DOCTOR OF PHILOSOPHY IN PSYCHOLOGY

Department of Psychology Ph.D. Overview

We offer a single doctoral degree in Psychology which may be earned in one of the following programs: Clinical, Cognitive and Brain Sciences, Developmental, Quantitative, or Social Psychology. Admission decisions are made separately within each program. Students admitted to one of these 5 programs enter with the expectation of continuing graduate study through the Ph.D. as the department does not admit terminal master's students.

All of our programs boast distinguished and award-winning faculty, notable research publications, and a deep foundation in the historical progress of psychological advances.

Please visit our program websites for more information on these programs:
Clinical Program (http://clinical.ku.edu)
Cognitive and Brain Sciences Program (http://www.cbs.ku.edu)
Developmental Program (http://developmental.ku.edu)
Quantitative Program (http://quantitative.ku.edu)
Social Program (http://social.ku.edu)

A clinical child psychology (http://cccpp.ku.edu) training program has been developed for doctoral students in an interdepartmental program with the Department of Applied Behavioral Science.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (http://catalog.ku.edu/graduate-studies) section of the online catalog.

Please consult the Departments & Programs (http://catalog.ku.edu/liberal-arts-sciences) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Students enter the department with the expectation of earning the Ph.D. The department does not admit students seeking the terminal master’s degree.

Applicants must have earned either the bachelor’s degree or the master’s degree. Although most applicants have majored in psychology as undergraduates, this is not required. It is necessary, however, to have earned 15 credit hours in psychology, including a first course in statistics and a course in experimental psychology or psychological research methods. Admission is competitive. The Graduate Record Examination is required. The GRE subject test is preferred but not required. Prior research and relevant work experience, honors, awards, and other achievements are taken into account. The deadline for completed applications is December 1 for the following fall semester.

Submit your graduate application online (https://graduate.ku.edu/application-process). Have official transcripts sent to the Graduate Application Processing Center.

Graduate Admissions
The University of Kansas
1450 Jayhawk Blvd.
Strong Hall, Room 313
Lawrence, KS 66045-7540

Please direct any questions regarding our graduate psychology programs and the application process to our Graduate Officer at psycgrad@ku.edu.

Dual-title Ph.D. Program in Psychology and Gerontology

KU is implementing a dual-title Ph.D. option in Psychology and Gerontology. The dual-title degree will enable students at KU to meet the challenge of undertaking graduate education in the emerging, interdisciplinary field of gerontology that is combined with training in established, traditional disciplines. Interested students apply and are admitted to the psychology Ph.D. program. After completing an M.A. in psychology, they may apply to undertake the dual-title option. The student’s diploma will carry the name of both fields.

This option is designed to appeal to students who are strong in a traditional discipline but also motivated to study across disciplinary lines. In the course of study, students can avail themselves of disciplinary depth and interdisciplinary breadth.

Ph.D. Degree Requirements

Although graduate education is offered through separate programs, each student prepares an individualized plan of study in consultation with faculty members. These plans indicate how the student proposes to fulfill the requirements for the M.A. and Ph.D. degrees, including all general requirements and conditions.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

Social Psychology

Monica Biernat, Social Psychology Program Director

The social psychology program is an intensive research training experience seeking students who are committed to empirical, scholarly work. The major research interests of faculty members are stereotyping, prejudice, intergroup relations, person perception, close relationships, emotion and motivation, self and identity, culture.

In addition to course work, the central requirement of the program is continuous involvement in research. Research opportunities range from laboratory experimentation to field research. Depending on backgrounds and goals, students may move from one research setting to another or concentrate on a particular type of research throughout their training.

Requirements

Students are guided by individually tailored plans called contracts. These describe sequences of learning experiences developed by the student
and a 3-member faculty committee. Beginning students are urged to enroll in basic courses in theory and research in social psychology and statistics. The contract specifies students’ long-range goals, specialties, other fields of psychology or related disciplines in which they will become proficient, proposed sequence of course work, research and teaching experiences they hope to obtain, plans for the M.A. proposal, comprehensive requirements and dissertation landmarks, and an approximate timetable. Contract details can be changed by agreement of the student and faculty committee.

The contract is a general framework that permits students’ graduate work to be adapted to their interests and abilities and provides a standard against which progress can be assessed. Students’ contracts must specify how the research skills and responsible scholarship requirement is to be met. The research skills requirement typically is met by completion of 6 graduate courses in statistics and research design. The responsible scholarship requirement is met via coursework as specified in the contract, completion of online tutorials, and attendance at ethics prosemesters. All contracts must comply with other departmental and general rules including residence and time limits.

Cognitive and Brain Sciences
Evangelia G. Chrysikou, Cognitive and Brain Sciences Program Director

The Cognitive and Brain Sciences PhD program at the University of Kansas seeks students with the intellectual potential, motivation, and quantitative aptitude to engage in productive scholarship in a basic or applied area of interest, including:

- Cognitive Psychology
- Cognitive Neuroscience
- Developmental Science
- Aging and Cognition
- Child Language
- Quantitative Methods

The training program emphasizes the development of a broad-based foundation in theory, research methods, technical skills, and quantitative analysis for application in a variety of basic and applied research settings. Areas of focus of current faculty members (http://www.cbs.ku.edu/page7) and faculty affiliate members (http://www.cbs.ku.edu/page7) include language, perception, attention, memory, cognitive development, aging, higher-order cognition, neuropsychology, computational neuroscience, psycholinguistics and neurolinguistics, philosophy of psychology, and philosophy of mind.

Our graduate students begin research as soon as they enter the program. As a result of this focus on guided research, our recent graduates have quickly found employment in academic programs, research organizations, and applied research units in industry and government. The current general program requirements can be found here (http://www.cbs.ku.edu/page7) and faculty affiliate members (http://www.cbs.ku.edu/page7) include language, perception, attention, memory, cognitive development, aging, higher-order cognition, neuropsychology, computational neuroscience, psycholinguistics and neurolinguistics, philosophy of psychology, and philosophy of mind.

Our admission requirements are listed here (http://psych.ku.edu/). The program follows a mentorship model. That is, students are admitted to work with specific faculty members rather than to the program at large. Students and faculty can also work closely with one of the CBS affiliated faculty members within the Department of Psychology or in other Departments (Linguistics, Gerontology, Speech-Language-Hearing, and Philosophy). Students benefit from regular monthly talks by faculty members and researchers in the field that take place within the Psychology Department, in other KU departments, and at the KU Medical Center (see our CBS Brown Bag (http://www.cbs.ku.edu/styled-4) and Mind Lecture (http://www.cbs.ku.edu/styled-6) Series).

Our admission requirements are listed here (http://psych.ku.edu/graduate-program). During the application process, applicants are encouraged to contact faculty members with whom they are interested in working.

General Program Requirements
1. Course Requirements

Overview: Students are expected to complete a PhD degree within 4-5 years. During their time in the program, students are required to take 4 Advanced Content courses and 4 Methods & Statistics courses (Primary Course Requirements, 24 didactic credits), at least 3 elective courses on areas of particular interest to their research (Secondary Course Requirements, 9 didactic credits), and complete a minimum of 18 research credits (PSYC 980 or PSYC 999). Students are also required to take 2 hours of the Teaching of Psychology course (PSYC 981), which is intended to prepare them for teaching graduate courses. Additional elective courses that are related to the student’s area of research interest are strongly encouraged, in consultation with the student’s advisor. The program is structured such that the primary course requirements can be completed during the first three years in the program and prior to the student’s oral comprehensive examinations. The selection of elective courses further allows the student to acquire depth of knowledge and skills within one or more areas within the Cognitive and Brain Sciences.

Required Courses
1.1 Primary Course Requirements

Advanced Content Courses - 4 courses required (12)

All CBS students are required to take the following two Advanced Content courses:

- PSYC 723 Advanced Cognitive Psychology 3
- PSYC 725 Cognitive Neuroscience 3

For the remaining two required core courses, CBS students can choose among the following Advanced Content course options, depending on their research interests and in consultation with their primary advisor:

- PSYC 757 Theories of Perception
- PSYC 860 Affective Science
- PSYC 870 Cognitive Development
- PSYC 890 Foundations of the Mind

Methods & Statistics - 4 courses required (14-15)

All CBS students are required to take the following three Methods & Statistics courses:

- PSYC 790 Statistical Methods in Psychology I 4
- PSYC 791 Statistical Methods in Psychology II 4
- PSYC 983 Methods & Professional Issues in the Cognitive & Brain Sciences 3

For the remaining one required Methods & Statistics course, CBS students can choose among the following Methods & Statistics course options (or a preapproved alternative; approval of CBS Program Director required prior to registration):

- PSYC 879 Applied Nonparametric Statistical Methods
- PSYC 887 Factor Analysis
- PSYC 892 Test Theory
- PSYC 893 Multivariate Analysis
- PSYC 894 Multilevel Modeling
Approved elective courses for the CBS program appear below: 

1.2. Elective Course Requirements
Students, in consultation with their advisor, are required to take at least 3 approved elective courses (9 didactic credits) within a given area of expertise to satisfy the electives requirement. The student may satisfy the elective course requirement by demonstrating competence in areas such as Statistics (see also the Quantitative Minor in Psychology (http://quantitative.ku.edu)), including psychometrics or mathematical modeling of psychological processes, beyond the primary required courses in Statistics and Methodology (see above); neuroscience (e.g., expertise in neuroscience techniques, such as brain imaging and mapping, neurostimulation, or mastery of psychophysiological methods); computer science, (such as artificial intelligence, computer simulation of cognitive processes, or programming skills); linguistics, psycholinguistics, and neurolinguistics; or human factors. It is expected that CBS students will enroll in elective CBS courses offered by the CBS faculty. A list of the approved elective courses for the CBS program appears below:

- **Computer Science**
  - EECS 138 Introduction to Computing: _____
  - EECS 368 Programming Language Paradigms
  - EECS 649 Introduction to Artificial Intelligence

- **Human Factors**
  - ADS 710 Advanced Human Factors in Interaction Design
  - ADS 765 Interaction Design
  - ADS 770 Design Cognition

- **Linguistics**
  - PSYC 735 Psycholinguistics I
  - PSYC 737 Psycholinguistics II

- **Linguistics / Neuroscience**
  - LING 738 Neurolinguistics I
  - LING 742 Neurolinguistics II
  - SPLH 620 The Communicating Brain: The Ultimate Personal Computer
  - SPLH 764 Seminar in: _____ (Speech Perception)
  - SPLH 820 Developmental Phonological Disorders
  - SPLH 836 Genetics of Communication and Learning Disorders
  - SPLH 846 Language Disorders of Adults
  - SPLH 850 Language Disorders Secondary to Closed Head Injury and Dementia
  - LING 715 Linguistics and Second Language Acquisition

- **Neuroscience**
  - PSYC 800 Experimental Psychology: _____ (Fundamentals of Neuroimaging)
  - PSYC 831 Advanced Human Learning and Memory
  - PSYC 956 Social Neuroscience
  - PSYC 843 Behavioral Pharmacology
  - PSYC 993 Seminar: _____ (Seminar Topic: Developmental Neuroscience*)
  - PSYC 993 Seminar: _____ (Seminar Topic: Human Behavioral Genetics)

- **Neuroscience / Computer Science**
  - PSYC 993 Seminar: _____ (topics as listed below)
  - Seminar Topic: Language*
  - Seminar Topic: Memory*
  - Seminar Topic: Ethics in CBS*

- **Philosophy**
  - PHIL 654 Philosophy of Mind

- **Statistics**
  - PSYC 879 Applied Nonparametric Statistical Methods
  - PSYC 887 Factor Analysis
  - PSYC 892 Test Theory
  - PSYC 893 Multivariate Analysis
  - PSYC 894 Multilevel Modeling
  - PSYC 895 Categorical Data Analysis
  - PSYC 896 Structural Equation Modeling I
  - PSYC 996 Structural Equation Modeling II
  - PSYC 898 Modeling of Intraindividual Observations
  - PSYC 991 Longitudinal Data Analysis
  - PSYC 984 Missing Data Analysis
  - PSYC 993 Seminar: _____ (Seminar Topic: Missing Data Analysis)

*Courses offered by CBS faculty. The exact content of the course may vary depending on individual instructor (i.e., different content within the general seminar topic of Memory, Language, etc.). Students are permitted to take multiple PSYC 993 courses within the same topic (e.g., two from Language), so long as the course content/ emphasis varies.

1.3 Research Credit Requirements

Research Credits
(At least 18 credits required)

CBS students can complete the research credit requirement by registering either for PSYC 980 (Special Problems in Psychology, 1-5 credits/semester) or PSYC 999 (Dissertation, 1-12 credits/semester) credit hours, depending on their year in the program.

2. Graduate Research & Scholarship Requirements

Due to the program’s strong emphasis on research, CBS students are required to be actively engaged in research and laboratory activities (e.g., study design, data collection, data analysis, manuscript and grant preparation) from the first semester of their 1st year in the program.

2.1. CBS Brown Bag & Professional Development Series Attendance (continuous)

Each month there are talks by faculty members and researchers in the field that take place within the Psychology Department as part of the CBS Brown Bag and Professional Development Talk series. All students in the CBS program are required to attend all CBS Brown Bag and Professional Development talks until successful completion of the PhD degree. Attendance is mandatory and will be monitored and recorded on the student’s record and annual evaluation report. Successful completion of the program requires satisfactory attendance of the CBS talk series, as determined by the CBS Program Director and faculty.
2.2. First Year Project & Presentation (Fall-Spring of Year 1)
Students are required to design and carry out an independent project, in consultation with their advisor, during their first two semesters in the program (Year 1). They are required to write a paper based on this project, as well as give a presentation at the CBS Brown Bag series in the Spring semester of their 1st year. The project is expected to result in a publication in a peer-reviewed scientific journal and/or presentation at a national or international conference in the cognitive and brain sciences. The project can also be a component of the student’s MA thesis, to be completed by the end of their 2nd year in the program. The First Year Project process is intended to provide the student with the opportunity to conduct a complete research study in their chosen lab, with their chosen advisor. The student is expected to demonstrate competence conducting laboratory research in their chosen area. As such, the First Year Project serves as a first point of evaluation of the suitability of a student for continued progress in the CBS program. Instances of substandard performance are expected to be rare.

2.3. NIH/NSF Grant Proposal Preparation
All students will prepare a grant application to the National Institute of Health (NIH, F31) as a requirement of the PSYC 983 Methods course (typically taken either during the student’s 2nd or 3rd year in the program). It is highly recommended that the student proceed with the submission of the actual application to NIH, in consultation with his or her advisor, during their 3rd year in the program. Students are also strongly encouraged to submit an application to NSF during their 1st year (through the Human Subjects Committee-Lawrence) and the tutorial (http://research.ku.edu/human_subjects_compliance_training) for research in their chosen area. CBS Program can meet the RSRS Requirement as part of their overall performance. The Research Skills and Responsible Scholarship Requirement (RSRS) is a Graduate Studies requirement (described in the General Information section of the Graduate Studies section of the Catalog). The written preliminary examination committee consists of three members, two of whom must be core faculty of the CBS Program. The written preliminary examination is independent of the comprehensive oral examination and dissertation proposal (for written preliminary examination procedures, see CBS Graduate Student Handbook).

2.4. Master’s Thesis and Oral Defense (Spring-Summer of Year 2)
Students are expected to complete a Master’s thesis (MA) by the end of their 2nd year in the program. The MA thesis can be a continuation of the student’s First Year Project, or other independent original research. Students are required to design and carry out their MA research, write a paper, and defend orally their MA thesis before the beginning of their 3rd year in the program (for MA defense procedures, see CBS Graduate Student Handbook). The MA thesis committee consists of three members, two of whom must be core CBS faculty members. It is anticipated that the student will publish and communicate the findings of their MA thesis, in consultation with their advisor, in a peer-reviewed scientific journal, as well as a national or international conference in the cognitive and brain sciences.

2.5. Research Skills and Responsible Scholarship Requirement (Year 3 or 4)
The Research Skills and Responsible Scholarship Requirement (https://policy.ku.edu/graduate-studies/research-skills-responsible-scholarship) (RSRS) is a Graduate Studies requirement (described in the General Information section of the Graduate Studies section of the Catalog). The specific manner in which this requirement is to be satisfied is left to the discretion of a particular Program or Department. Students in the CBS Program can meet the RSRS Requirement as part of their overall plan for professional training as follows: (i) complete the HSC-L ethics tutorial (http://research.ku.edu/human_subjects_compliance_training) (through the Human Subjects Committee-Lawrence) and the Responsible Conduct of Research (RCR) tutorial (http://research.ku.edu/responsible_scholarship_NSF_RCR_requirement); (ii) complete the 4 required courses in Methods and Statistics (see section 1.1 above); (iii) become a graduate student member in one or more professional association in the cognitive and brain sciences, in consultation with the student’s advisor and committee members (e.g., American Psychological Association, Cognitive Neuroscience Society, Psychonomic Society, Association for Psychological Science, Society for Neuroscience, etc.); and (iv) attend an ethics/responsible scholarship-related talk during the CBS proseminar, annually.

2.6. Written Preliminary Examination (Spring-Summer of Year 3)
The purpose of the written preliminary examination is to provide CBS students with the opportunity to demonstrate their ability to become independent, critical thinkers in their chosen research area. The expectation is that students will demonstrate the ability to think carefully about the literature in their chosen field and independently generate a critical evaluation of the field. They are further expected to be able to express themselves cogently in a written format. The form of this written examination varies depending upon the research interests of the student, the recommendation of the student’s advisor, and the advice of the student’s written preliminary examination committee. Formats have included an extensive review paper of a chosen research area, multiple smaller papers on a variety of research areas, or a full grant proposal (which may be submitted to a funding agency during the student’s 3rd year in the program). The written preliminary examination committee consists of three members, two of whom must be core faculty of the CBS Program. The written preliminary examination is independent of the comprehensive oral examination and dissertation proposal (for written preliminary examination procedures, see CBS Graduate Student Handbook).

2.7. Comprehensive Oral Examination & Dissertation Proposal (Summer of Year 3 or Fall of Year 4)
The program recommends students entering without a Master’s degree to take the oral comprehensive examination before the beginning of their 4th year. For those entering with an accepted Master’s degree, the recommendation is by the end of the Fall semester of their 3rd year in the program. Prior to asking the Department to request the Graduate Division of the College to schedule the comprehensive oral examination, the student must: (i) have completed and presented their First Year project; (ii) have obtained their MA degree; (iii) have passed their written preliminary examination; (iv) have taken at least ¾ of the required Advanced Content and Methods & Statistics courses, (v) have completed the Research Skills and Responsible Scholarship requirement; and (vi) have met the residency requirements. The comprehensive oral examination committee consists of five members, three of whom must be core faculty of the CBS program and at least one of whom is from outside the Department and represents Graduate Studies. The exact form of the examination is not specified by Graduate Studies but is intended to cover the student’s major area and ought to review the student’s plans for a doctoral dissertation. The program requires the student to prepare a written dissertation proposal and to distribute it to the committee at least two weeks prior to the scheduled examination date. The committee shall judge the student’s performance as satisfactory or unsatisfactory. If the performance is judged to be unsatisfactory, the student may request another examination in accordance with Graduate Studies policy on Doctoral Degree Comprehensive Oral Exams (http://policy.ku.edu/graduate-studies/doctoral-oral-exams). The department may elect to dismiss the student upon the first or subsequent unsatisfactory outcomes.

Candidacy:
After passing the comprehensive oral examination, the student becomes a candidate for the doctoral degree. At this point, a dissertation committee of three members of the Graduate Faculty is formed, the Chairperson of which must be authorized by Graduate Studies to chair dissertations. From this point onward, the student must be continuously enrolled until the degree is earned and in accordance with Graduate Studies’ policy on Doctoral Candidacy (http://policy.ku.edu/graduate-
2.8. Dissertation & Final Oral Examination (Years 4-5)
It is expected that CBS students defend their dissertation by the summer of their 5th year in the program. The dissertation must be written in final form and orally defended before the dissertation committee. The dissertation committee consists of five members, three of whom must be core faculty of the CBS program (primary dissertation committee) and at least one of whom is a member of the Graduate Faculty from outside the Department and represents Graduate Studies. Please see the Degree Programs section (http://catalog.ku.edu/graduate-studies/#programstext) of the Graduate Studies’ section of the catalog for more information on regulations governing committee composition.

2.9. Student Progress & Evaluation (continuous)
It is critical that students in the CBS program are continuously committed to and engaged in their progress and responsibilities toward earning their PhD degree. To this end, by October 15 of each year in the program, all students are required to submit to their advisor(s) and the CBS Program Director their Annual Academic Contract (AAC). Students are strongly encouraged to meet with their primary advisor(s) prior to this date, to discuss their plans for the preparation of their AAC. The purpose of the AAC is to provide an outline of the student’s annual research, academic, and professional goals, as well as a clear and specific timeline toward their achievement. The AAC should explicitly discuss the following areas:

1. Completed Coursework: A list of completed courses already taken, organized by the curriculum requirements as specified above.

2. Projected Coursework: A list of projected courses to be taken during that year, organized by the curriculum requirements as specified above.

3. Research Goals and Planned Research Activity: The student should discuss in as much detail as possible their research objectives and activities for the year. For example, in this section students can include an abstract for their First Year project or Master’s thesis to be completed in the next two semesters, their goals for their preliminary examination, or comprehensive oral examination and proposal, the aims of a grant proposal to be prepared and submitted during that year, a manuscript to be prepared for that year, and so forth. Students are strongly encouraged to submit a month-by-month timeline for the year, according to which they anticipate to complete their research goals.

4. Professional Goals: The student should discuss in as much detail as possible their professional goals for the year. For example, in this section students can discuss their plans for sharing their work with other laboratories (e.g., presenting at lab meetings, proseminars), preparing conference submissions (including submission deadlines), networking (within and outside KU), conducting peer reviews of scientific papers (in collaboration with their advisors), engaging in teaching activities, or preparing materials for job applications/interviews, etc.

Students are required to submit to their primary advisor before the Fall semester stop day, when faculty will meet, a summary of their progress toward their Annual Academic Contract goals. This progress will be discussed during the end-of-semester CBS faculty meeting. The CBS program Director will communicate to each student any mid-year faculty feedback. The CBS program Director will communicate to each student either in a personal meeting or in writing any mid-year faculty feedback. Any mid-year faculty feedback will be provided to students who have some deficiency or other issue that needs to be addressed.

Students are required to set up a meeting with their primary advisor before May 1st of each year, to discuss whether they met their annual goals according to the timeline specified in their Annual Academic Contract and assess their progress toward their degree. Following this meeting, all students are required to submit Annual Progress Report to their advisor(s) and the CBS Program Director by May 1st of each year in the program. The purpose of the Annual Progress Report is to evaluate the student’s success in meeting his or her research and academic objectives toward their degree. The Annual Progress Report should follow the format of the Annual Academic Contract and should specify in detail: (i) Completed courses and grades earned in each; (ii) how the student met their research goals and how they completed their planned research activities (e.g., published work, defended thesis, etc.); and (iii) how the student met the professional objectives they set in the beginning of the year in consultation with their advisor. This information will be shared with all core CBS Faculty members and the student’s progress will be discussed at the annual CBS faculty meeting. The CBS Program Director will then inform the student, in writing, of his or her standing in the Program. Aside from this formal evaluation, all students are strongly encouraged to seek feedback regularly from their advisors, other CBS faculty, committee members, or their instructors in graduate courses.

Templates for the Annual Academic Contract and Annual Progress Report are available on the CBS website (http://www.cbs.ku.edu).

For any questions about the CBS Graduate Curriculum, please email the Program Director, Dr. Evangelia G. Chrysikou, at lilachrysikou@ku.edu

Quantitative Psychology

Carol Woods, Interim Quantitative Psychology Program Director

The quantitative psychology (http://crmda.ku.edu) program provides a unique doctoral training experience. Graduate students are trained as quantitative specialists who can interface quantitative methods with substantive issues across the behavioral and social sciences. Students develop a substantial background in quantitative methods. Some students pursue more depth in quantitative content areas, and some pursue complementary expertise in a nonquantitative content area (e.g., clinical, cognitive, developmental, health, social). The exact nature of a student’s nonquantitative focus depends on the interests and goals of the student and the faculty mentor. Current methodological interests include psychometric methods, item response theory, structural equation modeling, multivariate statistics, multilevel modeling, differential equation modeling and dynamical systems, nonparametric statistics, and other topics in quantitative methods as applied in the behavioral and social sciences.

Recent graduates are employed in academic programs, basic research units in academic and organizational settings, applied research, and freelance consultation. Nearly all graduates proceed directly to full-time employment. About half the positions are academic, nearly all in upper-tier universities with graduate programs. Quantitative specialists have substantial technical expertise that provides an advantage in the job market. They often earn higher starting salaries and have access to additional income-enhancing activities such as grants and departmental consulting.
The program requires a total of 58 nonthesis hours (15 courses). Requirements are as follows:

**Quantitative Training**

**Quantitative Foundations (4)**
Quantitative foundations is 1 semester of basic psychological statistics, offered yearly:
- PSYC 790 Statistical Methods in Psychology I 4

**Area-Specific Methodology (3)**
(1 course, 3 hours minimum). e.g.:
- PSYC 815 Design and Analysis for Developmental Research 3
- PSYC 816 Design and Analysis for Neuroimaging Research
- PSYC 818 Experimental Research Methods in Social Psychology
- PSYC 819 Field and Evaluation Research Methods in Social Psychology

**Quantitative Core (27)**
(7 courses, 27 hours minimum). The quantitative core is a more intense series of courses in fundamental quantitative areas, currently including (other courses may be substituted with the director’s consent):
- PSYC 791 Statistical Methods in Psychology II
- PSYC 887 Factor Analysis
- Nonparametric Statistical Methods
- PSYC 879 Applied Nonparametric Statistical Methods
- PSYC 892 Test Theory
- PSYC 893 Multivariate Analysis
- PSYC 894 Multilevel Modeling
- PSYC 895 Categorical Data Analysis
- PSYC 896 Structural Equation Modeling I

**Quantitative Concentration (9)**
(3 courses, 9 hours minimum). The quantitative concentration focuses on a range of specialized applications, currently including:
- PSYC 990 Methods for Clustering and Classification
- PSYC 991 Longitudinal Data Analysis
- PSYC 993 Seminar: _____ (Advanced Quantitative Topics)
- PSYC 996 Structural Equation Modeling II

Advanced courses offered in other departments or schools also may be taken with the director’s consent.

**Proseminar in Quantitative Behavioral and Social Sciences (6)**
(6 semesters, 1 hour a semester, 6 hours minimum)
- PSYC 881 Proseminar in Quantitative Behavioral and Social Sciences 6

The quantitative proseminar is an ongoing discussion series covering advanced topics and emerging issues.

Courses will be added to these offerings. In addition, students complete at least 1 semester of a research methodology course. Methodology courses associated with the different substantive foci are available.

**Minor Concentration (9)**

(3 courses, 9 hours minimum, e.g., Cognitive Psychology, Developmental Psychology, Health Psychology, Social Psychology, Education, Mathematical Statistics). The minor concentration is fulfilled by taking 3 or more courses in a specialized area, education (e.g., testing, evaluation), mathematical statistics, or a tailored curriculum that meets the goals and objectives of the student (e.g., business).

**General Requirements**

**Research Skills and Responsible Scholarship**
- Because the quantitative training track is all about research methods and statistics, the research skills requirement is met by completion of the core requirements in statistics and research design. The responsible scholarship requirement is additionally met via attendance at ethics proseminar presentations offered each semester, and through direct mentoring with the faculty advisor.
- M.A. thesis (1-9 hours plus public defense, typically completed by the end of the second year of training, 3-person committee).
- Comprehensive oral examinations (review paper, dissertation proposal, elaborate project, or written examination plus public defense, typically completed during the fourth year of training, 5-person committee with 1 outside member).
- Dissertation (1-12 hours plus public defense, 5-person committee with 1 outside member).

**Additional Graduate Experiences**
Quantitative psychology students have opportunities for experience in teaching, statistical consulting, and data analysis through employment in various settings. Students also are expected to participate and assist with our regular summer training institutes on advanced quantitative techniques. Opportunities may include teaching undergraduate statistics in psychology, research assistantships in quantitative projects, assisting in research at an institute such as the Institute for Life Span Studies (http://www.lsi.ku.edu), or working in the Center for Research Methods and Data Analysis (http://crmda.ku.edu). Students have access to quantitative workshops and brown-bag lunches offered regularly by the quantitative training program. Workshops are conducted by national leaders in quantitative methods. Special resources for attending national workshops and conventions are also available.

**Quantitative Minor**
A minor in quantitative psychology is offered for graduate students in any of the department’s major programs and for select programs in the College of Liberal Arts and Sciences (e.g., sociology). The quantitative minor is an addition to the regular program and does not replace any existing or future requirements of the student’s major program. Students desiring a major emphasis in quantitative psychology should apply directly to the quantitative psychology program.

The minor consists of advanced course work in statistics, measurement, and methodology. The quantitative minor provides the student with elevated levels of quantitative expertise to enhance the overall quality of the research program. It gives students a competitive edge in the job market. Many faculty positions now request expertise in both a specific content area and in quantitative methods. Advanced quantitative skills also offer students additional job opportunities. The quantitative minor provides the additional credentials needed to pursue these jobs.

The minor requires 5 courses in quantitative methodology beyond the basic foundations course requirement (PSYC 790). The classes normally are taken in the department but can come from other departments
Many related courses may be substituted for the same general theme of the concentration and students can create a concentration that fits with their interests and educational objectives. Possible concentrations include:

**General Cognitive Development**
- PSYC 723 Advanced Cognitive Psychology 3
- PSYC 800 Experimental Psychology: _____ (Cognition and Aging) 3
- PSYC 872 Attention, Perception, and Learning in Infancy 3

**Social-Personality Development**
- PSYC 777 Social Psychology: Theory, Research, and Clinical Applications 3

**Theories of Personality**
- PSYC 962 Advanced Personality 3

**Quantitative Developmental Methods**
- PSYC 896 Structural Equation Modeling I 4
- PSYC 996 Structural Equation Modeling II 3
- PSYC 893 Multivariate Analysis 4

**Note:** Such a concentration also lends itself to completing a graduate minor in quantitative psychology and satisfying the Research Skills and Responsible Scholarship (RSRS) requirements.

**Developmental Evolutionary Psychology**
- PSYC 993 Seminar: _____ (Developmental Evolutionary Psychology) 1-5
- BIOL 625 Behavioral Ecology and Sociobiology 3
- BIOL 668 Evolutionary Ecology 3

**Developmental Cognitive Neuroscience**
- PSYC 725 Cognitive Neuroscience 3
- PSYC 800 Experimental Psychology: _____ (Neuroscience Methods) 3
- PSYC 800 Experimental Psychology: _____ (Developmental Cognitive Neuroscience) 3

**Language Development**
- PSYC 735 Psycholinguistics I 3
- PSYC 993 Seminar: _____ (Research Methods in Language Development) 1-5
- SPLH 816 Language Development 3

**Developmental Research Skills and Responsible Scholarship (8 hours, minimum)**

The RSRS requirement generally is satisfied by taking 2 additional quantitative courses and PSYC 982 Issues in Scientific Conduct. Satisfying the RSRS requirement in this way also lends itself to the completion of a graduate minor in quantitative psychology (6 quantitative courses total are required for the minor).

For more information, contact Andrea Greenhoot, agreenhoot@ku.edu

**Clinical Psychology**

Rick Ingram, Director of Clinical Training

The clinical psychology program educates students to master knowledge in the field of scientific psychology so that they can generate new
scientific knowledge and theory related to the field of clinical psychology, and can make independent contributions to the evolving base of skills and scientific knowledge required for clinical practice. All students take basic course work and practica in academic/research and clinical application. Students may take electives or practica to augment either aspect of training. About half the graduates pursue academic/research-oriented careers, and the rest undertake careers emphasizing applied activities (e.g., psychotherapy in community mental health centers or hospitals). Information is available from the graduate admission secretary or online (http://psych.ku.edu/clinical).

Health and Rehabilitation Specialty
Work centers on the psychosocial and biomedical aspects of physical health, illness, and disability. Students apply the knowledge and techniques to problems of prevention, assessment, treatment, and rehabilitation. A detailed overview is available from the graduate admission secretary or online (http://psych.ku.edu/clinical).

Requirements
Individual plans of study are designed to meet the standards established by state licensing boards and professional organizations. Individualization is achieved by selecting among alternate ways of meeting specific requirements and by selected electives or choosing the health and rehabilitation emphasis. The plan of study constitutes an agreement between the student and the entire clinical faculty. Program requirements:

General Core Requirements for Clinical Psychology (13-17 credit hours)
Quantitative Analysis of Behavior (6-7)
PSYC 789 Psychological Statistics: Foundations and Applications 3 or PSYC 790 Statistical Methods in Psychology I
Select 1 of the following: 3
PSYC 791 Statistical Methods in Psychology II
PSYC 795 Computing and Psychology
EPSY 811 Analysis of Variance
PSYC 879 Applied Nonparametric Statistical Methods
PSYC 887 Factor Analysis
PSYC 892 Test Theory
PSYC 893 Multivariate Analysis
PSYC 894 Multilevel Modeling
PSYC 895 Categorical Data Analysis
PSYC 896 Structural Equation Modeling I
Cognitive Bases of Behavior (3)
1 course from the following: 3
PSYC 723 Advanced Cognitive Psychology
PSYC 725 Cognitive Neuroscience
PSYC 800 Experimental Psychology: _____ (Cognition and Memory)
PSYC 800 Experimental Psychology: _____ (Developmental Cognitive Neuroscience)
PSYC 800 Experimental Psychology: _____ (Memory, Emotion, and Development)
PSYC 831 Advanced Human Learning and Memory
PSYC 863 Clinical Neuropsychology Across the Lifespan
PSYC 870 Cognitive Development

Social Bases of Behavior (3)
1 course from the following: 3
PSYC 774 Advanced Social Psychology I
PSYC 775 Advanced Social Psychology II (Current Issues)
PSYC 777 Social Psychology: Theory, Research, and Clinical Applications
PSYC 825 Social Development
PSYC 956 Social Neuroscience (Theory and Applications)

Developmental Bases of Behavior (3)
PSYC 825 Social Development
PSYC 863 Clinical Neuropsychology Across the Lifespan
PSYC 870 Cognitive Development
EPSY 705 Human Development through the Lifespan

Clinical Requirements (46)
9 content courses (25 hours) 25
EPSY 998 Seminar in: _____
PSYC 888 Diversity Issues in Clinical Psychology or EPSY 875 Understanding Cultural & Individual Differences in Professional Psychology
PSYC 898 Proseminar: Professional Issues in Clinical and Health Psychology
PSYC 946 Theories and Methods of Psychotherapy
PSYC 950 Clinical Supervision and Consultation: Theory & Research
PSYC 960 Advanced Psychopathology
PSYC 961 Biological Foundations of Psychopathology
PSYC 968 Research Methods in Clinical Psychology
PSYC 975 Professional and Ethical Problems in Clinical Psychology or EPSY 900 Legal, Ethical, and Professional Issues in Professional Psychology

Note: Because this is an American Psychological Association-approved clinical program, the faculty expect all students to operate within the APA Code of Ethics in professional and personal behavior. Adherence to the ethical principles is part of the normal evaluation of students during the degree program.

7 Courses Covering Practicum Course Work (21 hours): 21
PSYC 850 Assessment I: Foundations of Psychological Assessment
PSYC 855 Assessment II: Integrative Psychological Assessment
PSYC 964 Clinical Practicum I
PSYC 965 Clinical Practicum II
PSYC 966 Clinical Practicum III
PSYC 969 Clinical Practicum IV or PSYC 835 Clinical Practicum IV: Health
PSYC 970 Clinical Practicum V or PSYC 836 Clinical Practicum V: Health

Research Skills Proficiency
This requirement normally is met by completing all of the following with a grade of B or higher in each. Because these courses are required
elsewhere in the curriculum, they do not represent additional required hours.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>PSYC 968</td>
<td>Research Methods in Clinical Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 790</td>
<td>Statistical Methods in Psychology I</td>
<td>4</td>
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<tr>
<td>One of the following: 3-4</td>
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<tr>
<td>PSYC 791</td>
<td>Statistical Methods in Psychology II</td>
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<tr>
<td>Computer Analysis of Psychological Data</td>
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<tr>
<td>EPSY 811</td>
<td>Analysis of Variance</td>
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**Responsible Scholarship Requirement**

This is a new requirement. Satisfying this requirement will not necessitate additional credit-hour enrollments. Refer to the program website for the latest information.

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<td>Research Methods in Clinical Psychology (minimum of 3 hours on responsible research scholarship)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 975</td>
<td>Professional and Ethical Problems in Clinical Psychology (minimum of 6 hours on research and academic ethics)</td>
<td>3</td>
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</tbody>
</table>

Students must also complete:

1. Online tutorial for Responsible Scholarship from Research & Graduate Studies
2. Online tutorial for IRB (institutional Review Board)
3. Online tutorial for HIPAA data (completed annually)

**Thesis and Dissertation (18 hours)**

The student must complete a master’s thesis based on an empirical study (minimum of 6 hours) and an empirical doctoral dissertation (minimum of 12 hours) and defend each in separate oral examinations. The thesis should be completed by the end of the second year and written in a form suitable for journal submission.

**Electives/Independent Study (6 credit hours, minimum)**

Because a minimum of 86 hours of graduate credit is required for the degree, the hours not included in the requirements above may be elective courses selected by the student and his or her advisor.

**Examinations: Task**

Each student must propose and demonstrate competence in one task or project. This task typically is done in the third year. It may be in applied/clinical, research/methodology, or program evaluation. A complete description is available from the clinic office or online (http://psych.ku.edu/clinical).

Upon completion of all degree requirements except the dissertation and internship, the student must pass the oral comprehensive examination. This examination addresses a proposal for the dissertation as well as related, general questions in the field. It should be taken before completion of 4 calendar years for students entering with the B.A. and

**Internship (3 hours)**

Students must complete a 12-month predoctoral internship at a setting approved by the clinical psychology faculty. Clinical students may complete their internships at any setting approved by the American Psychology Association.