UNIVERSITY OF KENTUCKY SERIES

THE GRADUATE SCHOOL



BULLETIN

2002-2004

UK VISION

We aspire to enhance the University of Kentucky's stature as one of the nation's great universities:
an institution recognized nationally and internationally for excellence in teaching, research, and public service, and a sustaining resource for the intellectual, social, cultural, and economic development of the Commonwealth.

–UK Strategic Plan
adopted by the Board of Trustees
May 1998

UK MISSION

The University of Kentucky is a comprehensive, public, land grant university dedicated to preparing students for an increasingly diverse and technological world, and to improving the lives of people in the Commonwealth, the nation, and the world through teaching, research, and service.

- *Our instructional mission includes undergraduate, graduate, postgraduate, professional, and lifelong education informed by scholarship and research, and guided by a spirit of integrity and mutual respect.*
- *Our research, scholarship, and creative activities promote human and economic development through the expansion of knowledge and its applications in the sciences, social sciences, arts, humanities, business, and the professions.*
- *We have a unique responsibility for outreach and public service to support the citizens of the Commonwealth. We collaborate with our educational, professional, business, healthcare, and agricultural partners here and abroad to disseminate, share and apply knowledge.*

–UK Strategic Plan
adopted by the Board of Trustees
May 1998

UK VALUES

The values of the University guide our decisions and behavior. We value:

- *academic excellence and freedom;*
- *personal integrity;*
- *the creation, synthesis, application, and teaching of knowledge;*
- *lifelong learning;*
- *the success of our students;*
- *the personal and professional development of our faculty and staff;*
- *mutual respect and collaboration;*
- *cultural diversity and human dignity;*
- *personal and institutional accountability;*
- *service to local, state, national, and international communities; and*
- *the continuous improvement of our programs and administrative processes.*

–UK Strategic Plan
adopted by the Board of Trustees
May 1998

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Fall semester 2002 - Second Summer Session 2003

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2002 - 2004
The Graduate School

University of Kentucky Bulletin

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The University of Kentucky is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: Telephone number 404-679-4501) to award undergraduate, graduate and professional degrees.

COMPLIANCE WITH REGULATIONS

The University of Kentucky is committed to a policy of providing educational opportunities to all qualified students regardless of economic or social status, and will not discriminate on the basis of race, color, religion, sex, marital status, beliefs, age, national origin, sexual orientation, or physical or mental disability.

Compliance with Title IX of the Educational Amendments of 1972, which prohibits sex discrimination, and with Title VI of the Civil Rights Act of 1964 is coordinated by Mr. Terry Allen, Affirmative Action Office, 8 Administration Building, (859) 257-8927.

Efforts to comply with the laws and regulations applicable to people with disabilities are also coordinated by the Affirmative Action Office, as required by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990.

Questions concerning compliance with regulations may be directed to UK's Affirmative Action Office, or to the Director of the Office for Civil Rights, U.S. Department of Education, Washington, D.C.

The University is in compliance with the Drug-Free Workplace Act of 1988 and the Drug-Free Schools and Communities Act Amendment of 1989. Questions may be directed to the Vice President for Student Affairs or the Office of the Director of Human Resources Services.

Questions about admission to the University should be directed to the appropriate admissions office.

CALENDAR

Students should check the *Schedule of Classes* each semester for any calendar changes which may have been approved after publication of this Bulletin. The approved Calendar for the academic year 2003-2004 will be published in the *Schedule of Classes.*

2002 Fall Semester

APPLICATION FOR ADMISSION

February 1—Friday—Deadline for international applications to be submitted to the Graduate School for the 2002 Fall Semester

April 15—Monday—Deadline for applying with college deans for reinstatement after a second academic suspension for the 2002 Fall Semester

June 15, 2002—Saturday—Deadline for international applications to be submitted to the Graduate School for the 2003 Spring Semester

July 19—Friday—Deadline for applying for admission to a program in the Graduate School for the 2002 Fall Semester. Applications for readmission, post-baccalaureate status, and visiting student status will be accepted after the deadline.

August 14—Wednesday—Deadline for applying to the Graduate School for readmission, post-baccalaureate status, and visiting student status for the 2002 Fall Semester in order to register before the beginning of classes and avoid late fee

October 31—Thursday—Deadline for international applications to be submitted to the Graduate School for 2003 Summer School

December 9—Monday—Deadline for applying for admission to a program in the Graduate School for the 2003 Spring Semester. Applications for readmission, post-baccalaureate status, and visiting student status will be accepted after the deadline.

December 18—Wednesday—Deadline for applying to the Graduate School for readmission, post-baccalaureate status, and visiting student status for the 2003 Spring Semester in order to register before the beginning of classes and avoid late fee

REGISTRATION

August 20-26—Tuesday through Monday—Fall registration for students who entered the University in either the 2002 First Summer Session or Second Summer Session

August 20-26—Tuesday through Monday—Registration for new program graduate students

August 22-26—Thursday through Monday—Fall registration for new post-baccalaureate students admitted for the First Summer Session, Second Summer Session, or Fall Semester

August 23-24—Friday through Saturday—Registration for Evening/Weekend students

August 23—Friday—Registration for new international students who have been cleared for admission but did not advance register

August 26—Monday—Registration for new students who have been cleared for admission but did not priority register

August 28-September 4—Wednesday through Wednesday—Late registration for returning students who did not priority register and new applicants cleared late for admission. A late fee is assessed students who register during this time period.

September 18—Wednesday—Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)

November 4-27—Monday through Wednesday—Priority Registration for the 2003 Spring Semester

ADD/DROP AND WITHDRAWAL

July 20-August 7—Sunday through Wednesday—Add/Drop for registered students

August 21-24—Wednesday through Friday—Add/Drop for registered students

August 27—Tuesday—Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees

September 4—Wednesday—Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund

September 4—Wednesday—Last day to add a class for the 2002 Fall Semester

September 18—Wednesday—Last day to drop a course without it appearing on the student's transcript

October 25—Friday—Last day to withdraw from the University or reduce course load and receive any refund. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."

December 4-11—Wednesday through Thursday—Add/Drop for registered students for the 2003 Spring Semester

FEE PAYMENT

August 15—Thursday—Payment deadline for payment of registration fees and/or housing and dining fees

August 27—Tuesday—Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees

September 4—Wednesday—Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund

September 20*—Friday—Last day for reinstatement of students cancelled for nonpayment of registration fees and/or housing and dining fees. Requires payment of fees and may require payment of reinstatement fee.

October 25—Friday—Last day to withdraw from the University or reduce course load and receive any refund. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."

DEGREES AND GRADUATION

September 26—Thursday—Last day for filing an application for a December degree in college dean's office

October 10—Thursday—Last day for doctoral candidates for a December degree to submit a Notification of Intent to schedule a final examination in the Graduate School

November 21—Thursday—Last day for candidates for a December degree to schedule a final examination in the Graduate School

December 5—Thursday—Last day for candidates for a December graduate degree to sit for a final examination

December 20—Friday—Last day for candidates for a December degree to submit a thesis/dissertation to the Graduate School

OTHER IMPORTANT DATES—Beginning and End of Semester and Academic Holidays

August 7—Wednesday—Last day for students in the Employee Educational Program registered through August 1 to submit EEP form to Human Resource Services to confirm 2002 Fall Semester registration and tuition waiver

August 26-30—Monday through Friday—Approved time period for students to change academic majors (note: please check with college for admission deadline)

August 28—Wednesday—First day of classes

September 2—Monday—Labor Day—Academic Holiday

September 4—Wednesday—Last day for students in the Employee Educational Program who registered and/or changed schedules after August 1 to submit EEP form to Human Resource Services to confirm 2002 Fall Semester registration and tuition waiver

September 26—Thursday—Deadline for submission of application and all required documents to the Office of the Registrar for change of residency status for 2002 Fall Semester

October 4—Friday—Fall Break—Academic Holiday

October 21—Monday—Midterm of 2002 Fall Semester

October 23-November 4—Tuesday through Monday—Approved time period for students to change academic majors (note:please check with college for admission deadline)

November 28-30—Thursday through Saturday—Thanksgiving—Academic Holidays

December 11—Wednesday—Last day for students in the Employee Educational Program registered through December 11 to submit EEP form to Human Resource Services to confirm 2003 Spring Semester registration and tuition waiver

December 13—Friday—Last day of classes

December 16-20—Monday through Friday—Final Examinations

December 20—Friday—End of 2002 Fall Semester

December 23—Monday—Final deadline for submission of grades to the Registrar's Office by 4 p.m.

**These dates are subject to change.*

2003 Spring Semester

APPLICATION FOR ADMISSION

June 15, 2002—Saturday—Deadline for international applications to be submitted to the Graduate School for the 2003 Spring Semester

September 15, 2002—Sunday—Deadline for applying with college deans for reinstatement after a second academic suspension for the Spring Semester

October 31, 2002—Thursday—Deadline for international applications to be submitted to the Graduate School for 2003 Summer School

December 9, 2002—Monday—Deadline for applying for admission to a program in the Graduate School for the 2003 Spring Semester. Applications for readmission, post-baccalaureate status, and visiting student status will be accepted after the deadline.

December 18, 2002—Wednesday—Deadline for applying to the Graduate School for readmission, post-baccalaureate status, and visiting student status for the 2003 Spring Semester in order to register before the beginning of classes and avoid late fee

February 1—Saturday—Deadline for international applications to be submitted to the Graduate School for the 2003 Fall Semester

April 11—Friday—Deadline for applying for admission to a program in the Graduate School for the 2003 Summer Sessions. Applications for readmission, post-baccalaureate status, and visiting student status will be accepted after the deadline.

April 30—Wednesday—Deadline for applying to the Graduate School for readmission, post-baccalaureate status, and visiting student status for the 2003 First Summer Session in order to register May 12 and avoid late fee

REGISTRATION

January 8-13—Wednesday through Monday—Registration for new program graduate students

January 9-13—Thursday through Monday—Registration for new post-baccalaureate students

January 10-11—Friday and Saturday—Registration for Evening/Weekend and new graduate students

January 13—Monday—Registration for new students who have been cleared for admission but did not priority register

January 15-22—Wednesday through Wednesday—Late registration for returning students who did not priority register and new applicants cleared late for admission. A late fee is assessed students who register during this time period.

February 5—Wednesday—Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)

March 31-April 23—Monday through Friday—Priority registration for the 2003 Fall Semester and both 2003 Summer Sessions

May 1-12—Tuesday through Monday—First Summer Session registration and add/drop continue for students enrolled in the 2003 Spring Semester

May 6-June 11—Tuesday through Wednesday—Second Summer Session registration and add/drop continue for students enrolled in the 2003 Spring Semester

ADD/DROP AND WITHDRAWAL

December 4-11, 2002—Wednesday through Wednesday—Add/Drop for registered students for the 2003 Spring Semester

January 13-14—Monday and Tuesday—Opening-of-term add/drop for registered students

January 14—Tuesday—Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees

January 22—Wednesday—Last day to add a class for the 2003 Spring Semester

January 22—Wednesday—Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund

February 5—Wednesday—Last day to drop a course without it appearing on the student's transcript

March 14—Friday—Last day to withdraw from the University or reduce course load and receive any refund. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."

May 6-June 21—Tuesday through Saturday—Add/Drop for priority registered students for the 2003 Fall Semester

FEE PAYMENT

December 19, 2002—Thursday—Payment deadline for registration fees and/or housing and dining fees

January 14—Tuesday—Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees

January 22—Wednesday—Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund

February 7*—Friday—Last day for reinstatement of students cancelled for nonpayment of registration fees and/or housing and dining fees. Requires payment of fees and may require payment of a reinstatement fee.

March 14—Friday—Last day to withdraw from the University or reduce course load and receive any refund. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."

DEGREES AND GRADUATION

February 13—Thursday—Last day for filing an application for a May degree in college dean's office

February 27—Thursday—Last day for doctoral candidates for a May degree to submit a Notification of Intent to schedule a final examination in the Graduate School

April 10—Thursday—Last day for candidates for a May degree to schedule a final examination in the Graduate School

April 24—Thursday—Last day for candidates for a May graduate degree to sit for a final examination

May 9—Friday—Last day for candidates for a May degree to submit a thesis/dissertation to the Graduate School

May 10—Saturday—Commencement Day

OTHER IMPORTANT DATES—Beginning and End of Semester and Academic Holidays

December 11, 2002—Wednesday—Last day for students in the Employee Educational Program registered through December 11 to submit EEP form to Human Resource Services to confirm 2003 Spring Semester registration and tuition defrayal

January 13-17—Monday through Friday—Approved time period for students to change academic majors (note: please check with college for admission deadline)

January 15—Wednesday—First day of classes

January 20—Monday—Martin Luther King Birthday—Academic Holiday

January 22—Wednesday—Last day for students in the Employee Educational Program who registered and/or changed schedules after December 11 to submit EEP form to Human Resource Services to confirm 2003 Spring Semester registration and tuition defrayal

February 13—Thursday—Deadline for submission of application and all required documents to the Office of the Registrar for change of residency status for 2003 Spring Semester

March 10—Monday—Midterm of 2003 Spring Semester

March 11-31—Tuesday through Monday—Approved time period for students to change academic majors (note: please check with college for admission deadline)

March 17-22—Monday through Saturday—Spring Vacation—Academic Holidays

May 2—Friday—Last day of classes

May 5-9—Monday through Friday—Final Examinations

May 9—Friday—End of 2003 Spring Semester

May 12—Monday—Final deadline for submission of grades to the Registrar's Office by 4 p.m.

May 12-August 23—College of Pharmacy 15-Week Summer Term

**These dates are subject to change.*

2003 First Summer Session

APPLICATION FOR ADMISSION

October 31, 2002—Thursday—Deadline for international applications to be submitted to the Graduate School for 2003 Summer School

April 11—Friday—Deadline for applying for admission to a program in the Graduate School for the 2003 Summer Sessions. Applications for readmission, post-baccalaureate status, and visiting student status will be accepted after the deadline.

April 30—Wednesday—Deadline for applying to the Graduate School for readmission, post-baccalaureate status, and visiting student status for the 2003 First Summer Session in order to register May 6 and avoid late fee

May 28—Wednesday—Deadline for applying to the Graduate School for readmission, post-baccalaureate status, and visiting student status for the 2003 Second Summer Session in order to register before the beginning of classes and avoid late fee

June 15—Sunday—Deadline for international applications to be submitted to the Graduate School for the 2003 Spring Semester

REGISTRATION

May 6-12—Tuesday through Monday—First Summer Session registration and add/drop continue for students enrolled in the 2003 Spring Semester

May 12—Monday—Registration for new students

May 13-14—Tuesday through Friday—Late registration for returning students not already registered and new applicants cleared late for admission. A late fee is assessed students who register late.

May 19—Monday—Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit) in college dean's office

May 21-June 11—Wednesday through Wednesday—Second Summer Session registration and add/drop for students who entered the University in the 2003 First Summer Session

ADD/DROP AND WITHDRAWAL

May 13—Tuesday—Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees

May 14—Wednesday—Last day to enter an organized class for the 2003 First Summer Session

May 14—Wednesday—Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund

May 19—Monday—Last day to drop a course without it appearing on the student's transcript

May 28—Wednesday—Last day to withdraw from the University or reduce course load and receive any refund. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."

FEE PAYMENT

May 12—Monday—Payment deadline for payment of registration fees and/or housing and dining fees

May 13—Tuesday—Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees

May 14—Wednesday—Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund

May 28—Tuesday—Last day to withdraw from the University or reduce course load and receive any refund. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."

June 5*—Thursday—Last day for reinstatement of students cancelled for nonpayment of registration fees and/or housing and dining fees. Requires payment of fees and may require payment of a reinstatement fee.

OTHER IMPORTANT DATES—Beginning and End of Semester and Academic Holidays

May 12—Monday—Beginning of College of Pharmacy 15-Week Summer Term

May 13—Tuesday—First day of classes

May 14—Wednesday—Last day for students in the Employee Educational Program to submit EEP form to Human Resources Services for tuition defrayal for the 2003 First Summer Session

May 26—Monday—Memorial Day—Academic Holiday

May 27—Tuesday—Midterm of 2003 First Summer Session

June 10—Tuesday—Final Examinations

June 10—Tuesday—End of the 2003 First Summer Session

June 13—Friday—Final deadline for submission of grades to the Registrar's Office by 12 noon

**These dates are subject to change.*

2003 Second Summer Session

APPLICATION FOR ADMISSION

October 31, 2002—Thursday—Deadline for international applications to be submitted to the Graduate School for 2003 Summer School

April 11—Friday—Deadline for applying for admission to a program in the Graduate School for the 2003 Summer Sessions. Applications for readmission, post-baccalaureate status, and visiting student status will be accepted after the deadline.

May 26—Wednesday—Deadline for applying to the Graduate School for readmission, post-baccalaureate status, and visiting student status for the 2003 Second Summer Session in order to register before the beginning of classes and avoid late fee

June 15—Sunday—Deadline for international applications to be submitted to the Graduate School for the 2003 Spring Semester

July 25—Friday—Deadline for applying for admission to a program in the Graduate School for the 2003 Fall Semester. Applications for readmission, post-baccalaureate status, and visiting student status will be accepted after the deadline

REGISTRATION

May 6-June 11—Tuesday through Wednesday—Second Summer Session registration and add/drop continue for students enrolled in the 2003 Spring Semester

May 21-June 11—Wednesday through Wednesday—Second registration and add/drop for students who entered the University in the 2003 First Summer Session

June 10—Tuesday—Registration for Evening/Weekend and new graduate students

June 11—Wednesday—Registration for new students

June 12-13—Thursday through Friday—Late registration for returning students not already registered and new applicants cleared late for admission. A late fee is assessed students who register late.

June 23—Monday—Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)

ADD/DROP AND WITHDRAWAL

June 12—Thursday—Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees

June 13—Monday—Last day to enter an organized class for the 2003 Second Summer Session

June 13—Monday—Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund

June 23—Monday—Last day to drop a course without it appearing on the student's transcript

July 16—Wednesday—Last day to withdraw from the University or reduce course load and receive any refund. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."

FEE PAYMENT

June 11—Wednesday—Payment deadline for registration fees and/or housing and dining fees

June 12—Thursday—Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees

June 13—Friday—Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund

July 3*—Thursday—Last day for reinstatement of students cancelled for nonpayment of registration fees and/or housing and dining fees. Requires payment of fees and may require payment of a reinstatement fee

July 16—Wednesday—Last day to withdraw from the University or reduce course load and receive any refund. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."

DEGREES AND GRADUATION

June 4—Wednesday—Last day for doctoral candidates for an August degree to submit a Notification of Intent to schedule a final examination in the Graduate School

June 27—Friday—Last day for filing an application for an August degree in college dean's office

July 2—Wednesday—Last day for doctoral candidates for an August degree to submit a Notification of Intent to schedule a final examination in the Graduate School

July 16—Wednesday—Last day for candidates for an August degree to schedule a final examination in the Graduate School

July 30—Wednesday—Last day for candidates for an August graduate degree to sit for a final examination

August 7—Thursday—Last day for candidates for an August degree to submit a thesis/dissertation to the Graduate School

OTHER IMPORTANT DATES—Beginning and End of Semester and Academic Holidays

June 12—Thursday—First day of classes

June 13—Friday—Last day for students in the Employee Educational Program to submit EEP form to Human Resource Services for tuition waiver for the 2003 Second Summer Session

July 4—Friday—Independence Day—Academic Holiday

July 10—Thursday—Midterm of 2003 Second Summer Session

August 6—Wednesday—Last day for registered students in the Employee Educational Program who registered through August 6 to submit EEP form to Human Resource Services to confirm 2003 Fall Semester registration and tuition waiver

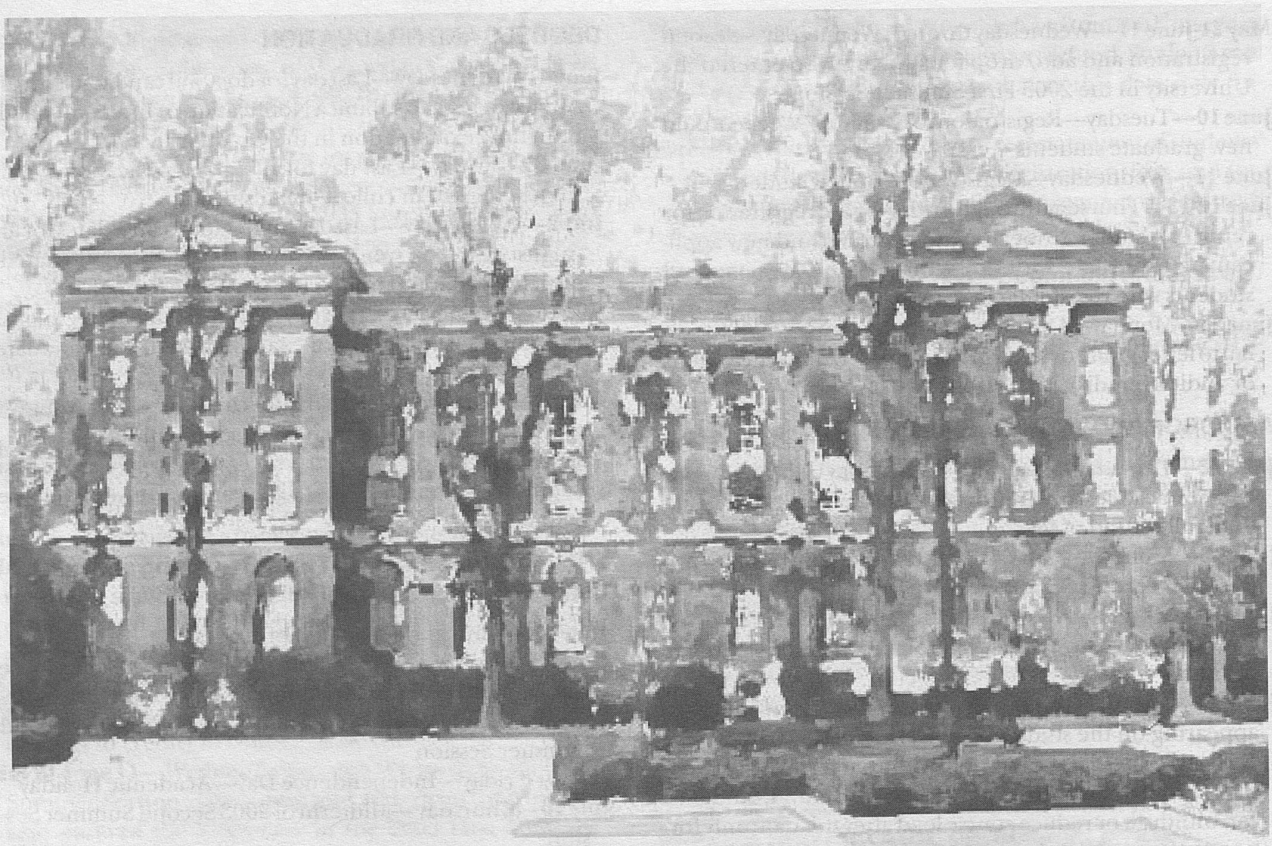
August 7—Thursday—End of the 2003 Second Summer Session

August 7—Thursday—Final Examinations

August 11—Monday—Final deadline for submission of grades to the Registrar's Office by 12 noon

August 23—Saturday—End of College of Pharmacy 15-Week Summer Term

**These dates are subject to change.*



GRADUATE SCHOOL ADMINISTRATION

Lee T. Todd Jr., Ph.D.
University President

Michael T. Nietzel, Ph.D.
Acting University Provost

Douglass S. Kalika, Ph.D.
Acting Dean of the Graduate School

Jeannine Blackwell, Ph.D.
Senior Associate Dean

James E. O'Reilly, Ph.D.
Associate Dean

Kwaku Addo, Ph.D.
Associate Dean

THE GRADUATE SCHOOL

The University of Kentucky began offering graduate work in 1870 and awarded its first graduate degrees in 1876. The Graduate School became a distinct unit in the University organization in 1912.

The mission of the Graduate School is to promote advanced study, graduate instruction, and research by the faculty and students of all colleges and departments. The total graduate resources of the University are merged under the Graduate School for the purpose of promoting the acquisition of knowledge in an atmosphere of free and lively inquiry.

Graduate work is offered in most colleges in the University. A general description and tabulation of courses for each of the various programs is given in the *Graduate Degree Programs* section of this bulletin.

The Graduate Faculty

The Graduate Faculty consists of the Dean of the Graduate School, Associate Deans of the Graduate School, and Full and Associate Graduate Faculty Members. As the chief University agency for the promotion of the ideals of graduate study, it determines the policies of the Graduate School and makes recommendations to the University Senate and to the President, or to other administrative officials as appropriate. All rules affecting graduate work and the inauguration of new graduate programs must be approved by the Graduate Faculty.

Any proposed change in the rules of the Graduate Faculty must be included in the agenda of its meeting and circulated to the Graduate Faculty at least 10 days prior to the meeting at which it is to be considered.

New Graduate Faculty members may be proposed to the Dean of the Graduate School at any time by the college deans and department chairs concerned, or in the case of persons not attached to a college faculty, by the Provost or the Medical Center Chancellor of the University. Eligibility qualifications are as follows:

1. The doctor's degree or its equivalent in scholarly reputation.
2. The rank of assistant professor (or equivalent), or higher.
3. Scholarly maturity and professional productivity as demonstrated by publications, editorial services, research surveys, creative work or patents, and research in progress at the time of appointment.
4. Demonstrated participation in graduate teaching and research in the program.

Any faculty member, regardless of specific title series of appointment, is eligible for consideration for membership on the Graduate Faculty. Appointment is based on academic credentials, degree of involvement in the graduate degree programs, and departmental recommendation.

Once Full Graduate Faculty status is attained, membership is continuous unless a change in status is recommended by a graduate program to the Dean of the Graduate School, who will present the recommendation to the Graduate Council. Associate membership is limited to a term of six years with reappointment possible after departmental review.

Appointment to Full Graduate Faculty membership is made by the Vice President for Research upon nomination by the Dean of the Graduate School after consultation with the Graduate Council when appropriate.

Full members of the Graduate Faculty are particularly responsible for:

1. Guidance of graduate student research and study to its completion. The finished work should meet or exceed accepted standards for publication, dissemination or performance within the particular discipline.
2. Participation in the formulation of graduate curricula and policy.

The Dean of the Graduate School is responsible for appointing and monitoring the progress of Associate Members of the Graduate Faculty. Associate members are authorized to teach graduate courses, direct master's theses, and serve on and co-chair doctoral committees. Membership in the Graduate Faculty is restricted to persons who satisfy the membership criteria and are able to assume the responsibilities in a particular program as set forth above. There is no category for at-large graduate faculty membership.

On recommendation of the Director of Graduate Studies and with the approval of the Dean of the Graduate School,

The Academic Common Market

Kentucky is a participating state in The Academic Common Market, an interstate agreement among 16 primarily Southeastern states for sharing academic programs. Students who qualify for admission may enroll in a specific program in another Academic Common Market state on an in-state tuition basis. At present, the agreement has been limited to less-common graduate programs. For information, write: Southern Regional Education Board, 130 Sixth Street N.W., Atlanta, Georgia. For information about University of Kentucky programs in the Academic Common Market, contact the Academic Common Market Institutional Coordinator, Office of the Registrar, 100 Funkhouser Building, University of Kentucky, Lexington, KY 40506-0054, Phone: (859) 257-3256, E-mail: smcgurk@uky.edu, Web: <www.uky.edu/Registrar/acadmkt.html>.

persons who normally do not hold academic appointment in the University, but who have demonstrated an interest in collaborative participation in its graduate programs, may be appointed as Auxiliary Graduate Faculty Members. They should hold the terminal academic degree in the field and possess a record of research or creative experience that would warrant their inclusion on advisory committees to assist graduate students in conducting research. Auxiliary Graduate Faculty may serve only as nonvoting members of the advisory committee.

Administrative officers assigning teaching and other duties to members of the Graduate Faculty who are taking an active part in the graduate program (i.e., are heavily engaged in directing theses and dissertations, carrying on productive research, etc.) should make appropriate reduction in the duties required of such faculty members.

The Dean of the Graduate School

The Dean of the Graduate School is charged with administering the policies adopted by the Graduate Faculty and the University Senate relating to graduate studies. The dean presides over all meetings of the Graduate Faculty and calls meetings of this faculty whenever it is advisable or whenever requested to do so by one-fourth of the membership. Recommendations are made by the dean to the Graduate Faculty regarding the requirements for advanced degrees, the regulations necessary to insure a high standard of graduate work and all other aspects of the graduate program. The graduate programs are administered in the interest of efficient instruction and the highest attainment possible on the part of each graduate student. The dean is responsible for determining and certifying to the Registrar candidates who have fulfilled requirements for advanced degrees.

The President, Vice President for Research, and the Dean of the Graduate School shall be *ex officio* members of all committees of the Graduate School. The Provost and the Medical Center Chancellor are *ex officio* members of all committees of the Graduate School that affect their respective areas.

The Graduate Council

The Graduate Council is composed of 18 members and the Dean of the Graduate School, who serves as chair. There are 16 faculty representatives and two student representatives. Associate deans serve in a nonvoting, *ex officio* capacity.

The composition of the Graduate Council is as follows: two members from the College of Agriculture; three members from the College of Arts and Sciences; one member from the College of Business and Economics; two members from the College of Education; one member from the College of Engineering; one member from the Colleges of Communications and Information Studies and of Fine Arts; two members from the Colleges of Medicine and Pharmacy; one member from the Colleges of Dentistry, Health Sciences, Nursing, and the Graduate Centers; one member from the Colleges of Human Environmental Sciences, Social Work and the Graduate Centers; two members appointed by the Dean of the Graduate School; and two student members selected by the Graduate Council.

Members representing a college or a combination of colleges are elected by the Graduate Faculty in the respective colleges.

The term of office of the elected members is three years and that of the graduate students is one year. Members may not succeed themselves until three years have elapsed following the completion of their last term.

The Graduate Council approves or disapproves proposals concerning courses offered for graduate credit, and advises and lends assistance to the Dean in executing the policies and regulations determined by the Graduate Faculty. Specifically, the Council:

1. Evaluates department requests relating to proposed graduate programs.
2. Reviews existing programs and curricula.
3. In cooperation with the Dean, initiates recommendations to the Graduate Faculty. (This procedure is not intended to prevent a faculty member from bringing any recommendation or request directly before the Graduate Faculty.)

The Graduate Council has such authority as is herein granted, or such as the Dean or the Graduate Faculty may delegate to it. A majority of the Graduate Council constitutes a quorum for the transaction of business.

Directors of Graduate Studies

The Dean of the Graduate School, with the advice of the college dean(s) and the approval of the president, may recommend to the Graduate Faculty the areas of graduate study and research into which the University may be divided. (The logical unit for an area is a department or center. By common consent, however, certain departments may be grouped into a single area to offer a graduate program and in exceptional cases a department may be divided into two or more areas to offer programs in the respective areas.) Directors of Graduate Studies (DGSs) are the local representatives of each graduate program. They provide for the program's administration, and act as the official liaison with the Graduate School. Directors of Graduate Studies are responsible to the Graduate Faculty of their program and to the Dean of the Graduate School for the recruitment, admission, advising, and examination of students in their program. In addition to Directors of Graduate Studies for specific programs, some colleges have designated individual faculty members as Associate Deans for Graduate Studies to serve as the local extension of the Graduate School at the college level.

Directors of Graduate Studies are appointed by the Dean of the Graduate School after consultation with the respective Graduate Faculty and administration in a program. The DGS is normally a tenured faculty member, holding the rank of Associate Professor or above, and is a full member of the Graduate Faculty.

GRADUATE COUNCIL

Dr. Jeffery Bieber Educational Policy Studies and Evaluation	2005
Dr. Greg Brock Family Studies	2004
Dr. Jesus Garcia Curriculum and Instruction	2004
Dr. John Garen Economics	2003
Dr. Hans Gesund Civil Engineering	2003
Dr. Robert Grossman Chemistry	2005
Dr. Robert J. Harmon Animal Sciences	2003
Dr. Brian Jackson Physiology	2005
Dr. Daniel Noonan Molecular and Cellular Biochemistry	2005
Dr. Michael Reed Acricultural Economics	2004
Dr. David Sogin Music	2003
Dr. Ernest Yanarella Political Science	2003
Dr. Thomas Zentall Psychology	2004
TBA	2005

APPOINTED MEMBERS

Suzanne Smith Mechanical Engineering	2003
TBA	2003

Upon the appointment of each Director of Graduate Studies, the Dean of the Graduate School shall draw the attention of the appointee to the existence and location of the official University policies and guidelines that affect graduate faculty, graduate students, and student applicants.

The Director of Graduate Studies of a graduate program reports directly to the Dean of the Graduate School or to the Dean's designee on all matters relating to graduate education in the program. The DGS is responsible to the Dean of the Graduate School for the administration of the specific graduate program, including maintenance of records, administration of graduate program funds, admission of graduate students, any affiliated University Scholars Program, fellowships, program requirement changes and new programs, advising and registration, appointment of advisory and examination committees, and other degree requirements related to the graduate program. Additionally, the DGS serves as the focal point for dissemination of information from the Graduate School.

Directors of Graduate Studies serve as program advisers to each student until the student has a thesis or dissertation director. The DGS then recommends that the thesis or dissertation director be appointed the student's adviser or committee chair. In areas where theses are not required, the DGS is the adviser of all students not writing theses. All student schedules should be endorsed by the student's adviser. If it is desirable, a DGS may recommend that additional advisers in the program be appointed. A DGS who is to be absent from the University for as long as a semester must inform the Dean so that a substitute may be appointed.

A more detailed description of the role and responsibilities of the Director of Graduate Studies is available in the Graduate School office.

Establishment and Modification of Graduate Programs

An area that wishes to establish a new graduate program or modify an existing one must submit its program to the Graduate Council, which will make a recommendation concerning it to the Graduate Faculty.

Graduate degree programs to be delivered at distance learning locations (either on site or via technology) shall be reviewed by the Graduate Council prior to their submission for appropriate review at higher levels. Distance learning graduate degree programs shall be reviewed periodically and their effectiveness assessed during regular institutional unit reviews, or, when circumstances warrant, by a special review process initiated by the Dean of the Graduate School.

Distance Learning Graduate Programs

A number of departments offer selected courses or entire graduate degree programs off campus or via the Internet. Instruction is provided by various distance-learning technologies and/or on-site meetings of students with faculty. Through its Office of Distance Learning Graduate Programs, the Graduate School provides coordination and support for the off-campus sites and assures a high standard of graduate work. This office assists with: student recruitment; administration of the distance learning graduate program sites; liaison among students, programs, and UK support units; and liaison with the cooperating regional universities. All distance learning graduate programs function within the policies and rules of the Graduate School. See <www.rgs.uky.edu/gs/extcampuspgms.html>.

GRADUATE ADMISSION

Kentucky Residency

According to law, the University of Kentucky and all other state-supported institutions of higher education assess tuition on the basis of Kentucky or non-Kentucky residency. The policy for determining residency is established by the Commonwealth of Kentucky Council on Postsecondary Education (see *Residency Policy* on page 158). Students who are unsure of their residency status should check with the Registrar's Office before applying for admission.

Admission Procedures

The University of Kentucky is committed to a policy of providing educational opportunities to all qualified students regardless of economic or social status, and will not discriminate on the basis of race, color, religion, sex, marital status, beliefs, age, national origin, sexual orientation, or physical or mental disability.

Applicants for admission to the University of Kentucky Graduate School must pay an application fee. The fee is $30 for domestic applicants and $35 for international applicants. A check or money order made payable to THE UNIVERSITY OF KENTUCKY should accompany the completed application. NO CASH, PLEASE. Students applying via the Web can also pay the application fee by credit card on the Web. Go to <www.rgs.uky.edu/gs/gsapplication.html> and click on "Pay Application Fee."

Students seeking admission to the University of Kentucky Graduate School must hold a baccalaureate degree from a fully accredited institution of higher learning. An overall undergraduate grade point average of 2.75 and 3.0 on all graduate work is required by the Graduate School. Individual departments may require higher grade point averages.

All applicants for admission to degree programs in the Graduate School must submit complete official scores on the verbal, quantitative and analytical portions of the Graduate Record Examination (GRE) (see *Provisional Admission* on page 15). The College of Business and Economics substitutes the Graduate Management Admission Test (GMAT) for M.B.A., Ph.D. and Accounting applicants. Also, applicants for Health Administration, Public Administration, and Public Health may substitute the GMAT for the GRE.

New students applying for admission must have two official transcripts sent *by each institution* of higher learning previously attended. All transcripts must be sent directly to the Graduate School, or transcripts in sealed envelopes obtained from the Registrar of each institution may accompany the application.

To be official, records must bear the Registrar's signature and/or official seal of the issuing institution. A summary of credits transferred and recorded on the transcript issued by the institution granting the degree will not suffice.

Application forms can be obtained by writing:
The Graduate School
351 Patterson Office Tower
University of Kentucky
Lexington, Kentucky 40506-0027
or on the Web at:
www.rgs.uky.edu/gs/gsapplication.html

Applications must be submitted no later than one month before the beginning of the term the applicant intends to begin graduate work (see *Calendar* on page 3); all application materials (including all transcripts and official scores) must be received by this deadline.

Graduate students may not be able to directly enter a full graduate program leading to the degree they desire; it may be necessary for them to satisfy certain prerequisites that they did not complete in their undergraduate curriculum. Deficiencies are determined by the program in which the major

Graduate Record Examination (GRE)

All applicants for admission to degree programs in The Graduate School must submit scores on the verbal, quantitative and analytical portions of the Graduate Record Examination (GRE). This rule may be waived for one semester in individual cases upon recommendation of the Director of Graduate Studies in the individual department or program. In cases where waivers are granted, however, the GRE scores must be submitted before the end of the first semester of graduate study (see section on Provisional Admission). The advanced portion of the GRE may be required by individual departments or programs if they so desire. (Students who do not plan to work toward a graduate degree, i.e., Visiting Students, Rank I, Fifth-Year, other certification, and post-baccalaureate students, are exempt from this requirement.)

The College of Business and Economics substitutes the Graduate Management Admissions Test (GMAT) for the Graduate Record Examination for M.B.A., Ph.D, and Accounting students. Also, applicants in Health Administration, Public Administration, and Public Health may substitute the GMAT for the GRE.

Students who have earned an academic doctorate are exempt from the GRE/GMAT requirement.

See <www.gre.org/> for more information.

work is to be done. Ordinarily, students are considered for direct admission in any field in which they have an appropriate undergraduate major or its equivalent.

Admission to the Graduate School entitles students to take such courses as they desire, provided they have the necessary prerequisites and departmental approval.

Attendance in the Graduate School at the University of Kentucky is not a right, it is a privilege which may be withdrawn by the University or by any area of graduate study if it is deemed necessary by the Dean of the Graduate School in order to safeguard the University's standards.

Additional Procedures for International Applicants

All non-U.S. citizens, except Permanent Residents of the U.S., should request an Application Form for International Students. Applicants must have excellent grades and rank in the top quarter of their classes. To be considered for entry as a graduate student, an applicant must hold a four-year bachelor's degree. (**Indian students**: a first-class record is normally expected although high second-class holders in non-science areas may be considered if they can offer further evidence of having been in at least the top 10 percent of their graduating class.)

When credentials are submitted in support of any application, they should be either the original documents or certified copies (i.e., copies certified or attested as "true copies" by a notary public). An official translation must be attached to these records if they are in a language other than English. Credentials should include a record of all degrees earned, detailing all subjects taken and grades obtained. Grades must be listed in the indigenous system.

GRE/GMAT Requirement. Applications will not be considered without complete official scores on the Graduate Record Examination (GRE). Business and Accounting applicants must substitute the Graduate Management Admissions Test (GMAT). Also, applicants for Public Administration, Health Administration, and Public Health may substitute the GMAT. If the GRE or the GMAT have not been taken, write to the Educational Testing Service (ETS), Box 6000, Princeton, NJ 08541, for information concerning the appropriate examination. The tests are administered throughout the year and test scores generally require six weeks for delivery. It is important, therefore, that the applicant take the appropriate test well in advance of the application deadline in order to allow ample time for scores to be received in the Graduate School.

Test scores must be sent directly to the University of Kentucky Graduate School from ETS.

International Application Fee. International applicants for admission to the University of Kentucky Graduate School must pay a $35 application fee. A check or money order in United States funds made payable to THE UNIVERSITY OF KENTUCKY should accompany the completed application. Applications will be processed upon receipt of the fee. NO CASH, PLEASE.

English Proficiency Requirement. The University of Kentucky requires a minimum score of 550 on the Test of English as a Foreign Language (TOEFL) for all applicants whose native language is not English. (The equivalent score on the computer version of the TOEFL is 213.) The test is administered by the Educational Testing Service (ETS), which publishes the TOEFL Bulletin. The TOEFL Bulletin includes a registration form. Bulletins are available in many locations outside the U.S., usually at American embassies and consulates, educational commissions and foundations, bi-national centers, and many private organizations.

Students who cannot obtain a TOEFL Bulletin and registration form locally should write, well in advance, to: Test of English as a Foreign Language, Box 6154, Princeton, NJ 08541-6154 or see <www.toefl.org> on the Web.

Test scores must be sent directly to the University of Kentucky Graduate School from ETS.

Financial Resources Requirement. Entering international students must certify that they have at least $20,000* available for each 12-month period of study. It is estimated that this amount will cover the cost of tuition, fees, books and supplies, room and meals, health insurance (explained below) and incidentals, for a single person. Applicants must certify $6,000* per year for their spouse and $4,000* per year for each additional dependent. An I-20 (or IAP-66) is issued to applicants who have been academically accepted only upon receipt of acceptable financial information.

Self-supported students must have on hand at the beginning of each registration $8,793 to pay for tuition and fees, room and board, and health insurance. All students need to arrive with a minimum of $1500, or $2000 if bringing dependent(s).

** Subject to change without notice.*

Health History Form. All international students must obtain a tuberculin screening test and reading, and complete a health history form from the Student Health Service before registration will be allowed. This should be done as soon as possible following arrival on the University campus. (See also *Health Services* on page 39.)

Application Deadlines for International Student Admission

Applications for admission by international students must be received by the Graduate School by February 1 for the fall semester, June 15 for the following spring semester, and October 31 for all summer sessions. No application will be considered until all supporting documents have been received and the application file is complete. The Graduate School cannot guarantee full consideration of application files that remain incomplete (i.e., missing transcripts or official scores) after May 1 for fall admission or September 15 for spring admission.

Support Services for the International Student

International Student Services. International Students and Scholars Services division, part of the Office of International Affairs, is the focal point for international student services. It orients students to a new educational system and to American culture, and provides a continuing source of information, counsel, and friendship through their stay. The Office is charged with the responsibility of interpreting immigration regulations which affect international students and scholars. It also sponsors cross-cultural programs on campus and in the community designed to encourage communication and understanding between Americans and internationals. Among the programs offered are the Cosmopolitan Club, Welcome and Orientation Week, the International Hospitality Program, and English as a Second Language. The Office of International Affairs is located in Bradley Hall.

Health Services. The University has an excellent health care clinic for outpatient care that is of special importance to international students (see section on Health Services). All international students on F-1, F-2, J-1, and J-2 visas are automatically enrolled in the University of Kentucky student insurance plan. Students who have purchased health insurance in their home country may be eligible for a waiver. Because of the extremely high cost of medical care, it is imperative that a student have insurance for himself or herself, spouse, and children. Health insurance application forms can be obtained in Bradley Hall.

Program in English for International Students. The English Department sponsors the Center for English as a Second Language. The Center offers eight-week terms of study; students may join in June, August, October, January, or March. Students receive 160 hours of intensive English instruction in an eight-week period. No college credit is given for the course of study, but students are given certificates of completion for the Center's program. Sometimes students are admitted to the Graduate School contingent upon successful completion of the program. The Center is authorized under federal law to enroll nonimmigrant alien students. The fee is $1,425* for instruction; room, board, and textbooks are not included in the fee. For further information write the Center for English as a Second Language, 1235 Patterson Office Tower, UK, 40506.

*Subject to change without notice.

Sponsored International Graduate Students. International graduate students financed and monitored by sponsoring agencies can be provided with special placement, advising, and management services. Literature describing these services is available from the Office of International Affairs. The sponsoring agency is assessed a fee of $300 per semester per student for these special services.

Special Admission Categories

Post-Baccalaureate Graduate Students

Students who hold a baccalaureate degree from a fully accredited institution of higher learning and who wish to pursue graduate study without a degree objective may apply for admission as post-baccalaureate graduate students.

Post-baccalaureate status is not a form of probationary admission to a degree-granting graduate program.

An application for admission to the Graduate School as a post-baccalaureate graduate student should be filed in the Admissions Office at least two weeks in advance of the registration date for the term in which the student plans to enroll. An original or a photocopy of a transcript showing an awarded bachelor degree must accompany the application. An overall undergraduate grade point average of 2.5 or better and a 3.0 on all previous graduate work (both on a 4-point scale) are required by the Graduate School for admission.

Post-baccalaureate students may take graduate courses for graduate credit. Permission to enter any graduate class as a post-baccalaureate student will be granted only if the student meets the prerequisites for that course and if space is available.

A post-baccalaureate student who later wishes to apply to enter a degree-granting graduate program must have a 3.0 or better grade point average on all course work, graduate or undergraduate, attempted as a post-baccalaureate. A standard application form or written notice requesting consideration for admission to a specific program and stating the semester or summer session for which enrollment is desired must be presented to the Graduate School. Calendar deadlines for application noted in the front of this Bulletin should be observed.

A maximum of nine semester hours or 25 percent of the semester hours required for the degree concerned (exclusive of residence or thesis credit, research and independent study), whichever is greater, may later be transferred from post-baccalaureate status to a master's or specialist degree program at the University of Kentucky. All such transfers of credit hours into a graduate program must be approved by that program's Director of Graduate Studies and by the Dean of the Graduate School. A grade of A or B must have been earned in the course or courses to be transferred (see *Transfer of Credits* on page 22 for details).

Non-Degree Certification Students

The University of Kentucky offers admission to students pursuing course work applicable toward non-degree certification. These include, for example, Rank I Certification and Fifth Year Certification through the College of Education. This is a separate type of admission, which differs from post-baccalaureate status. Minimally, the Graduate School requires applicants for certification to meet the same admission requirements as for post-baccalaureate status, but the

unit often imposes additional and more rigorous requirements for admission. It is best to consult with the Director of Graduate Studies in the specific area for which certification is sought prior to applying.

Certification students who later wish to transfer credits into a master's or specialist program at the University of Kentucky may do so. The requirements and limitations are the same as for any transfer of credits into such a program.

Provisional Admission

Students wishing to pursue an advanced degree who are temporarily ineligible for regular graduate admission status may be recommended by the Director of Graduate Studies for provisional admission status in the following cases:

1. Missing transcripts or other requirements for admission such as letters of recommendation;
2. Temporary waiver of the Graduate Record Examination (not to exceed one semester);
3. Deficiencies determined by the program;
4. Temporary ineligibility for regular admission status because program only reviews applications once a year;
5. Graduating University of Kentucky seniors lacking no more than six hours for graduation; the consent of the college dean and the Dean of the Graduate School and approval of the Director of Graduate Studies are necessary. Students may take no more than 12 credit hours and must complete the undergraduate degree during the semester in which they enroll in the provisional status (see *Graduating Seniors as Part-Time Graduate Students* below).

Provisional status is permitted for a maximum of one full-time semester or up to 12 hours after which the student's record will be reviewed. Within 30 days into the following semester, and on recommendation of the Director of Graduate Studies, the student will be changed from provisional to regular program status, or dropped from the graduate program entirely.

Graduating Seniors as Part-Time Graduate Students

Seniors at the University of Kentucky lacking no more than 6 credit hours for graduation and having an undergraduate average of at least 2.75 on all work attempted may register in the Graduate School in provisional status with the consent of the undergraduate college dean, the appropriate Director of Graduate Studies, and the Dean of the Graduate School. The total load of such students may not exceed 12 credit hours. Graduate credit will be allowed for each credit hour of graduate work beyond the six or fewer credit hours needed to complete undergraduate requirements. Requirements for the undergraduate degree must be completed during the semester in which the student is allowed to register for part-time graduate work. Students applying for admission to the Graduate School under these conditions must fill out a petition form listing the course or courses to be taken to complete the undergraduate requirements. Petition forms are available in the Graduate School.

University Scholars Program

(Combined Bachelor's/Master's Degree Program)

The University Scholars Program offers particularly gifted and highly motivated students the opportunity of integrating their undergraduate and graduate courses of study in a single continuous program culminating in both a baccalaureate and a master's degree. The total number of hours for the combined program may be as many as 12 fewer than the total required for both the bachelor's and the master's degrees separately. The requirements for the bachelor's degree are unaffected.

Application to the program should be submitted at the end of the student's junior year. Applicants should have completed at least 90 credit hours of work toward the bachelor's degree, or be eligible for senior standing in the semester they are admitted to the program. The master's program should be in the field of the undergraduate major, and the undergraduate grade point average must be at least a 3.5 in the applicant's major field and 3.2 overall.

Applicants to a University Scholars program must fill out and have signed a University Scholars application form, which is available in the Graduate School. This form should be returned along with the standard Graduate School application form.

The Dean of the Graduate School or his appointee will make admission decisions. Students must register in the Graduate School for all work taken following admission to the University Scholars Program and pay graduate tuition and fees. University Scholars may take no more than 16 credit hours per semester, except by recommendation of their Director of Graduate Studies and by approval of the Dean of the Graduate School. Students must have an undergraduate advisor and a graduate advisor. A jointly planned program must be prepared for each student.

The following graduate programs participate in University Scholars:

Agricultural Economics
Anthropology
Biosystems and Agricultural Engineering
Chemistry
Chemical Engineering
Civil Engineering
Classics
Communication
Computer Science
Diplomacy and International Commerce
Electrical Engineering
Family Studies
Forestry
French
Geography
History
Materials Science and Engineering

Mechanical Engineering
Music
Physics
Public Administration
Sociology
Spanish

University of Kentucky/Lexington Theological Seminary Double Competency Program

The Lexington Theological Seminary and the University of Kentucky have established a double-competency program to educate qualified students whose career interests are social work and the ministry. Interested students should contact the Director of Graduate Studies in Social Work.

University of Kentucky/Asbury Theological Seminary Double Competency Program

Asbury Theological Seminary and the University of Kentucky have established a double-competency program for students whose interests are social work and the ministry. Interested students should contact the Director of Graduate Studies in Social Work.

Collaborative Curriculum Leading to the Master of Music in Sacred Music

The UK School of Music offers the Master of Music with an emphasis in Sacred Music; this degree involves the completion of core course work at the University of Kentucky, as well as 6-9 credits of course work at an accredited seminary or other appropriate institution. One option available to the student involves a collaborative curriculum between the University of Kentucky and Lexington Theological Seminary leading to the award of the Master of Music from UK, and the Master of Arts in Church Music from Lexington Theological Seminary. Interested students should contact the Director of Graduate Studies at the University of Kentucky School of Music.

Dual Degree Programs

B.S. in Engineering/M.B.A.

The College of Business and Economics and the College of Engineering offer the opportunity to obtain the Bachelor of Science in Engineering (B.S.) and Master of Business Administration (M.B.A.) degrees in a five-year dual degree program. In addition to regular engineering courses, prerequisite undergraduate courses in accounting, economics, and statistics are taken during the first three years of study to prepare students for management, economics, business, and finance M.B.A. courses. The students' senior year marks the beginning of the graduate M.B.A. courses and interaction with non-engineering M.B.A. students. During the summer prior to the fifth year, the students participate in study abroad designed expressly for the program, thereby enhancing and broadening their cross-cultural experience.

B.S. in Engineering/M.P.A.

The Martin School of Public Policy and Administration and the College of Engineering offer the opportunity to obtain the Bachelor of Science in Engineering (B.S.) and Master of Public Administration (M.P.A.) degrees in a five-year dual degree program. Typically, students will enroll in the College of Engineering as freshmen and take courses required for the B.S. degree through the junior year. During the senior or fourth year, students will begin to take M.P.A. courses. In the fifth year, students will take M.P.A. classes exclusively. Students must complete an internship in the summer following the fifth year of course work.

J.D./M.B.A.

The College of Business and Economics and the College of Law offer the opportunity to obtain the Master of Business Administration (M.B.A.) and Juris Doctor (J.D.) degrees in a dual degree program. Because both schools recognize that some aspects of business and law are compatible and interrelated, students can usually obtain both degrees in less time than if the degrees were pursued separately. As a result, students gain marketable skills and specialized employment opportunities in less time than might otherwise be required. Students interested in the J.D./M.B.A. program must apply to both the College of Law and the Graduate School.

J.D./M.P.A.

The University of Kentucky offers a two-year, 45-hour professional Master of Public Administration degree through the Graduate School. The College of Law offers a three-year, 90-hour Juris Doctorate. The M.P.A. program has been professionally reviewed and recognized by the National Association of Schools of Public Affairs and Administration. The College of Law is accredited by the American Bar Association and is a member of the Association of American Law Schools. The J.D./M.P.A. dual degree is the only one of its type offered in the Commonwealth. It permits students to gain both degrees in a total time period of one year less than if the degrees were earned independently. For information, contact the Director of Graduate Studies in Public Administration or the College of Law.

M.D./M.B.A.

The University of Kentucky M.D./M.B.A. program is designed to provide students with the necessary educational foundation so that they not only are prepared to begin practice as a doctor, but also to assume managerial responsibility in a variety of health care settings. The integrated, sequenced program of study consists of the full, four-year Kentucky Medical Curriculum and foundation business courses followed by M.B.A. courses. The program may normally be completed in five years. Students interested in the program must apply to both the College of Medicine and the Graduate School.

M.D./M.P.H.

The University of Kentucky M.D./M.P.H. combined degree provides well-trained physicians with additional skills and knowledge in public health policies and procedures, enabling them to provide service to individuals within the context of a healthy community and its unique population characteristics. With careful planning, the M.D. and M.P.H. tracks can be completed in five years. Students interested in the program must apply to both the College of Medicine and the Graduate School.

Pharm.D./M.B.A.

The College of Business and Economics and the College of Pharmacy offer the opportunity to obtain the Master of Business Administration (M.B.A.) and Doctor of Pharmacy (Pharm.D.) degrees in a dual degree program. Students can usually obtain both degrees in four years plus three summers instead of the five and one-half years required if the degrees were pursued separately. The dual degree program is designed to provide students with the necessary educational foundation so that they not only are prepared to begin practice as a pharmacist, but to assume managerial responsibility in a variety of health care settings. A student desiring admission into the dual degree program will be required to apply formally and independently to both programs.

Pharm.D./M.P.A.

The University of Kentucky offers a two-year, 45-hour professional Master of Public Administration degree through the Graduate School. The College of Pharmacy offers a four-year, 158-hour Doctor of Pharmacy. The Pharm.D./M.P.A. dual degree is the only one of its type offered in the Commonwealth. The dual degree program permits a student to gain both degrees in a total time period less than if the degrees were earned independently. The dual degree program is highly desirable for persons seeking careers in state and federal regulatory and administrative agencies, the pharmaceutical industry, managed care organizations, and academia. For information, contact the Director of Graduate Studies in Public Administration or the College of Pharmacy.

Pharm.D./M.S. in Economics

The College of Business and Economics and the College of Pharmacy offer the opportunity to obtain the Master of Science (M.S.) in Economics and Doctor of Pharmacy (Pharm.D.) degrees in a dual degree program. The dual degree program permits a student to gain both degrees in a total time period less than if the degrees were earned independently.

Individuals grounded in both economic analysis and clinical skills provide an increasingly important and unique interface between practitioners and managers to balance clinical decision making with financial realities. The dual degree is thought to be highly desirable for persons seeking careers in government, the pharmaceutical industry, institutional settings, managed care organizations, pharmacy benefit management organizations, and academia. A student desiring admission into the dual degree program will be required to apply formally and independently to both programs.

M.D./Ph.D. Combined Studies

Students combining studies toward a Ph.D. degree and an M.D. degree in one of the established programs of the Graduate School must be admitted to both programs. Before applying for admission to the Graduate School, applicants should consult with the Director of Graduate Studies of the graduate area of interest.

Copies of the guidelines for students wishing to pursue the combined M.D./Ph.D. degrees may be obtained in the office of the Associate Dean for Academic Administration in the Graduate School.

Visiting Students

Students who are enrolled in a graduate program at another institution and plan to attend the University of Kentucky as Visiting Students need not submit transcripts. Students must, however, request a Visiting Student form from the Graduate School office when filing an application. Visiting Student admission is for one semester only and credit earned in that status is not applicable to a University of Kentucky degree.

Readmission

Former University of Kentucky graduate students in good standing are eligible for readmission within one academic year. Otherwise, readmission is contingent upon the approval of the student's program. Students must file an application for readmission by the stated deadlines (see *Calendar* on page 3). No application fee is assessed for students seeking readmission. Readmission information and forms can be found on the Web at <www.rgs.uky.edu/gs/domapp/readmdm.html>.

GENERAL REGULATIONS

Registration and Classification

All students expecting graduate credit must be enrolled in the Graduate School. Graduate students will conform to the general registration schedule of the University and may not enter later than the last allowable date set by the Registrar.

Before registering, graduate students should obtain approval of their proposed schedule from their adviser(s).

Changes in the Graduate School Requirements

When Graduate School or degree program requirements are changed after a course of study has begun, the students shall have the option of fulfilling either the old or the new requirements.

If students elect to fulfill the old requirements but find that necessary resources (e.g., courses, instruction in particular skills) are no longer available, they may make reasonable substitutes with the approval of the Dean of the Graduate School upon recommendation of the Director of Graduate Studies.

In the event that students interrupt their work on a graduate degree (i.e., are not enrolled) for one calendar year or more, the Dean of the Graduate School shall determine, upon recommendation of the Director of Graduate Studies, whether the old requirements or the new requirements shall apply. In the event students have not completed the requirements for the graduate degree five years after the effective date of a change in degree requirements, the new requirements shall apply unless determined otherwise by the Dean of the Graduate School.

Advanced Degrees for Faculty Members

Members of the faculty having a rank higher than that of Instructor may not be considered as candidates for degrees in the discipline in which they are employed and hold academic rank.

Student Responsibility

It is the student's responsibility to be informed concerning all regulations and procedures required by the course of study being pursued. *In no case will a regulation be waived or an exception granted because a student pleads ignorance of the regulation* or asserts that information was not presented by advisers or other authorities. Therefore, the student should become familiar with the Graduate School Bulletin, including 1) the section presenting the requirements for degrees and 2) the specific program offerings and requirements.

The Director of Graduate Studies in the student's major program should be consulted concerning course requirements, any deficiencies, the planning of a program, and special regulations. Programs may have degree requirements that are not listed in the Bulletin.

It is to be noted that the Dean of the Graduate School interprets the Graduate Bulletin. Only the Graduate Council may waive requirements stated in this Bulletin.

Confidentiality of Student Records

In accordance with the Family Education Rights and Privacy Act (FERPA) of 1974, University of Kentucky students have the right to review, inspect, and challenge the accuracy of information kept in a cumulative file by the institution unless the student waives this right in writing. Records cannot be released in other than emergency situations without the written consent of the student, except in the following situations:

1. to other school officials, including faculty within the educational institution or local educational agency, who have legitimate educational interests;
2. to officials of other schools or school systems in which the student intends to enroll, upon condition that the student be notified of the transfer, receive a copy of the record if desired, and have an opportunity for a hearing to challenge the content of the record;
3. to authorized representatives of 1) the Comptroller General of the United States, 2) the Secretary of Education of the United States, 3) an administrative head of an education agency or 4) state educational authorities;
4. in connection with a student's application for, and receipt of, financial aid;
5. where the information is classified as "directory information." The following categories of information have been designated by the University as directory information: name, address, telephone listing, e-mail address, photographs, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, enrolled hours, and the most recent previous educational institution attended by the student. If you do not wish such information released without your consent, you should notify the Student Records Office in writing.

Questions concerning this law and the University's policy concerning release of academic information may be directed to the Student Records Office of the Graduate School.

Graduate Courses

All courses numbered 500 through 799 may be counted for credit toward a graduate degree provided they are approved as an appropriate part of the student's graduate program by

the student's graduate adviser or committee. Courses numbered 400G to 499G carry graduate credit for non-majors only.

Courses numbered at the 800 or 900 level are normally not accepted for credit toward a graduate degree. Exceptions can be made if permission is granted by the Graduate Council to a program to offer specific professional courses as part of its academic program. Prior approval to take a course must be obtained from the Director of Graduate Studies, the Dean of the Graduate School and the dean of the professional college. Without such approval, professional courses may not be counted toward satisfying degree requirements. Courses numbered at the 600 or 700 level should be taught by members of the Graduate Faculty or by such other instructors as are approved by the Dean of the Graduate School.

Add/Drop-Withdrawal

The Graduate School follows the rules of the University Senate as administered by the Registrar's Office.

Academic Load

The total semester or term academic load of a student is the sum of all credits and credit equivalents (e.g., graduate language courses, undergraduate courses, courses audited, etc.) being carried. The normal academic load of a graduate student during any semester is nine credit hours or equivalent. Under no circumstances may it exceed 15 credit hours or equivalent. During the summer term, the maximum academic load for the second summer term is nine credit hours, and for the first summer term is four credit hours. The maximum academic load for any combination of the first and second summer terms is 12 credit hours.

Students satisfactorily completing nine course credits, or equivalent, of graduate level work during a semester, are classified as full-time students by the University. Students satisfactorily completing five course credits, or equivalent, during a summer term are classified as full-time. Those completing less than these amounts are classified as part-time. For the student who is a full-time teaching assistant or whose service to the University requires approximately 20 hours per week, the academic load shall not exceed 10 hours. This maximum may be increased to 12 hours for students with lighter service loads upon recommendation of the Director of Graduate Studies and approval of the Dean of the Graduate School.

Full-time students who fall below the minimum full-time equivalent as the result of failing or dropping one or more courses are reclassified as part-time students for that semester or term.

Master's candidates working on their theses may register for up to 12 credits of course number 768 in the appropriate department. Plan A master's degree candidates who are in residence and receiving financial support from the University and/or utilizing University resources while working on the thesis must be enrolled in the Graduate School. Candidates not enrolled in course work to meet degree requirements must be enrolled in their department's course number 748 or 768 each semester.

Grades and Grade Point Averages

The official grades of graduate students are recorded in the Office of the Registrar.

The grading in graduate courses is done according to the following scale:

A-High achievement	4 grade points per credit
B-Satisfactory achievement	3 grade points per credit
C-Minimum passing grade	2 grade points per credit
E-Failure	0 grade points per credit
I-Incomplete	See explanation below
S-Satisfactory	See explanation below
U-Unsatisfactory	See explanation below

D grades may not be awarded to graduate students. Graduate courses (400G-799) may not be taken Pass/Fail.

A grade of I (incomplete) may be assigned to a graduate student if a part of the work of a course remains undone and if there is a reasonable possibility that a passing grade will result from completion of the work. **All incompletes (I grades) must be replaced by a regular final letter grade within 12 months of the end of the academic term in which the I grade was awarded or prior to the student's graduation, whichever occurs first.** If an I grade has not been replaced within the allowable period, the University Registrar shall change the I grade to a grade of E on the student's permanent academic record and adjust the student's grade point average accordingly, unless otherwise approved because of exceptional circumstances by the Dean of the Graduate School upon recommendation of the Director of Graduate Studies in the student's program.

Instructors who assign an I grade **must** file with the student's Director of Graduate Studies information which includes 1) the name of the student, 2) the course number and hours of credit, 3) the semester and year of enrollment, 4) specific information on the work to be completed before a final grade can be assigned, and 5) the time frame in which the specific requirements are to be met (not to exceed 12 months). Graduate students should consult with their Director of Graduate Studies concerning procedures relative to the awarding of I grades and the conditions under which they may be removed.

All I grades must be resolved to a regular letter grade before a student may sit for the final examination, or the qualifying examination for doctoral students. Exceptions to this rule will be considered in unusual circumstances, and require the approval of the Director of Graduate Studies and the Dean of the Graduate School.

A grade of S (satisfactory) may be recorded for students in graduate seminars, independent work courses, and research courses which extend beyond the normal limits of a semester or summer term. This grade may not be given to a student in a course carrying credit if the student has done unsatisfactory work or failed to do a reasonable amount of work, in which case **a grade of U** (unsatisfactory) will be assigned. The project must be substantially continuous in its progress. All S, and U grades must be removed prior to the final examination (or qualifying

examination for doctoral students), except for those given in Residence Credit 748, 749, 768, and 769, or in graduate courses which carry no credit.

An overall average of B (3.0) on all graduate work in the program must be attained before an advanced degree may be awarded. Graduate-level courses (numbers 400G-799) are computed in the graduate grade-point average, with the exception of 400G courses in the student's program.

Once a grade other than I, S, or U has been reported to the Registrar's Office, it may not be changed unless an error was made at the time the grade was given and recorded, and then only upon the written unanimous approval of the instructor, the Registrar, and the Dean of the Graduate School.

Repeat Option

A student may repeat a graduate course and count only the second grade as part of the graduate grade point average. This action will be initiated by petition of the Director of Graduate Studies to the Dean of the Graduate School, and may be used only once in a particular degree program or in post-baccalaureate status.

Credit Equivalence

Certain research courses carry no credit hours or grades but do contribute to the residence requirements of graduate degrees. For these courses the credit equivalent is stated in the course descriptions.

Scholastic Probation

When students have completed 12 or more semester hours of graduate course work with a cumulative GPA of less than 3.0, they will be placed on scholastic probation. Students will have one full-time semester or the equivalent (nine hours) to remove the scholastic probation by attaining a 3.0 cumulative GPA. If probation is not removed, students will be dismissed from the Graduate School.

Students who have been dismissed from the Graduate School for this reason may apply for readmission to the Graduate School after two semesters or one semester and the eight-week summer term. Readmitted students will have one full-time semester or the equivalent (nine hours) to remove the scholastic probation by attaining a 3.0 cumulative GPA.

Exceptions to this policy can be made only by the Dean of the Graduate School.

Students placed on scholastic probation are not eligible for fellowships or tuition scholarships and may not sit for doctoral qualifying examinations, or master's or doctoral final examinations.

Termination

The Dean of the Graduate School may terminate enrollment in a particular program for the following reasons:

1. Scholastic probation for three enrolled semesters.
2. Having failed twice the final examination for the master's degree or the qualifying examination.
3. In cases where the student's Advisory Committee recommends termination after the qualifying examination has been passed, the Graduate Faculty in that program will meet to vote on the recommendation. When the Graduate Faculty of that program concurs and the student dissents, the student will have an opportunity to meet with the Graduate Faculty of the program, after which a second vote will be taken and a final recommendation will be made to the Dean of the Graduate School.

Each program sets specific requirements and standards of performance, evaluative procedures and criteria, and procedures for terminations. The student should be informed of these criteria at the time of enrollment by the Director of Graduate Studies of the program.

Examinations for Graduate Credit

A special examination for graduate credit in a student's program requires the approval of the Dean of the Graduate School. Students must complete the Special Examination form (available in the Registrar's Office) and have it approved and signed by the Director of Graduate Studies and the Dean of the Graduate School. Students must be enrolled in the Graduate School during the semester they wish to sit for a special examination.

Students Changing Programs

Students who plan to change programs must have the consent of the Director of Graduate Studies in the **new** program. A letter of acceptance from the DGS must be sent to the Graduate School. Also, students must request in writing that this change be made official by the Graduate School.

Off-Campus and Short Courses

Short courses are defined as courses of less than a term in length. A short course may not carry more credits than the number of weeks during which it is offered. Two short courses of four weeks or less may not be taken simultaneously.

Instructional standards for off-campus and short courses should be the same as those established for on-campus and regular courses. A comprehensive final examination will normally be required to assess the student's capability for scholarly thinking in the subject matter area. Practicum or laboratory short courses should require other experiences of comparable rigor.

UK Students as Visitors

University of Kentucky graduate students who attend another graduate school as a Visiting Student must have the permission of their University of Kentucky adviser and the Graduate School **before** the courses are taken in order to transfer credits earned (see *Transfer of Credits* on page 22).

Visiting Student status may be granted **only** to a student who is in good standing in a degree program.

Time Limit for Degrees

Master's/Specialist Degrees. Activities used to satisfy degree requirements must be completed within eight years preceding the proposed date of graduation. Extensions of time will

be considered by the Graduate Council only upon written recommendation by the appropriate Director of Graduate Studies. No activity completed more than 12 calendar years preceding the proposed graduation date will be considered for graduation.

Doctoral Degree. All degree requirements for the doctorate must be completed within five years following the semester or summer session in which the candidate successfully completes the qualifying examination. In the event that all degree requirements are not met during the five-year period, degree candidates who provide evidence of the likelihood of completing the degree during an extension of time may be granted such an extension by the Graduate Council. Requests will be considered only upon written recommendation of the appropriate Director of Graduate Studies after the candidate has again successfully completed the qualifying examination process as currently administered by the program. (Note: Failure to pass the re-examination will result in the termination of degree candidacy; a second re-examination is not permitted.) An extension of no more than five years may be granted.

Electronic Theses and Dissertations (ETDs)

The Graduate School, in conjunction with the University Libraries, permits graduate students the *option* of submitting their master's theses and doctoral dissertations in wholly electronic format, instead of the traditional paper copy. These scholarly works are then displayed on the World Wide Web for the international community of scholars to view. ETDs have many advantages and are the latest advance in scholarly communication. They provide for a much broader and faster showcase for the research and creative accomplishments of graduate students and their programs, as well as providing students the valuable experience of preparing a large wholly electronic document and gaining a working familiarity with several software types. A properly constructed ETD has enhanced full-text searchability; searches are not limited to just keywords and indexing data. Their electronic nature can provide much richer content: multi-media components such as high-resolution color images, video and audio clips, as well as some databases and programs can be imbedded in an ETD. Further information is available at <www.uky.edu/ETD/>.

Thesis and Dissertation Fees

Thesis and dissertation fees cover the cost of binding the thesis or dissertation, microfilming, and copyright (see *Copyright* section on page 27). The Thesis fee for a Plan A master's degree is $14; the Dissertation fee is $69, which includes the cost of submission to UMI Dissertation Publishing. Fees can change without notice. Authorization forms used for paying dissertation fees are issued in Room 351, Patterson Office Tower. Diplomas will not be released from the Registrar's Office until the fees have been paid.

Graduation (Commencement)

Graduate degrees may be conferred at the close of either semester or the second summer session, but Commencement exercises are held only in May. Students who are eligible to receive degrees at the end of the summer session or the fall semester may participate in the spring Commencement exercises. Appropriate academic regalia must be worn.

To be eligible for a degree, **a student must file Application for Degree Cards in the Graduate School within 30 days after the beginning of the semester (15 days in the summer session) in which they expect to graduate.**

Diplomas

Diplomas for graduate students are ordered after certification of the degrees has been completed. If a letter of certification is needed, the Graduate School will provide one upon written request or by coming in person to Room 351 Patterson Office Tower.

Outstanding Accounts

All outstanding accounts due to the University must be cleared before a degree is awarded.

ADVANCED DEGREES

GENERAL REQUIREMENTS FOR ALL MASTER'S DEGREES

(See also General Regulations)

On-Campus Residence

There is **no** Graduate School-wide sustained residence requirement for master's degrees at the University of Kentucky. However, students are advised to review the requirements for the programs in which they are interested and consider carefully the spirit of resident graduate work as discussed in the section on doctoral residency. Students who contemplate continuing in a doctoral program should take into account at the outset the residence requirements for the doctoral degree.

Foreign Language Requirement

Many programs require a reading knowledge of a modern foreign language for the master's degree. French, German, or Russian are the normally accepted languages. However, another modern language pertinent to the student's program may be substituted on the recommendation of the adviser and with the approval of the Director of Graduate Studies and the Dean of the Graduate School. The language requirement may be satisfied by:

1. completing one of the accelerated graduate level language courses with a B or better grade.
2. completing the fourth semester of a foreign language with a grade of B or better as an undergraduate at an accredited college or university.
3. completing, with a grade of B or better, special examinations given for the graduate reading courses. Forms may be obtained from the Registrar's Office, Funkhouser Building. Other types of special examinations are scheduled in the Graduate School.
4. transferring a language taken to satisfy the requirements for a master's degree at another university.

Note: With the approval of their program, international students who are non-native speakers of English may satisfy the foreign language requirement by presenting a TOEFL score of 550 or above. (The equivalent score on the computer version of the TOEFL is 213.)

Candidates for degrees must be proficient in English.

Transfer of Credits

With the approval of the student's adviser or major professor, the Director of Graduate Studies, and the Dean of the Graduate School, a maximum of nine semester hours *or twenty-five percent of the semester hours required for the degree concerned (exclusive of residence or thesis credit) whichever is greater,* of regular graduate course credits, completed at an accredited university and earned prior to admission to a given graduate degree program, may be credited toward the minimum requirements of the Master's or Specialist degree in that graduate program provided that the grades earned were A or B. For example, such credits may be earned 1) as a student in another graduate program at the University of Kentucky, or 2) as a graduate student at another accredited graduate school. In the event a student offers credits in more than one of these categories, the total to be credited toward the degree still may not exceed nine hours *or twenty-five percent of the semester hours required for the degree concerned (exclusive of residence or thesis credit), whichever is greater.* In no case will independent work, research, thesis, or dissertation credit completed as part of the degree requirements for one program be considered to satisfy requirements of a subsequent master's or specialist program.

Courses and Curricula

Graduate students are eligible to take regular courses which meet as organized classes and independent-study or research courses in which each student carries on investigations independent of class meetings. *Independent study or research courses must not duplicate thesis work;* thesis work must be done in addition to the minimum course requirements. *At least two-thirds of the minimum requirements for the master's or specialist degree must be in regular courses, and at least half of the minimum course requirements (excluding thesis, practicum, or internship credit) must be in 600- or 700-level courses.* Exceptions to this rule may be made only with the approval of the Graduate Council.

Concurrent Degree Programs

Concurrent enrollment for degree purposes in more than one graduate program is permitted only with the approval of the student's Graduate Adviser(s), Directors of Graduate Studies in the programs, and the Dean of the Graduate School. No more than nine hours of course work may be common to concurrent degree programs.

Subsequent to the receipt of a doctoral degree, a student is not eligible to receive a master's degree based on the work which led to the doctorate.

Independent Study Programs (Correspondence Courses)

No graduate credit is given for courses taken by correspondence.

Final Examination

A Final Examination (oral and/or written) is given to all

Degrees Conferred

Doctor of Philosophy

Agricultural Economics
Anatomy and Neurobiology
Animal Sciences
Anthropology
Biology
Biomedical Engineering
Biosystems and Agricultural Engineering
Business Administration
Chemical Engineering
Chemistry
Civil Engineering
Communication
Computer Science
Crop Science
Economics
Educational and Counseling Psychology
Educational Policy Studies and Evaluation (Higher Education)
Electrical Engineering
English
Entomology
Exercise Science
Family Studies
Geography
Geology
Gerontology
History
Materials Science and Engineering
Mathematics
Mechanical Engineering
Microbiology
Mining Engineering
Molecular and Biomedical Pharmacology
Molecular and Cellular Biochemistry
Music
Nursing
Nutritional Sciences
Pharmaceutical Sciences
Philosophy
Physics and Astronomy
Physiology
Plant Pathology
Plant Physiology
Political Science
Psychology
Public Administration
Rehabilitation Sciences
Social Work
Sociology
Soil Science
Spanish
Statistics
Toxicology
Veterinary Science

Master of Arts

Anthropology
Art
Classics
Communication
Diplomacy
English
French
Geography
German
History
Library Science
Mathematics
Music
Philosophy
Political Science
Psychology
Sociology
Spanish
Theatre Arts

Master of Science

Agricultural Economics
Animal Sciences
Applied Mathematics
Biology
Chemistry
Clinical Sciences
Computer Science
Crop Science
Dentistry
Economics
Entomology
Geology
Hospitality and Dietetic Administration
Kinesiology and Health Promotion
Mathematics
Medical Sciences
Pharmaceutical Sciences
Physics
Plant and Soil Science
Plant Pathology
Psychology
Statistics
Toxicology
Veterinary Science

Other Degrees

Doctor of Education
Doctor of Musical Arts
Doctor of Science
Master of Arts in Education
Master of Arts in Interior Design, Merchandising and Textiles
Master of Business Administration
Master of Civil Engineering
Master of Education
Master of Engineering
Master of Fine Arts
Master of Health Administration
Master of Historic Preservation
Master of Mining Engineering
Master of Music
Master of Public Administration
Master of Public Health
Master of Rehabilitation Counseling
Master of Social Work
Master of Science in Accounting
Master of Science in Agriculture
Master of Science in Biomedical Engineering
Master of Science in Biosystems and Agricultural Engineering
Master of Science in Chemical Engineering
Master of Science in Civil Engineering
Master of Science in Communication Disorders
Master of Science in Education
Master of Science in Electrical Engineering
Master of Science in Family Studies
Master of Science in Forestry
Master of Science in Health Physics
Master of Science in Interior Design, Merchandising, and Textiles
Master of Science in Library Science
Master of Science in Manufacturing Systems Engineering
Master of Science in Materials Science and Engineering
Master of Science in Mechanical Engineering
Master of Science in Mining Engineering
Master of Science in Nursing
Master of Science in Nutritional Sciences
Master of Science in Physical Therapy
Master of Science in Physician Assistant Studies
Master of Science in Radiological Medical Physics
Master of Science in Vocational Education
Specialist in Education

candidates for master's degrees not later than eight days before the last day of classes of the semester in which the degree is to be awarded. The examination is scheduled by the Dean of the Graduate School and the report is returned to the Dean upon completion of the examination, which in no case may be later than two weeks after the start of the examination. The examining committee consists of at least three qualified faculty recommended by the Director of Graduate Studies and appointed by the Dean of the Graduate School. At least two committee members (including the chair or co-chair) must be members of the Graduate Faculty, and at least one of the two must be a Full member of the Graduate Faculty.

The recommendation for a final examination **must** be filed with the Graduate School at least two weeks prior to the date of the examination. (Students writing theses should see the section on Thesis/Non-Thesis Options below and *Electronic Theses and Dissertations (ETDs) on page 21.*)

Students on scholastic probation are not eligible to sit for the final examination.

If the candidate fails the final examination, the committee may recommend to the Dean of the Graduate School the conditions under which a second examination may be administered. Insofar as it is practicable, the same examining committee gives this examination. In all decisions the majority opinion of the committee prevails. If the committee is evenly divided, the candidate fails. A third examination is not allowed.

Thesis/Non-Thesis Options

The Graduate Faculty authorizes all graduate programs to satisfy the master's requirements by either of two options, thesis (Plan A) or non-thesis, (Plan B). Candidates for the master's degree must have a major area (defined usually as an academic department) and *must take at least two-thirds of the course work in this area.* The other one-third may be taken in this area or in related graduate areas. In Agriculture, Education, and Human Environmental Sciences, only one-half of the work must be in the major area. When the establishment of major topics seems to require it, the Graduate Council may, on recommendation of the appropriate Director of Graduate Studies, authorize courses taught outside the major to count toward the major requirement.

In addition, *the Council on Postsecondary Education (CPE) requires that at least one-half of the minimum course requirements (excluding thesis, practicum, or internship credit) be in the major or core area, with three-fourths of these at the 600- to 700-level.* This is in addition to the requirements stated above.

The thesis option (Plan A) requires a thesis to be developed under the direction of a member or associate member of the Graduate Faculty. Collaborative effort by two or more graduate students is not forbidden. However, there must be enough independent effort to enable each student to make a separate contribution and to prepare an individual thesis.

Theses must be prepared in conformity with the instructions published by the Graduate School. For specific instructions regarding the format of theses, the student should obtain a copy of *Instructions for the Preparation of a Master's Thesis* from the Graduate School or on the Web at <www.rgs.uky.edu/gs/thesdissprep.html>.

Before the final examination, the thesis director and the appropriate Director of Graduate Studies must indicate to the Graduate School that the student's thesis satisfies all requirements of the Graduate School and is complete in content and format with the exception of pagination, and that the student is ready to be examined. Any modification in the thesis which the final examination committee specifies must be made before the degree is conferred.

The final two copies are submitted to the Graduate School after the Director of Graduate Studies and the Thesis Director have signed that they are complete. The thesis in its final form must be received in the Graduate School within 60 days of the Final Examination.

Theses must be presented to and accepted in the Graduate School by the last day of the semester if a student plans to graduate that semester.

Each student must pay a $14 fee for the binding of the thesis. Payment will be made at the Billings and Collection Office.

Theses submitted by candidates become the physical property of the University of Kentucky. The University protects the authors' rights by placing certain restrictions upon the use of theses.

The Graduate School, in conjunction with the University Libraries, offers graduate students the option of submitting their master's thesis in wholly electronic format. For more information, see *Electronic Theses and Dissertations (ETDs)* on page 21.

The non-thesis option (Plan B) requires that six or more graduate credit hours of course work be submitted in lieu of a thesis. A student may follow this option with approval of the program concerned.

Students should consult their adviser for any additional requirements established for Plan B in their area of study.

GENERAL REQUIREMENTS FOR ALL DOCTORAL DEGREES

Doctor of Philosophy (Ph.D.) Degree

The Ph.D. degree is intended to represent the demonstration of independent and comprehensive scholarship in a specific field. Such scholarship must be manifested by both the student's mastery of subject matter and capacity to do research.

The degree of Doctor of Philosophy is conferred upon a candidate who, after completing graduate work devoted to study of a special field of knowledge, 1) passes comprehensive examinations in the chosen field and the dissertation subject, 2) presents a satisfactory dissertation, and 3) shows evidence of scholarly attainment.

Students should note that some doctoral programs have degree requirements that may exceed the minimum requirements of the Graduate Faculty.

The Major Professor and the Advisory Committee

Each student's program is guided by a major professor and an advisory committee throughout the graduate career. Their purpose is to give continuity of direction and counsel and provide intellectual stimulation from the earliest days of residency through the completion of the doctorate.

The Director of Graduate Studies, or designee, serves as adviser to beginning graduate students until the advisory committee is appointed, normally not later than upon completion of 18 credit hours of graduate work. The advisory committee must be appointed at least one year prior to the qualifying examinations. The major professor and advisory committee are appointed by the Graduate Dean after consultation with the appropriate Director of Graduate Studies. The Dissertation Director, when selected, serves as the major professor. The advisory committee also provides advice to the student and specifically sets requirements (within applicable program, Graduate School, and University regulations) which the student must meet in pursuit of the doctorate.

The advisory committee has a core of four members. This core consists of the major professor as chair, two other members from the major area, and at least one representative from any minor area(s). At least one representative must be from outside the academic program (department). All members of the core must be members of the Graduate Faculty of the University of Kentucky and three (including the major professor) must possess full Graduate Faculty status. Additional faculty members may serve as members of the advisory committee. The core of the advisory committee must be kept at its full complement throughout the graduate career of the individual student. Thus, in the event of a vacancy on the committee (occasioned by resignation, faculty leave, or inability to serve), an appropriate replacement must be made prior to any subsequent committee decisions.

All decisions of the advisory committee are by majority vote of its Graduate Faculty members. Advisory committee decisions must be reported promptly to the appropriate Director of Graduate Studies who will be responsible for transmitting them to the Dean of the Graduate School.

In addition to advising and program planning, the advisory committee is also involved in the administration of the qualifying examination, the supervision of the preparation of the dissertation, and the administration of the final examination.

Major and Minor Subjects

Every applicant for the Ph.D. degree must select a major area of study. The major area is one in which the student's efforts are concentrated. Some programs also require one or more minor areas. Minor(s) must be approved by the student's advisory committee.

Residency Requirements

The purpose of a residency requirement is to encourage contact with the academic community in which doctoral students may become fully involved with colleagues, libraries, laboratories, on-going programs of research and inquiry, and experience the intellectual environment that characterizes a university. Such experience is generally as important as formal class work in the process of intellectual development. While the residency requirement is, by necessity, given in terms of full or part-time enrollment, the intent of the requirement is to ensure that the student becomes fully involved in an essential part of scholarly life.

Requirements for the doctorate may be completed in three years of full-time graduate work or the equivalent in combined full-time and part-time study; however, more time may be required (see *Academic Load* on page 19). In unusual cases, approval of a program of study involving less time may be secured from the Dean of the Graduate School. It should be understood that scholarly accomplishment is the ultimate goal to which requirements are intended to lead the student, not semester hours completed nor time spent in the program. On the recommendation of the Director of Graduate Studies, and with the concurrence of the Dean of the Graduate School, successful completion of a master's degree may be considered the equivalent of the first year of the three years of work toward the doctorate.

Subject to approval by the individual doctoral program (see the chart of Degree Requirements), students may fulfill the three-year doctoral residence requirement utilizing one of the three models listed below.

Model I

a) master's degree or 18 graduate hours at the University of Kentucky, or transfer of residence credit from an awarded master's at another accredited school; *plus,*
b) two consecutive semesters enrolled full-time, i.e., nine or more credits per semester (may include combined first and second summer sessions); *plus,*
c) completion with a grade of "S" of two consecutive full-time* semesters (9 credits each) or three consecutive part-time** semesters (6 credits each) of course 769 after successfully passing the qualifying examination.

Model II

a) master's degree or 18 graduate hours at the University of Kentucky, or transfer of residence credit from an awarded master's at another accredited school; *plus,*
b) enrollment part-time (at least 6 graduate credits per semester) during three consecutive semesters; *plus,*
c) completion with a grade of "S" of two consecutive full-time* semesters (9 credits each) or three consecutive part-time** semesters (6 credits each) of course 769 after successfully passing the qualifying examination.

Model III

a) master's degree or 18 graduate hours at the University of Kentucky, or transfer of residence credit from an awarded master's at another accredited school; *plus,*
b) accumulation of 24 graduate credits at the University of Kentucky (exclusive of short courses; no more than nine of these 24 credits may be earned in summer

sessions) during three consecutive academic or calendar years; *plus,*

c) completion with a grade of "S" of two consecutive full-time* semesters (9 credits each) or three consecutive part-time** semesters (6 credits each) of course 769 after successfully passing the qualifying examination.

*Students electing the full-time option may substitute a summer term for one of the semesters by enrolling in 3 credits of 769 in the first summer session and 6 credits of 769 in the second summer session.

**Students electing the part-time option may substitute a summer term for one of the semesters by enrolling in 6 credits of 769 in the second summer session only.

With the written recommendation of a candidate's advisory committee and with the approval of the appropriate Director of Graduate Studies and the Graduate Dean, specified graduate course work may be taken in lieu of all or part of the residence credit (course 769) requirement. The student need not be physically present on campus while enrolled for credit after the qualifying examination. While there is generally no formal class work attached to these credits, and in some cases the student may not be on the campus, full tuition costs are assessed in that students who are preparing their dissertations are utilizing University resources such as libraries, Computing Center, and major professors' and committee members' time and energy.

Note: The semester during which the student takes the qualifying examination may be counted for residence credit **only** if the date of successful passage is within six weeks (three weeks for the second summer session) of the first day of classes.

Candidates who have fulfilled the above requirements, but who have not yet defended the dissertation, are required to remain continuously enrolled in course 749 or 769 (0 credit hours) each semester until the dissertation is completed and defended. Such registration enables the University to keep accurate records of degree candidates and facilitates rapid and accurate information processing. Some programs have additional residence requirements which must also be met.

It should be understood that the above represents the **minimum requirements** of the Graduate School. Some programs have additional requirements.

Exceptions to this normal pattern may be made with the approval of the Dean of the Graduate School upon the written recommendations of the student's advisory committee and the Director of Graduate Studies, which clearly demonstrate that the principle of residence is preserved.

Foreign Language Requirement

Some doctoral degree programs require a reading knowledge of one or more modern foreign languages for the doctorate. The language (s) normally accepted are French, German, or Russian. However, any modern foreign language more appropriate to the student's field of study may be selected on the recommendation of the advisory committee and with the approval of the Director of Graduate Studies and the Graduate Dean. Arrangements must be made through the Office of the Dean of the Graduate School for examinations in languages not regularly taught at the University of Kentucky.

Any language requirement(s) must be satisfied before the applicant may sit for the qualifying examination (see *Foreign Language Requirements* on page 22).

The Qualifying Examination

A qualifying examination consisting of both written and oral components is required of all doctoral students. Its purpose is to verify that students have sufficient understanding of, and competence in, their fields to become candidates for the degree. In most programs, an individual qualifying examination is prepared and administered by the advisory committee; typically, that committee also judges the results of the examination. A majority vote of the core of the advisory committee is required for successful completion of the qualifying examination. Programs that give uniform, written qualifying examinations to all of their candidates shall have rules (filed with the Dean of the Graduate School) governing the role of the advisory committee in the preparation, administration, and evaluation of the qualifying examination. The examination usually is given after four semesters of graduate work or the equivalent.

The qualifying examination must be scheduled through the Director of Graduate Studies and approved a minimum of two weeks in advance by the Graduate School. Students should check with the Director of Graduate Studies to make sure that the qualifying examination has been properly scheduled.

The results of the examination must be reported by the Director of Graduate Studies to the Graduate School within 10 days of its conclusion. If the result is failure, the advisory committee determines the conditions to be met before another examination may be given. The minimum time between examinations is four months. A second examination must be taken within one year after the first examination. A third examination is not permitted.

The Dissertation

Each student must present a dissertation which represents the culmination of a major research project. The dissertation must be a well-reasoned, original contribution to knowledge in the field of study and should provide evidence of high scholarly achievement. The major professor is the primary source of guidance in the planning and preparation of the dissertation. However, other members of the advisory committee may be involved in the process as well. All core members of the advisory committee must read the dissertation prior to signing the dissertation approval form. It is the responsibility of the advisory committee to make suggestions for revisions before the final examination. A majority of the advisory committee core members must indicate that the form and substance of the dissertation are adequate to justify the scheduling of the final examination. The final examination may not be scheduled without the approval of a majority of the advisory committee members.

The style and form of the dissertation must conform with the instructions published by the Graduate School. For specific instructions regarding the format of the dissertation, the student should obtain a copy of the *Instructions for the Preparation of Dissertations and Doctor of Musical Arts Projects* from the Graduate School Office or on the Web at <www.rgs.uky.edu/gs/thesdissprep.html>.

Copyright and Fees

Each graduating doctoral student must pay dissertation fees. Payment can be made at the University Billings and Collections Office. Authorization forms for paying dissertation fees are issued in room 351, Patterson Office Tower.

Dissertations may be copyrighted by the student by 1) signing the Copyright Authorization on the Publishing Agreement Form which is completed when the dissertation is submitted to the Graduate School, 2) paying the copyright fee of $45 (this copyright fee is in addition to the $69 dissertation fee), and 3) including a copyright notice in the front of the dissertation.

The Graduate School, in conjunction with the University Libraries, offers graduate students the option of submitting their master's thesis in wholly electronic format. For more information, see *Electronic Theses and Dissertations (ETDs)* on page 21.

Final Examination

The Final Examination includes a defense of the dissertation and may be as comprehensive in the major and minor areas as the advisory committee chooses to make it. It is conducted by an expanded advisory committee chaired by the Director of Graduate Studies or someone designated by the Director. The Dean of the Graduate School and the President of the University are *ex officio* members of all final examination committees. The examination is a public event and its scheduling is published and announced beforehand. Any member of the University community may attend.

At least 8 weeks prior to the final examination, the Director of Graduate Studies will advise the Graduate School of the intent to examine. At this time the Graduate Dean appoints an Outside Examiner as a core member of the advisory committee. The specific time and date of the examination must be designated by the Graduate School *at least two weeks prior to the actual examination.* All members of the committee except the outside examiner must have an opportunity to suggest revisions prior to signing the Dissertation Approval Form. Thus, most revisions should have been completed at an earlier time. The final examination must take place no later than eight days prior to the last day of classes of the semester in which the student expects to graduate. Final examinations are public events and must take place while the University is officially in session. They may **not** be scheduled during the periods between semesters or between the end of the second summer session and the beginning of the fall semester.

The Dissertation Approval Form, along with an acceptable copy of the dissertation, must be presented to the Graduate School at the time the Final Examination is scheduled. The draft of the dissertation submitted must be complete in content, including all footnotes, tables, figures, and appendices. A full bibliography or set of references must be included as must all preliminary pages including a table of contents.

In all decisions, the majority opinion of the Graduate Faculty members of the advisory committee prevails. If the advisory committee is evenly divided, the candidate fails.

In the event of failure, the advisory committee recommends to the Dean of the Graduate School conditions under which the candidate may be re-examined, if re-examination is deemed appropriate. When conditions set by the Dean of the Graduate School have been met, the candidate may be re-examined. Should any vacancies on the Committee occur between the two examinations, the Dean of the Graduate School shall appoint replacements. A third examination is not permitted.

After the final examination is passed, the final copy of the dissertation is prepared. Final copies are then submitted to the Graduate School along with the signatures of the Major Professor and the Director of Graduate Studies. The dissertation in its final form must be received in the Graduate School within 60 days of the final examination. If this deadline is not met, the candidate must undergo a second examination.

Doctor of Education

(See *Doctor of Education* under *Graduate Work in the College of Education* on page 28.)

Doctor of Musical Arts

(See *Doctor of Musical Arts Degree* in the Music program description on page 109.)

Doctor of Science

(See *Doctor of Science* in the Clinical Sciences program description on page 68.)

DOCTORAL PROGRAMS WITH OTHER UNIVERSITIES

Cooperative doctoral programs in education are offered between the University of Kentucky and other state universities: Eastern Kentucky University (EKU), Morehead State University (MoSU), Murray State University (MuSU), the University of Louisville (UofL), and Western Kentucky University (WKU). These programs permit qualified candidates to complete up to one year of graduate work above the master's degree at the cooperating university. A minimum of 18 credit hours of course work, the qualifying examination, and the dissertation must be completed at the University of Kentucky, and a minimum of one academic year must be spent in full-time residence on the Lexington campus. The work of each candidate is directed by an advisory committee composed of faculty from both institutions.

Persons interested in these programs should confer with

the Dean of the Graduate School at the cooperating university, or with the appropriate Director of Graduate Studies in the College of Education at the University of Kentucky. Admission will depend upon academic standing, scores on standardized examinations, personal references, and other relevant factors.

There are additional Cooperative doctoral programs in the following areas:

Geology	UK/EKU
Higher Education	UK/UofL
History	UK/WKU
Musicology	UK/UofL
Physics	UK/UofL
Rehabilitation Sciences	UK/EKU/MuSU/WKU

There is a Joint doctoral program in Social Work between the University of Kentucky and the University of Louisville (UofL).

Inquiries should be directed to the appropriate Director of Graduate Studies, University of Kentucky.

GRADUATE WORK IN THE COLLEGE OF EDUCATION

The College of Education offers the following degrees: Master of Arts in Education, Master of Science in Education, Master of Science (in the Kinesiology and Health Promotion graduate program), Specialist in Education, Doctor of Education, and Doctor of Philosophy. Graduate work is also provided for persons seeking Rank I or II classification.

Rank II classification may be achieved by the completion of a master's degree or the "Planned Fifth Year Program." The "Fifth Year" is a non-degree program of 32 semester hours for persons who hold bachelor's degrees and teaching certificates. A minimum of 18 hours must be completed at the University of Kentucky. Of the 32 hours, at least 12 must be in professional education, and at least 12 must be in fields outside education.

Specific requirements depend upon the type of certificate desired. Information about specific certification requirements can be obtained from the appropriate Director of Graduate Studies.

Rank I classification requires the completion of: 1) 30 hours of approved graduate-level credit in addition to the requirements for a Rank II classification, or 2) 60 hours of approved graduate-level credit including the master's degree.

Each student's graduate curriculum must be a well-rounded program of courses related to the student's major interest and approved by the adviser. In cases of deficient preparation, the adviser, with the approval of the Director of Graduate Studies in the respective department, determines prerequisite undergraduate courses to be taken. Specific questions regarding programs should be referred to the appropriate Director of Graduate Studies.

Master of Arts in Education Advanced Certification Option

The Master of Arts in Education is the program selected by candidates seeking advanced certification for work in school settings.

A Master of Arts in Education degree will usually lead to Rank II for pay purposes.

The plan which leads to the degree of Master of Arts in Education for persons holding an initial certificate is outlined below:

1. All candidates for the Master of Arts in Education degree must meet the requirements for a valid teaching certificate. These requirements are outlined in the general catalog of the University. If deficiencies are found, they should be overcome before proceeding with graduate work. The work required to overcome these deficiencies is in addition to the minimum graduate requirements for the degree.
2. a. A minimum of 24 semester hours of graduate work, with at least 12 semester hours in courses numbered 600 or higher, must be completed and a thesis presented, or
   b. A minimum of 30 semester hours of graduate work, with at least 15 semester hours in courses numbered 600 or 700, must be completed.
3. At least 12 semester hours of graduate work must be in Education.
4. The total number of credits presented in Education, undergraduate and graduate, must be at least 30 semester hours.
5. At least 12 semester hours must be outside the College of Education for both elementary and secondary teachers except for teachers of vocational education who take six hours outside Education, and Reading Specialists who take six to nine hours outside Education.
6. Specific requirements depend upon the type of certificate desired. Information about specific certification requirements can be obtained from the appropriate Director of Graduate Studies.

Master of Arts in Education Initial Certification Option

The College of Education also offers a Masters of Arts in Education for individuals seeking initial secondary education certification in the following subject areas: business/marketing, English, foreign language, mathematics, science, and social studies.

1. All candidates for this program who are graduates of the University of Kentucky should possess appropriate content-area degrees or the University of Kentucky's undergraduate secondary education degree. These requirements are outlined in the general catalog of the University. Those individuals who hold baccalaureate degrees from other institutions must have a major in the area of teacher certification and should meet with subject area

faculty to identify any deficiencies. The work required to overcome any deficiencies must be completed before admission to the program and is in addition to the minimum graduate requirements for the degree.
2. A minimum of 33 credit hours of graduate work is required, including 27 hours in Education.
3. At least 18 semester hours of graduate work must be in courses numbered 600 or 700.
4. At least 6 hours must be outside the College of Education and related to the teaching major.
5. Specific requirements depend upon the type of certificate required. Information about teaching majors and certification requirements should be obtained from the subject area faculty. Other information may be obtained from the Director of Graduate Studies.

Master of Science in Education

The Master of Science in Education degree is designed for both non-certification and certification students. However, if a student already holds a valid teaching certificate, the Master of Science in Education degree may give Rank II for pay purposes and may, under some circumstances, renew the certificate.

The plan that leads to the degree of Master of Science in Education is outlined below:

1. a. A minimum of 24 semester hours of graduate work, with at least 12 semester hours in courses numbered 600 or 700, must be completed and a thesis presented, or
   b. A minimum of 30 semester hours of graduate work, with at least 15 semester hours in courses numbered 600 or 700, must be completed.
2. A minimum of 12 semester hours of graduate work in the College of Education is required.
3. A minimum of six hours outside the College of Education is required, but individual programs may require additional work outside the College.
4. Specific requirements depend upon the type of certificate desired. Information about specific certification requirements can be obtained from the appropriate Director of Graduate Studies.

Master of Education

The Master of Education (M.Ed.) in School Administration is the degree program selected by those seeking preparation for certification as a school principal in Kentucky public schools. The preparation curriculum includes 36 hours of course work and leads to a letter of eligibility for the Instructional Leader School Principalship, All Grades professional certificate. If this is a student's initial master's degree, a 30-hour Rank I program can be included within the curriculum.

The curriculum that leads to eligibility for certification as a principal contains two levels. For those students pursuing the M.Ed. as their initial master's degree, both levels of the preparation program must be completed before one is eligible for participation in the Kentucky Principal Internship Program (KPIP).

Doctor of Education

The requirements for the Ed.D. correspond to those of the Ph.D. with the following differences:

1. In addition to other credentials, admission requirements include:
   a. a master's degree, or
   b. 30 graduate credit hours applicable to an appropriate master's degree.
2. Some program areas require successful teaching, clinical, or administrative experience for admission.
3. The program requires completion of a major body of course work of at least 42 graduate credits beyond the minimum hours required for admission.
4. Course work for the Ed.D. will be planned by the advisory committee to complement and extend previous graduate work. Therefore, the student's total doctoral and predoctoral graduate work will reflect competencies in the following areas:
   a. **Area of Concentration**: A significant concentration of course work designed to develop an in-depth knowledge in a specific area of Education.
   b. **Support Areas**: Course work to support the Area of Concentration shall include the following two components:
      1) Disciplinary support work from outside the Area of Concentration. Some or all of this work will be done outside the College of Education.
      2) Course work relevant to the development of competencies in the foundational studies in Education. Such course work is to be taken in departments of the College of Education other than the Area of Concentration.
   c. **Research Methodology**: At least nine credits of recent course work selected to develop competencies in conceptualizing research, developing rigorous designs, selecting appropriate methodology, processing and analyzing data, interpreting results, and arriving at conclusions.
5. Although some students' programs may require competency in a foreign language as a research tool, there is no general language requirement.
6. The core membership of the advisory committee for each Ed.D. student consists of four members, consistent with Graduate School Rules.
7. In Cooperative programs with the regional universities, three advisory committee members must be from the University of Kentucky and must be full members of the Graduate Faculty.

Cooperative Doctoral Programs in Education

Cooperative doctoral (Ed.D.) programs in education are offered between the University of Kentucky and the following state universities: Eastern Kentucky University, Morehead State University, Murray State University, and Western Kentucky University (see *Doctoral Programs with Other Universities* on page 27).

Students are encouraged to apply to a Cooperative Doctoral Program early in their master's degree program to facilitate transition into the doctoral program.

Persons interested in a Cooperative doctoral program should confer with the Dean of the Graduate School at the cooperating university, or with the appropriate Director of Graduate Studies in Education at the University of Kentucky. Currently, the participating University of Kentucky academic departments are those of Administration & Supervision, Curriculum & Instruction, Educational Policy Studies & Evaluation, Kinesiology & Health Promotion, and Special Education.

Doctor of Philosophy (Education)

The Doctor of Philosophy degree in the field of Education is offered in Educational and Counseling Psychology and in Educational Policy Studies and Evaluation (Higher Education) (see *General Requirements for All Doctoral Degrees* on page 24).

Specialist in Education

The Specialist in Education degree is offered in Administration and Supervision, Educational and Counseling Psychology, and Special Education. It is conferred upon a candidate who satisfactorily completes a post-master's program in education under the general requirements of the Graduate School and the following special requirements:

Admission

The student, prior to admission to the program must 1) have a master's degree, 2) have a standing of 3.4 or higher on all graduate work, 3) meet the requirements for a teaching certificate or have credentials appropriate to the field of specialization, and 4) have at least 30 credit hours in courses in education (undergraduate and graduate).

The student should file an application with the Graduate School and the Director of Graduate Studies in the appropriate department and must be recommended by the major program and the department.

Program

The student must earn a minimum of 30 credit hours of graduate work beyond the master's degree, of which at least 15 must be in courses numbered 600 or above.

A departmental committee is responsible for helping students plan individual programs. The program should contribute to specialization in a field but should not neglect the broader development of the individual.

The student must complete an independent research project (equal to three but not to exceed 6 credit hours) and submit a written report, a copy of which is to be filed with the department directing the research.

With the approval of the Director of Graduate Studies and the Dean of the Graduate School, the student may transfer a maximum of 9 credit hours earned beyond the master's degree from an accredited institution that is approved to offer work above the master's level.

Final Examination

The final examination required of all candidates is administered by an examining committee consisting of at least three qualified members recommended by the adviser and the Director of Graduate Studies and appointed by the Dean of the Graduate School.

ACADEMIC RESOURCES

RESEARCH AT THE UNIVERSITY OF KENTUCKY

The University of Kentucky is the major graduate and research institution of the Commonwealth, and the major land-grant university in the state. As such, it offers substantial programs in both basic and applied research. These research efforts are the life blood of graduate education programs that prepare new researchers who will continue to expand the boundaries of human knowledge and to seek answers to pressing problems of our complex society. Applied research programs in areas such as agricultural sciences, arts and sciences, business and economics, engineering sciences, mathematical sciences and physics, medicine, and mining and minerals serve the Commonwealth and the nation by addressing critical issues influencing the quality of life and economic well-being of our citizenry.

University faculty and research staff have expertise in many areas including the basic biological, medical, physical, and social sciences; the creative arts and the humanities; and engineering. These individuals conduct research that ranges from the investigation of philosophical and ethical dilemmas raised by advances in science and technology to the practical application of basic knowledge in agriculture, energy, rehabilitation, and information retrieval, as well as in the economic development of the Appalachian region.

A significant aspect of research conducted at the University is the concern for its practical application for the betterment of society. Many of the techniques developed and ideas conceived in the laboratory and in advanced study evolve into technological developments of major significance.

Most research programs at the University are supported through federal, state and private sources. Application for such support and the fiscal administration of the monies received are overseen by the Office of Sponsored Projects Administration (OSPA). Programmatic organization and administration of research is provided by the various research institutes and multi-disciplinary centers and, in the case of individual faculty projects, by the regular departmental, school, and college structures.

Postdoctoral Fellowships

Postdoctoral fellowships are available in many research programs. Information concerning the terms of these fellowships is available in the individual departments. Postdoctoral fellows are required to register with the Graduate School through their departments.

Research and Teaching Assistantships

Most departments have support for teaching and research assistants. The stipends vary by department. Information concerning assistantships may be obtained from the various departments. (See *Fellowships and Assistantships* on page 38.)

Teaching and Learning Center

The University of Kentucky has several dynamic professional development programs for graduate students seeking academic careers. The Teaching and Learning Center assists faculty and graduate students in enhancing their teaching and other professional skills through a variety of innovative program offerings, as well as individual consultations and technological assistance.

The University of Kentucky was one of the original 17 cluster groups and was awarded an additional three-year grant under Phase II of the Preparing Future Faculty Initiative. The national Preparing Future Faculty program is a career development program targeted to graduate students planning to enter the professoriate.

Visiting Scholars and Advanced Study

When appropriate resources are available, the appropriate Chancellor or the Vice President for Research, upon the recommendation of the Dean of the Graduate School and the department affected, welcomes visiting scholars as guests of the University, and grants the privilege of auditing seminars and research courses and of conducting research. Normally there will be no charge except for laboratory expenses. Negotiations for such arrangements should be made in advance through the Office of the Dean of the Graduate School.

University of Kentucky Libraries

University of Kentucky Libraries, a member of the Association of Research Libraries, is a system that includes a main library, 11 branch and associate libraries and two information centers. With a book endowment of $66 million and growing, the UK Libraries rank 28th among all U.S. public and private institutions. UK's collection consists of more than 2.9 million books, more than 28,000 periodicals, five million microfiche, and 1.1 million government publications.

The central library is the William T. Young Library, a state-of-the-art facility that opened in April 1998. It houses the social sciences, humanities, and life sciences collections. With over 361,000 square feet of space, the William T. Young

Library seats 4,000 patrons, houses 1.2 million volumes, and is open 24 hours a day during the fall and spring semesters. It has one of the most advanced internal networking systems of any library in the world; there are approximately 3,600 network ports and 600 personal computers available for patrons and staff, all interconnected by a high-speed ATM network. Seventy laptop computers are available for student use in the library, as well as a large student computing lab, an audiovisual lab, and distance-learning facilities. The library provides 57 group study and conference rooms, many equipped with multimedia network capabilities, for use by students, faculty and staff.

Computing Services

The University of Kentucky Information Technology provides state-of-the-art computing services to all faculty, students, and staff, as well as to members of the National Computational Science Alliance, a cooperative partnership of academic, government, and industry researchers engaged in developing and deploying cutting-edge high performance computing technologies. One of the major efforts of the Alliance involves the creation of the Access Grid, a collection of high performance and high throughput resources and services that support both formal and informal intergroup communication and interaction between Alliance users. UK is one of the initial sites on the national Access Grid. The principle large-scale scientific computational facility at UK is an HP Superdome complex consisting of four SMP servers interconnected by a high speed, low latency "hyperfabric" network, in addition to gigabit Ethernet links to the public network. Three of the servers in the cluster have sixty-four PA-8700 processors each, and the fourth has thirty two PA-8700 processors, for a total of 224 processors (at 750 MHz). The complex has 448 gigabytes of main memory, 5 terabytes of disk space, and is rated at 672 peak GFLOPs.

Following benchmarking of the Superdome cluster, University of Kentucky has been ranked 8th out of 27 high performance academic computing centers in the US, and 109th out of the top 500 supercomputer sites world-wide.

The University of Kentucky is a founding member of Internet2, the national research network currently under development and has installed a 45 Mb/s Internet2 connection, which provides access to major research universities and a number of government and private laboratories around the world. Current projects by UK researchers utilizing the Superdome cluster include computational chemistry, computational biology, computational fluid dynamics, ocean modeling, particle physics, protein structure, as well as projects in agricultural science, astrophysics, engineering, mathematics, pharmacy, and nanotechnology.

MULTIDISCIPLINARY GRADUATE PROGRAMS

Graduate Center for Biomedical Engineering

The Graduate Center for Biomedical Engineering provides multidisciplinary programs of education, research, and service in the application of engineering principles to the areas of medicine and biology. The Center brings together engineers, life scientists, and physicians to conduct original research on a variety of medical-related problems. Areas of research include cardiopulmonary mechanics and controls, neuromuscular function, musculoskeletal mechanics, rehabilitation engineering, computational neuroscience, motor control, orthopedic biomaterials, orthopedic biomechanics and electromagnetic tissue stimulation. Master of Science and Doctor of Philosophy degrees in Biomedical Engineering are offered. The Center is located in the Wenner-Gren Research Laboratory that provides the framework for multidisciplinary research. Faculty and staff of the Center collaborate with investigators from other units of the University including the Departments of Physiology, Anatomy and Neurobiology, Cardiology, Medicine, Surgery, Physical Medicine and Rehabilitation, Orthopedics, Sports Medicine, and Kinesiology and Health Promotion, as well as the Departments of Agricultural, Chemical and Materials, Electrical, and Mechanical Engineering, the College of Pharmacy, and the Center for Robotics and Manufacturing Systems. Center faculty and staff provide opportunities and support for graduate students, medical residents, and selected undergraduates. Graduates of the program enter careers in research institutes, academia, hospitals and industry.

The Patterson School of Diplomacy and International Commerce

The Patterson School of Diplomacy and International Commerce offers an interdisciplinary master's degree which can be tailored to meet the career needs of individual students. The program is especially useful for students desiring careers in any of the non-academic fields in foreign affairs such as international banking, commerce and journalism, or service with governmental agencies or international organizations. To assure the interdisciplinary character of the degree, students may concentrate their work in a specific geographical area or focus on certain aspects of international affairs.

In addition, the Patterson School serves in an advisory capacity to Ph.D. programs in departments offering internationally-oriented doctoral degrees in various colleges on campus.

Graduate Program in Gerontology

The Ph.D. program in Gerontology provides opportunities for the advanced multidisciplinary study of aging and the aged with particular emphasis on issues of health and

well-being. This doctoral program is the recipient of a multi-year NIH training grant (1998-2003), coordinated through the Sanders-Brown Center on Aging, a Commonwealth Center of Excellence. The Center is a nationally designated Alzheimer's Disease Research Center, a Center of Excellence in Stroke, and the site of a Geriatric Education Center. The graduate faculty includes representation from Anatomy and Neurobiology, Anthropology, Behavioral Science, Civil Engineering, Dentistry, Family Studies, Geography, Internal Medicine, Management, Neurology, Nursing, Nutrition and Food Science, Philosophy, Physiology, Preventive Medicine and Environmental Health, Psychology, Social Work, and Sociology. Areas of particular expertise and emphasis include rural aging, long-term care, cognitive and sensory change, public policy, ethical issues, and the etiology and treatment of Alzheimer's disease, stroke, and other diseases prevalent among the elderly. Center facilities include 34 biomedical research laboratories, a library, conference rooms, and research and office space. Affiliated facilities for training and research include the University of Kentucky Hospital, Christian Health Center (a University-affiliated nursing home), The Breckinridge (an Alzheimer's assisted living facility), the Center for Rural Health, the Helping Hand Alzheimer's Day Care Program, University of Kentucky Geriatric Support Services, Cardinal Hill Hospital, Northeast Area Health Education Center, and the Veteran's Affairs Medical Center.

Graduate Center for Nutritional Sciences

The M.S. and Ph.D. programs in Nutritional Sciences provide opportunity for advanced multidisciplinary study in Nutritional Sciences. Educational opportunities exist in agricultural, biological, clinical, community, medical, social, biochemical, and molecular nutritional sciences. The graduate faculty consists of a core faculty and more than 30 jointly-appointed faculty members representing various academic units of the University including Agronomy, Animal Sciences, Anthropology, Behavioral Science, Biochemistry, Clinical Sciences, Horticulture, Internal Medicine, Neurology, Nutrition and Food Science, Oral Health Science, Psychiatry, Surgery, and Toxicology. Faculty have modern research laboratory facilities for conducting cell culture, human, and animal studies using state of the art equipment. These include trace mineral, vitamin, lipid, amino acid, enzyme, hormone, cytokine, stable and radioactive isotope, microcirculatory, and energy assessment analyses. Clinical facilities for training and research include the University of Kentucky Hospital, the Veteran's Administration Hospital, Sanders-Brown Center on Aging, University of Kentucky Medical Center Outpatient Clinics, and the Markey Cancer Center. Opportunities for community-based research exist locally, throughout the state, and in international settings.

Martin School of Public Policy and Administration

The Martin School offers three multidisciplinary degree programs—the Master of Public Administration, the Master of Health Administration, and the Ph.D. in Public Administration—and engages in research and public service activities. The disciplines represented by the School's faculty are management, finance, economics, industrial engineering, political science, and health administration. The research and public service components of the Martin School offer the School's faculty, staff, and graduate students the opportunity to engage in interdisciplinary research on public policy issues.

Graduate Center for Toxicology

The Graduate Center for Toxicology (GCT) educates scientists at the M.S., Ph.D. and postdoctoral levels to deal with toxic substances and their effects on humans and the environment. The GCT has a core faculty based in the Health Sciences Research Building and an interdisciplinary faculty of about fifty jointly-appointed faculty members, all of whom are active in teaching and research in toxicology, drawn from the major departments and colleges on campus. The GCT has over 100 graduates among whom are numerous faculty members and government and corporate toxicologists.

Student support comes from Graduate School fellowships, minority fellowships, special fellowships, research assistantships, and NIEHS pre- and postdoctoral fellowships for Research Training in Environmental Toxicology.

Areas of research strength include environmental toxicology, immunotoxicology, molecular mechanisms of chemical carcinogenesis, molecular biology, toxicology, and neurotoxicology. Students in the GCT are organized through the Toxicology Student Forum, which is represented on all GCT committees and functions as the students' voice and representative during their time at the University of Kentucky.

RESEARCH CENTERS, INSTITUTES AND SUPPORT UNITS

Appalachian Center

The Appalachian Center coordinates and supports research, instruction, extended service, and archival activities relating to the Appalachian region, and administers interdisciplinary research programs such as the Common Knowledge Network and the Rockefeller Humanities Fellowship project. The Center offers graduate assistantships and provides assistance and a focal point for graduate students from a range of disciplines who are interested in the study of Appalachia.

Students interested in graduate study with an emphasis in the Appalachian region may contact the Director of the Center.

Center for Business and Economic Research

The Center for Business and Economic Research provides a focal point for research in the Carol Martin Gatton College of Business and Economics. It provides information and staff support for research projects, assists faculty in efforts to secure external funding for research, and coordinates multidisciplinary team approaches to research. The Center also monitors and analyzes the economy of Kentucky and provides quarterly economic forecasts for the state.

Center for Computational Sciences

The Center for Computational Sciences is a center for research and education with primary emphasis on developing and using computer models to analyze chemical, physical, and biological systems. Faculty from Mathematics, Computer Science, Statistics, Engineering, Chemistry, Physics, Biology, and other departments use a multidisciplinary approach to study such systems, utilizing the full range of computational resources—micro, mini, mainframe, and supercomputers. This includes algorithm development and evaluation for vector and parallel, as well as for scalar machines. Courses in applied mathematics, numerical analysis, and computer modeling are available for students interested in this approach to analyzing and understanding these systems.

Center for Pharmaceutical Science and Technology

The Center for Pharmaceutical Science and Technology (CPST) is a fully integrated analytical and formulation development and FDA-registered pharmaceutical manufacturing facility utilizing current Good Manufacturing Practices (cGMPs). The CPST has the capacity to develop and manufacture solid, semi-solid (topical) and aseptic injectable formulations, and has completed well over 200 projects/grants with academic institutions, biotechnology and pharmaceutical companies as well as with the NIH. These partnerships involve the analytical and formulation development and cGMP manufacture of existing drugs and novel chemical entities. The Center's missions are to enrich the education of the University's students through specialized educational and training programs related to pharmaceutical technologies, to provide expertise to students and faculty involved in translational research requiring the manufacture of pharmaceutical products, to support the extensive infrastructure required to manufacture drug products for clinical trials and to enhance economic development in the Commonwealth.

Center for Robotics and Manufacturing Systems

The Center for Robotics and Manufacturing Systems is dedicated to the advancement of manufacturing through education, research, and technology transfer. The Center supports active programs in the areas of manufacturing processes, engineered materials and processes, automation systems, and integrated manufacturing systems.

State-of-the-art laboratories are utilized by faculty, staff and students to develop processes for new materials, modeling and simulation, and automation and systems integration. Major areas of research include aspects of metal cutting such as control of machining chatter, methods and theory of chip formation and control, finite element modeling of the machining process, and metrology. The monitoring and control of machine systems also is an important area. Current research also encompasses activities on methodologies for modeling, sensing, and control. Intelligent systems, communication networks particularly adapted to manufacturing systems, and improved distributed computer architectures are being studied. In addition, processes such as painting technology, stereolithography, electrodischarge compaction of powdered metal, and injection molding are addressed.

Technology transfer activities help manufacturing companies keep pace with increasing globalization. Specialized areas of assistance offered by the CRMS engineering and technical staff include computer-aided technologies, electronic assembly, product/process optimization, and rapid prototyping. Technology advancements are disseminated to manufacturers by presentations, seminars, workshops, demonstrations and exhibitions, as well as through one-on-one industrial extension activities.

Center of Membrane Sciences

The Center of Membrane Sciences affords a unique approach to promote multidisciplinary research and education in both natural biological membranes and artificial synthetic membranes. UK faculty from the Departments of Animal Sciences, Anatomy and Neurobiology, Biochemistry, Biomedical Engineering, Chemical and Materials Engineering, Chemistry, Nutrition and Food Science, Pharmacy, Physiology and Biophysics, and Psychology are active in the programs of the Center. This collaboration between experts in biological membranes with experts in synthetic membranes constitutes the major strength of the Center and it puts the University and the Commonwealth at the forefront of this vital area of science and technology. No other such Center of Membrane Sciences exists in the United States. The sciences of membranes encompasses broad areas: a) the structure and chemistry of biological membranes and their constituents, transport processes, and information transfer (transmembrane signaling) in living systems; b) the synthesis, structure, and chemistry of synthetic membranes; separation of solutes ranging in size from smaller molecules and ions to large proteins by reverse osmosis and ultrafiltration with biotechnology and pharmaceutical applications; separation of gaseous mixtures by synthetic membranes; c) separation of organic and biomolecules by synthetic membranes containing chemical and biofunctional groups; d) membrane-based catalysis, analysis, and separation combining molecular biology with chemistry and chemical engineering to produce new fundamental and applied studies of biofunctional membranes. Opportunities are available for graduate students in

each of the above-listed disciplines as well as in agriculture, health sciences, dentistry, medicine, and other areas.

Gluck Equine Research Center

The Gluck Equine Research Center is part of the Department of Veterinary Science. Research in the Center is supported, in part, by an endowment established by the University of Kentucky Equine Research Foundation. The Center provides state-of-the-art facilities and equipment for the study of a wide variety of diseases of the horse. Research in the areas of infectious diseases, reproductive physiology, parasitology, pharmacology, immunogenetics, growth and development, pathology, blood typing, and toxicology and experimental therapeutics are conducted within the 69,505 square foot building located in front of Commonwealth Stadium.

The Gluck Center offers postgraduate and postdoctoral training in a variety of disciplines. The Center is well-positioned in one of the most concentrated horse breeding areas in the world. Both basic biomedical and problem-oriented research are included in the Center's program.

Interdisciplinary Human Development Institute

The Interdisciplinary Human Development Institute (IHDI) is a research, training, service and technical assistance program working at local, state, regional, national and international levels to improve services to persons with disabilities and their families. These activities are developed in cooperation with a broad range of both University of Kentucky units and public or private organizations and agencies. These cooperative relationships include education, social services, medicine, health sciences, rehabilitation and other related disciplines. Its activities include life span involvements with programs ranging from prevention of disabilities to aging and gerontology. It is a member of the American Association of University Affiliated Programs (AAUAP).

Kentucky Geological Survey

As the official State geologic research organization, the mission of the Kentucky Geological Survey (KGS) is to increase knowledge and understanding of the mineral, energy, and water resources, geologic hazards, and geology of Kentucky. Applied and basic research is conducted to address issues related to environmental protection, energy production, planning, and hazard mitigation. KGS is a national leader in geologic mapping and in the conversion of geologic maps for computer applications. Research results, publications, and maps are available on the KGS Web site at www.uky.edu/KGS. Geologic data (oil and gas well records, coal borehole records, water well records) and a catalog of publications and maps are available in a searchable database on the KGS Web site. Technology-transfer workshops are offered throughout the year on diverse topics (for example, groundwater protection, GPS and GIS technology, digital geologic mapping).

Numerous researchers at KGS serve as adjunct faculty in the Department of Geological Sciences and the Department of Agricultural Engineering, teach courses, and serve on advisory committees of graduate students at UK. Many graduate students are employed in KGS research programs, and graduate students from UK and other universities participate in a summer internship program provided by KGS.

Kentucky Transportation Center

The Kentucky Transportation Center serves as the focal point in the state for interdisciplinary research in transportation. The Commonwealth of Kentucky has long recognized the important contributions of transportation to the long-term prosperity and well being of its citizens. This is demonstrated in the unique relationship between the Kentucky Transportation Cabinet and the University of Kentucky, whereby the Kentucky Transportation Center was created within the College of Engineering. The Center's mission is providing research expertise and transferring technology for improving the state's transportation system.

The Kentucky Transportation Center plays a key role in this effort by conducting transportation research; developing solutions to transportation problems; and providing training/technical assistance to the transportation community throughout Kentucky and the nation. A highly experienced group of engineers and other professionals provide focused expertise in several critical areas of transportation such as environmental analysis, geotechnology, intelligent transportation systems, pavements and materials, structures, traffic and safety, policy and systems analysis and construction management. The Center staff is enhanced by faculty, undergraduate and graduate students from disciplines that include civil engineering, business administration and economics, geography, mechanical engineering and public administration and policy analysis.

Kentucky Water Resources Research Institute

The Kentucky Water Resources Research Institute (KWRRI) stimulates and supports water resources research and education by identifying current and emerging water resources issues for Kentucky and the nation. Faculty at all the universities and colleges in Kentucky are encouraged to participate in the Institute's programs.

Programs of the Institute include the Environmental System Certificate, which offers a multi-disciplinary perspective of environmental issues; the Environmental Protection Scholarship Program, which supports both undergraduate and graduate students with full scholarships in exchange for employment with the state upon graduation; and the Federal Facilities Oversight Unit, which assists the state Cabinet for Health Services with environmental oversight of federal facilities located in Kentucky. The Water Resources Research Institute supports faculty members, research staff and graduate students in a broad spectrum of research topics. The Institute's technology transfer program includes short courses, seminars and conferences, and the distribution of research results through newsletters, web sites, and printed research reports.

Markey Cancer Center

The Markey Cancer Center is a multidisciplinary center for research, patient care, education and community outreach. Research activities are broadly represented through designated program areas, which include: tumor immunology, cellular and molecular biology, mechanisms of carcinogenesis, behavioral/psychosocial studies, clinical investigations, developmental therapeutics and cancer prevention and control. Core research resources available through the center include: flow cytometry, macromolecular structure, nuclear magnetic resonance spectroscopy, transgenic mouse construction, the national Cancer Information Service, a Prevention Research Center and the SEER-linked Kentucky Cancer Registry. These activities, together with a wide range of individual investigator initiated projects, are supported by a combination of funding sources, including research grants from the National Cancer Institute, the American Cancer Society, and other extramural funding agencies. The Center provides pilot project support for new investigators as well as for interactive/program project grant initiatives.

Sanders-Brown Center on Aging

The Sanders-Brown Center on Aging is a multidisciplinary center for gerontological teaching, research, and service, dedicated to improving the quality of life for older adults. The Center is responsible for coordinating and integrating research, education and service programs in aging throughout the University of Kentucky. It administers interdisciplinary research programs, coordinates the offering of gerontology courses, and assists in the training of graduate students. Over 150 faculty and staff from many areas and disciplines of the University are involved in programs of the Center (see *Graduate Program in Gerontology* on page 32).

Students interested in graduate study with an emphasis in gerontology may work toward the Graduate Certificate in Gerontology awarded by the Sanders-Brown Center on Aging. The certificate requires 15 graduate credit hours in an approved, multidisciplinary curriculum in gerontology and completion of graduate degree requirements in a major academic discipline. For further information on the Graduate Certificate in Gerontology contact the Certificate Director, Sanders-Brown Center on Aging.

Statistics Consulting Laboratories

The Department of Statistics operates two consulting laboratories: the Statistics Consulting Laboratory for the main campus and the Biostatistics Consulting Unit for the Medical Center campus. These laboratories provide advice to faculty and graduate students on proper study designs for projects involving quantitative data as well as on appropriate strategies for analyzing the data emanating from such projects. Laboratory services cover the entire range of applied statistical methodology including biostatistics, epidemiology and survey sampling. Statistical programming support for projects is also available on a fee for services rendered basis. The staff occasionally offers short courses on specialized topics.

Survey Research Center

The Survey Research Center designs, coordinates, and conducts survey research activities for the University and public agencies and assists faculty and students with survey research projects. The Center's services range from research design and questionnaire development through data analysis and report writing. The Center conducts national, statewide, and local telephone surveys using a state-of-the-art computer-assisted telephone interview system (CATI), mail surveys and face-to-face interviews. It conducts the Bi-Annual Kentucky Survey, which probes the opinions and attitudes of Kentuckians. The Center serves as the Headquarters of the National Network of State Polls and is an affiliate of the Kentucky State Data Center. Survey data and data from other Center projects are available for faculty and graduate student research.

Tobacco and Health Research Institute

This Institute conducts research in two distinct fields, namely the investigation of animal physiology related to the use of tobacco products, and the application of biotechnology to develop new crops based on the tobacco plant. In the animal sciences field, THRI grants support projects that investigate the action of tobacco smoke constituents on processes in the lung, the action of nicotine on the central nervous system, and many other mechanisms relating to the interaction of tobacco products with animal physiology. The Institute also provides an unique service to tobacco researchers worldwide through its production of research reference cigarettes, construction of equipment for smoke-exposure studies, and provision of analytical services. Biotechnology research aimed at the development of new crops based on tobacco is supported both through competitive grants and by an in-house program. There is a strong emphasis on collaborations with research groups in academia and industry. The in-house group undertakes research into the types of products best suited to production *via* crop agriculture, the development of advanced systems for production of novel substances in the tobacco plant, and the development of new tobacco plants making novel products such as antibiotics, insecticides, enzymes, etc. This research is designed to facilitate the eventual development of entirely new crop opportunities for the Kentucky tobacco grower. The Institute welcomes proposals for research support in both the animal health and the tobacco biotechnology fields.

INTER-UNIVERSITY AFFILIATIONS

Southeastern Universities Research Association

The Southeastern Universities Research Association (SURA) is a consortium of 41 universities in 13 southeastern states and the District of Columbia established in 1980 to serve as an entity through which colleges, universities, and other organizations may cooperate with one another and with

government and other organizations in acquiring, developing, and using laboratories, machines, and other research facilities and in furthering knowledge in the physical, biological, and other natural sciences and engineering. The University of Kentucky is a founding member of SURA.

SURA's current research efforts are focused in nuclear physics, information technology, and materials science. SURA manages the Thomas Jefferson National Accelerator Facility (TJNAF) for the Department of Energy for research in nuclear science. The SURA/TJNAF Graduate Fellowship Program offers awards to graduate students at SURA institutions who plan to pursue TJNAF-related research.

Research Program at Oak Ridge Associated Universities

Since 1946, students and faculty of the University of Kentucky have benefited from its membership in Oak Ridge Associated Universities (ORAU), a consortium of colleges and universities and operating contractor for the U.S. Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Contact the Office of the Vice President for Research, University of Kentucky, (859) 257-5294 for more information.

GENERAL INFORMATION

Tuition and Fees for 2002-2003

Tuition Schedule

Per Semester: Fall and Spring	Resident	Non-resident
Full-Time Student		
Graduate School	$2,173.25	$5,782.25
MBA	$2,326.25	$5,944.25
Part-Time Student (per hour fee)		
Graduate School	$227.40	$628.40
MBA	$244.40	$646.40
Summer Terms	**Resident**	**Non-resident**
Full-Time Student		
Second Summer Session* only		
Graduate School	$1,145.40	$3,150.40
MBA	$1,230.40	$3240.40
Part-Time Student and		
First Summer Session+		
(per hour fee)		
Graduate School	$227.40	$628.40
MBA	$244.40	$646.40

+First Summer Session: Four credit hours is the maximum course load and fees will be assessed separately per hour.

*Second Summer Session: Full-time fees are attained at five hours for the Graduate School.

Mandatory Registration Fee (included in the figures above)

Semester (Full-time)	Annual Charges	Second Summer (Full-time)	Part-time and First Summer Fee Per Credit Hour
$247.25	$494.50	$75.40	$13.40

FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Fellowships and Assistantships

Financial assistance is available in the form of fellowships and assistantships, as well as research funding. A fellowship is a non-service award made to superior students to assist in the pursuit of an advanced degree. An assistantship is an appointment to perform specified teaching or research duties.

Fellowships

There are more than 400 non-service fellowships available in all areas of graduate work. The majority of these fellowships carry a tuition scholarship and student health insurance as well as a stipend. Tenure may be from one to three years, depending on fellowship type. While fellowships are formally awarded by the Graduate School, nominations for most fellowships are made by the department in which a student is enrolled or seeks to enroll.

Almost all fellowships are awarded beginning with the fall semester. There are virtually no fellowships that beginwith the spring semester. Departments make fellowship nominations by February for the next academic year, so students interested in a fellowship should submit applications and all supporting documents by that time. Later applicants have a reduced chance of obtaining a fellowship. Notification regarding awarding of fellowships comes from the Graduate School by early May.

Assistantships

Approximately 1500 teaching or research assistantships are available from departments and other units of the University. In addition to an assistantship stipend, full or partial tuition scholarships and student health insurance are available for most assistantship holders.

The majority of assistantships are awarded beginning with the fall semester. Students interested in an assistantship should submit applications by February 1 for the next academic year; late applicants have a reduced chance of obtaining an assistantship. Most assistantship decisions are made by April for the coming academic year.

The University of Kentucky honors the following:

Resolution Regarding Graduate Scholars, Fellows, Trainees and Assistants

Adopted by the Council of Graduate Schools in the United States

"Acceptance of an offer of financial support (such as a graduate scholarship, fellowship, traineeship, or assistantship) for the next academic year by a prospective or enrolled graduate student completes an agreement that both student and graduate school expect to honor. In that context, the conditions affecting such offers and their acceptance must be defined carefully and understood by all parties."

"Students are under no obligation to respond to offers of financial support prior to April 15; earlier deadlines for acceptance of such offers violate the intent of this Resolution. In those instances in which a student accepts an offer before April 15, and subsequently desires to withdraw that acceptance, the student may submit in writing a resignation of the appointment at any time through April 15. However, an acceptance given or left in force after April 15 commits the student not to accept another offer without first obtaining a written release from the institution to which the commitment has been made. Similarly, an offer made by an institution after April 15 is conditional on presentation by the student of a written release from any previously accepted offer. It is further agreed by the institutions and organizations subscribing to the above Resolution that a copy of this Resolution should accompany every scholarship, fellowship, traineeship, and assistantship offer."

Notification of an assistantship comes from the department. Questions about the availability of positions and the status of assistantship applications should be addressed to the Director of Graduate Studies in the department a student seeks to enter.

Student Support

Funds are available to students enrolled in graduate programs for assistance with expenses relating to dissertation or thesis research as well as for travel to present research at professional meetings. Students should check with the Graduate School Fellowship Office regarding application materials for student support.

Students should consult with the Director of Graduate Studies in the department they seek to enter for information regarding nomination for other research support funds that may be available from the Graduate School.

Health Services

University Health Service

The convenience of an on-campus health care facility, a low-cost prepaid plan for outpatient services, and a student group health insurance plan are designed to make UK's total health plan attractive and economical for graduate and professional students, both full-time and part-time.

All full-time students must pay the student health fee in fall and spring semesters which entitles them to medical and mental health care at the University Health Service. For students who attend either of the summer sessions the health fee is optional.

Part-time students may prepay the student health fee or may use the health service on a fee-for-service basis; the health fee may be paid at the Student Billing Office.

The University Health Service is located in the Kentucky Clinic across Rose Street from the University Hospital. All visits are made by appointment [(859) 323-2778]. The clinic is staffed by physicians, nurses, psychiatrists, and other health professionals who are specialists in the health problems of young adults.

Spouses of eligible students are welcome to receive their primary care at the health service. They are charged for all services rendered. Children and other family members are not eligible.

Services covered by the health fee include: unlimited visits to clinicians for illness or injury, laboratory services and x-rays ordered by the health service clinician as part of evaluation for an illness or injury, some medications, allergy shots and immunizations, and visits to the professionals in the Mental Health Service. For additional information, contact the University Health Service at (859) 323-5823.

Health Insurance

Services related to hospitalization, surgical procedures and accident care, and any other health care provided outside the University Health Service, are not covered by the health fee. The University of Kentucky strongly endorses the belief that students should have health insurance, either provided by their parents' policy or by an independent insurance company. The University, including the University Hospital, assumes no responsibility for a student's medical expenses.

Health Insurance Requirement for International Students

The University of Kentucky has instituted a mandatory health insurance program for all international students. International students who are in F-1 and J-1 visa status will be charged for the UK Student Health Insurance Plan along with their tuition and fees. Students who have purchased health insurance in their home countries or are covered as a dependent on a U.S. plan may be eligible for a waiver. F-2 and J-2 dependents who enroll in classes will be charged for the health insurance along with their tuition and fees. International students on a J-1 visa are required to purchase health insurance for all of their dependents. F-1 students are strongly encouraged to purchase health insurance for their dependents because of the extremely high cost of medical care. International students with questions about health insurance should contact the health insurance coordinator in the Office of International Affairs at (859) 257-4067 ext. 238.

Health Insurance Coverage for Graduate TAs, RAs, GAs, and Institutional Fellowship Recipients

Degree-seeking graduate students who hold full assistantships (teaching assistants, research assistants, graduate assistants), or are full institutional fellowship holders, or a combination thereof, receive the student health insurance plan offered by the University of Kentucky. Coverage is provided at no cost to eligible graduate students. All other graduate students may purchase the insurance. For more information, call the Graduate School Fellowship Office at (859) 257-3261 and ask for the insurance coordinator.

Student Group Insurance Plan

The University Health Service can assist students in obtaining health insurance coverage. The annual policy provides year-round coverage. Students may also purchase coverage for their spouse and/or children.

The premium may be paid annually, semi-annually, or quarterly by check, Visa, or MasterCard. Enrollment may be continued from one year to the next by re-enrolling within 14 days from the enrollment date. Although students are encouraged to enroll at the beginning of the school year, enrollment is available throughout the policy year.

Health insurance information packets for the upcoming school year are available in mid-July at the University Health Service. For further information and enrollment dates, call (859) 323-5823, ext. 230.

The current insurance plan is underwritten by the MEGA Life and Health Insurance Company.

Student ID Card (UKID)

All students admitted to the University (both full-time and part-time) are expected to obtain a student ID card (UKID). This is a permanent card, which becomes valid each semester when fees are paid. The first ID card is provided without cost.

Students who lose their UKID should report the loss immediately to the UKID Office (257-1378), the Diner/Plus Account Office (257-6159), or any Food Service location. The UKID is the property of the University of Kentucky and is to be returned to the Dean of Students upon termination of student status.

Counseling and Testing Center

The University Counseling and Testing Center has a staff of licensed psychologists whose primary function is to address the emotional/psychological issues of both undergraduate and graduate students. Some typical concerns of graduate students include feelings of depression, anxiety, stress due to the demands of graduate school, quality of interpersonal relationships, loneliness and isolation, grief, time management, refinement of critical thinking skills, career and life planning, and other issues of a personal nature.

All counseling sessions are *free, voluntary, and confidential.* The services are available by appointment to fee-paying students enrolled for at least six semester hours. Graduate students enrolled for thesis or dissertation hours also are eligible.

In addition to counseling with individual students, the Center offers couples (significant others) and group counseling. General counseling groups are ongoing and reconstituted each semester. Participants work on a variety of issues. There are also special focus groups such as Bridges (a support group for graduate African-American women), an eating disorders group, and a discussion group for LD/ADHD.

Appointments and further information may be obtained by calling (859) 257-8701 or by coming to the Center, 301 Frazee Hall.

Disability Services

Students with disabilities should call or stop by the Disability Resource Center, 2 Alumni Gym, or call (859) 257-2754. The staff will assist students with information about accessible parking, bus services, and/or special needs.

Housing

The UK Apartment Housing Office operates apartments for single graduate students and student families. The apartments are rented on a 12-month lease agreement basis. For more information, contact UK Graduate and Family Housing, 700 Woodland Ave., Lexington, KY 40508; (859) 257-3721; e-mail apthousing@uky.edu; or see <www.uky.edu/auxserv/housing.htm>.

DEGREE REQUIREMENTS

This chart outlines minimum requirements for all graduate degree programs.

PROGRAM	DEGREE	Thesis Option	Non-thesis Option	Residence Model(s)	Credit Hours Required	Language(s) Required
Accounting	Master of Science in Accounting		X		30	
Administration and Supervision	Specialist in Education	X			39*	
Instruction and Administration	Doctor of Education	X		I, II, III	*	
School Administration	Master of Education		X		33*	
Agricultural Economics	Doctor of Philosophy	X		I	*	
	Master of Science	X			24	
	Master of Science		X		36	
Anatomy and Neurobiology	Doctor of Philosophy	X		I	*	
Animal Sciences	Doctor of Philosophy	X		I, II, III	*	
	Master of Science	X			24	
	Master of Science		X		36	
Anthropology	Doctor of Philosophy	X		I	*	ONE
General Anthropology	Master of Arts	X			24	
Applied Anthropology	Master of Arts		X		33*	
Art Education	Master of Arts	X			30	
	Master of Arts		X		36	
Art History	Master of Arts	X			24	TWO
Art Studio	Master of Fine Arts		X		60*	
Biology	Doctor of Philosophy	X		I	*	
	Master of Science	X			24	
	Master of Science		X		30	
Biomedical Engineering	Doctor of Philosophy	X		I	*	
	Master of Science in Biomedical Engineering	X			26	
	Master of Science in Biomedical Engineering		X		31	
Biosystems and Agricultural	Doctor of Philosophy	X		I, II, III	*	
Engineering	Master of Science in Biosystems&Ag Engineering	X			24	
	Master of Science in Biosystems&Ag Engineering		X		30	
Business Administration	Doctor of Philosophy	X		I	*	
	Master of Business Administration		X		36	
Chemical Engineering	Doctor of Philosophy	X		I, II, III	*	
	Master of Science in Chemical Engineering	X			24	
	Master of Science in Chemical Engineering		X		30	
Chemistry	Doctor of Philosophy	X		I, II, III	*	
	Master of Science	X			24	
	Master of Science		X		30	
Civil Engineering	Doctor of Philosophy	X		I, II, III	*	
	Master of Science in Civil Engineering	X			24	
	Master of Science in Civil Engineering		X		30	
	Master of Civil Engineering		X		30*	
Classics	Master of Arts	X			24	ONE
	Master of Arts		X		30	ONE

PROGRAM	DEGREE	Thesis Option	Non-thesis Option	Residence Model(s)	Credit Hours Required	Language(s) Required
Clinical Sciences	Doctor of Science			I	*	
	Master of Science	X			37	
	Master of Science		X		38	
Communication	Doctor of Philosophy	X		I, II, III	*	
	Master of Arts	X			30	
	Master of Arts		X		30*	
Communication Disorders	Master of Science in Communication Disorders		X		30	
Computer Science	Doctor of Philosophy	X		I, II, III	*	ONE
	Master of Science	X			24*	
	Master of Science		X		30	
Crop Science	Doctor of Philosophy	X		I. II. III	*	
	Master of Science	X			24	
	Master of Science in Agriculture	X			24	
	Master of Science in Agriculture		X		36	
Curriculum and Instruction						
Early Childhood Education	Master of Arts in Education	X			30	
	Master of Arts in Education		X		36	
Elementary Education	Master of Arts in Education		X		30	
Instruction and Administration	Doctor of Education	X		I, II, III	*	
Instructional Systems Design	Master of Science in Education	X			36	
	Master of Science in Education		X		36	
Middle School Education	Master of Arts in Education	X			24	
	Master of Arts in Education		X		30	
	Master of Science in Education	X			24	
	Master of Science in Education		X		30	
Reading	Master of Arts in Education		X		33	
Secondary Education	Master of Arts in Education		X		30*	
	Master of Science in Education	X			24	
	Master of Science in Education		X		30*	
Dentistry	Master of Science	X			24	
Diplomacy and International Commerce	Master of Arts	X			24	ONE
	Master of Arts		X		30	ONE
Economics	Doctor of Philosophy	X		I	*	
	Master of Science		X		30	
Educational and Counseling Psychology	Doctor of Philosophy	X		I, II	*	
	Specialist in Education		X		30*	
	Master of Science in Education	X			30*	
	Master of Science in Education		X		36*	
Educational Policy Studies and Evaluation	Doctor of Philosophy	X		I, II	*	
	Doctor of Education	X			*	
	Master of Science in Education		X		31*	
Electrical Engineering	Doctor of Philosophy	X		I, II	*	
	Master of Science in Electrical Engineering	X			24	
	Master of Science in Electrical Engineering		X		33	
Engineering	Master of Engineering		X		30	
English	Doctor of Philosophy	X		I, II	*	ONE
	Master of Arts	X			24	ONE

PROGRAM	DEGREE	Thesis Option	Non-thesis Option	Residence Model(s)*	Credit Hours Required	Language(s) Required
English (cont.)	Master of Arts		X		30*	ONE
Entomology	Doctor of Philosophy	X		I, II, III	*	
	Master of Science	X			24	
	Master of Science		X		36	
Family Studies	Doctor of Philosophy	X		I,II,III	*	
	Master of Science in Family Studies	X			*	
	Master of Science in Family Studies		X		*	
Forestry	Master of Science in Forestry	X			24	
	Master of Science in Forestry		X		30	
French	Master of Arts		X		30	ONE
Geography	Doctor of Philosophy	X		I	*	ONE
	Master of Arts	X			24	
	Master of Arts		X		30	
Geology	Doctor of Philosophy	X		I, II, III	*	
	Master of Science	X			24	
German	Master of Arts	X			24	ONE
	Master of Arts		X		30	ONE
Gerontology	Doctor of Philosophy	X		I	*	
Health Administration	Master of Health Administration		X		44	
Historic Preservation	Master of Historic Preservation		X		48	
History	Doctor of Philosophy	X		I	*	ONE/TWO**
	Master of Arts	X			24	ONE
	Master of Arts		X		36	ONE
Hospitality and Dietetic Administration	Master of Science	X			30	
	Master of Science		X		36	
Interior Design, Merchandising	Master of Arts in Interior Design, Merch. & Textiles	X			30	
and Textiles	Master of Arts in Interior Design, Merch. & Textiles		X		30	
	Master of Arts in Interior Design, Merch. & Textiles	X			30	
	Master of Arts in Interior Design, Merch. & Textiles		X		30	
Kinesiology and Health Promotion	Doctor of Education	X		I,II,III	*	
	Master of Science	X			30	
	Master of Science		X		30	
Exercise Science	Doctor of Philosophy			I	*	
Library Science	Master of Arts	X			30	ONE
	Master of Arts		X		36	ONE
	Master of Science in Library Science		X		36	
Manufacturing Systems Engineering	Master of Science in Mfg Systems Engineering	X			24	
	Master of Science in Mfg Systems Engineering		X		33	
Materials Science and Engineering	Doctor of Philosophy	X		I, II, III	*	
	Master of Science in Materials Science&Engineering	X			24	
	Master of Science in Materials Science&Engineering		X		30	
Mathematics	Doctor of Philosophy	X		I	*	ONE
	Master of Science	X			30	
	Master of Science		X		30	
	Master of Arts	X			30	
	Master of Arts		X		30	
Applied Mathematics	Master of Science		X		36	

PROGRAM	DEGREE	Thesis Option	Non-thesis Option	Residence Model(s)+	Credit Hours Required	Language(s) Required
Mechanical Engineering	Doctor of Philosophy	X		I, II, III	*	
	Master of Science in Mechanical Engineering	X			24	
	Master of Science in Mechanical Engineering		X		30*	
Medical Sciences	Master of Science	X			*	
	Master of Science		X		*	
Microbiology	Doctor of Philosophy	X		I	*	
Mining Engineering	Doctor of Philosophy	X		I	*	ONE
	Master of Science in Mining Engineering	X			24	
	Master of Science in Mining Engineering		X		30	
	Master of Mining Engineering		X		30	
Molecular and Biomedical Pharmacology	Doctor of Philosophy	X		I	*	
Molecular and Cellular Biochemistry	Doctor of Philosophy	X		I	*	
Music	Doctor of Philosophy	X		I, II	*	
	Doctor of Musical Arts	X		I, II	*	ONE
	Master of Music	X			30	
	Master of Music		X		30	
	Master of Arts	X			30	ONE
Nursing	Doctor of Philosophy	X		I	*	
	Master of Science in Nursing	X			40	
	Master of Science in Nursing		X		40	
Nutritional Sciences	Doctor of Philosophy	X		I, II, III	*	
	Master of Science	X			29	
	Master of Science		X		35	
Pharmaceutical Sciences	Doctor of Philosophy	X		I	*	
	Master of Science	X			24	
	Master of Science		X		30	
Philosophy	Doctor of Philosophy	X		I, II	*	ONE
	Master of Arts		X		30	ONE
Physical Therapy	Master of Science in Physical Therapy	X			24	
	Master of Science in Physical Therapy		X		30	
Physician Assistant Studies	Physician Assistant Studies		X		100	
Physics and Astronomy	Doctor of Philosophy	X		I	*	
	Master of Science	X			24	
	Master of Science		X		30	
Physiology	Doctor of Philosophy	X		I	*	
Plant Pathology	Doctor of Philosophy	X		I, II, III	*	
	Master of Science	X			24	
Plant Physiology	Doctor of Philosophy	X		I	*	
Plant and Soil Science	Master of Science	X			24	
	Master of Science		X		30	
Political Science	Doctor of Philosophy	X		I, II	*	ONE**
	Master of Arts	X			24	
	Master of Arts		X		30	
Psychology	Doctor of Philosophy	X		I	*	
	Master of Arts	X			24	
	Master of Science	X			24	

PROGRAM	DEGREE	Thesis Option	Non-thesis Option	Residence Model(s)+	Credit Hours Required	Language(s) Required
Public Administration	Doctor of Philosophy	X		I	*	
	Master of Public Administration		X		45	
Public Health	Master of Public Health		X		*	
Radiation Science	Master of Science in Radiological Medical Physics		X		30	
	Master of Science in Health Physics		X		30	
Rehabilitation Counseling	Master of Rehabilitation Counseling		X		*	
Rehabilitation Sciences	Doctor of Philosophy	X		I,II,III	*	
Social Work	Doctor of Philosophy	X		I, II, III	*	
	Master of Social Work		X		60*	
Sociology	Doctor of Philosophy	X		I, II, III	*	
	Master of Arts	X			24	
	Master of Arts		X		30	
	Master of Science in Agriculture	X			24	
	Master of Science in Agriculture		X		36	
Soil Science	Doctor of Philosophy	X		I, II	*	
Spanish	Doctor of Philosophy	X		I	*	TWO
	Master of Arts	X			24	ONE
	Master of Arts		X		30	ONE
Special Education	Doctor of Education	X		I	*	
	Specialist in Education		X		30*	
	Master of Science in Education	X			36*	
	Master of Science in Education		X		39*	
Statistics	Doctor of Philosophy	X		I	*	
	Master of Science	X			29	
	Master of Science		X		35	
Theatre Arts	Master of Arts	X			30	
	Master of Arts		X		30	
Toxicology	Doctor of Philosophy	X		I	*	
	Master of Science	X			24	
	Master of Science		X		31	
Veterinary Science	Doctor of Philosophy	X		I, II, III	*	
	Master of Science	X			24	
Vocational Education	Doctor of Education	X		I, II, III	*	
	Master of Science in Vocational Education	X			24	
	Master of Science in Vocational Education		X		30	
	Master of Science in Education	X			24	
	Master of Science in Education		X		30	

**Individual requirements may vary according to the need of the student. Where asterisks are listed, consult the Director of Graduate Studies in the specific program.*
***Contact Director of Graduate Studies for details.*
+See page 25 for description of Models I, II, and III.

DIRECTORS OF GRADUATE STUDIES

COLLEGE OF AGRICULTURE
PROGRAMS

Agricultural Economics 52
David Freshwater
Animal Sciences 54
David L. Harmon
Crop Science 74
David Van Sanford
Entomology 86
Kenneth V. Yeargan
Forestry 88
David Wagner
Plant Pathology 125
Christopher L. Schardl
Plant Physiology 125
Arthur G. Hunt
Plant and Soil Science 126
Michael Collins
Soil Science 138
John H. Grove
Veterinary Science 144
Thomas M. Chambers

COLLEGE OF ARCHITECTURE
PROGRAMS

Historic Preservation 95
Dennis Domer

COLLEGE OF ARTS AND SCIENCES
PROGRAMS

Anthropology 55
Mary Anglin
Biology 58
Pete Mirabito
Chemistry 65
Robert D. Guthrie
Classics 58
A. Ross Scaife
English 84
Dale Bauer
French 89
A. Ross Scaife
Geography 90
Richard Schein
Geology 91
Alan Fryar
German 92
A. Ross Scaife
History 95
Ellen Furlough
Mathematics 103
David C. Johnson
Philosophy 119
Sanford Goldberg
Physics and Astronomy 123
Thomas Troland
Political Science 127
Stuart Kaufman
Psychology 128
David Berry
Sociology 137
Larry Burmeister
Spanish 139
Diana Niebylski
Statistics 142
Arnold J. Stromberg

COLLEGE OF
BUSINESS AND ECONOMICS
PROGRAMS

Accounting 49
Thomas R. Pope
Business Administration 62
(MBA) - Walter Ferrier
(Ph.D.) - Michael Tearney
Economics 78
John Garen

COLLEGE OF COMMUNICATIONS
AND INFORMATION STUDIES
PROGRAMS

Communication 70
Roy L. Moore
Library Science 104
Timothy Sineath

COLLEGE OF DENTISTRY
PROGRAMS

Dentistry 76
Thomas T. Lillich

COLLEGE OF EDUCATION
PROGRAMS

Administration and Supervision 51
Jane Lindle
Curriculum and Instruction 74
Douglas C. Smith
Educational and Counseling Psychology ... 80
Eric Anderman
Educational Policy Studies and Evaluation 81
Jeffery Bieber
Kinesiology and Health Promotion 99
J.W. Yates
Rehabilitation Counseling 133
Ralph Crystal
Special Education 140
John Schuster
Vocational Education 145
Charles Byers

COLLEGE OF ENGINEERING
PROGRAMS

Biosystems and Agricultural Engineering .. 61
Richard S. Gates
Chemical Engineering 64
Dibakar Bhattacharyya
Civil Engineering 66
Kamyar Mahboub
Computer Science 73
Grzegorz Wasilkowski
Electrical Engineering 83
William T. Smith
Engineering 84
G. T. Lineberry
Manufacturing Systems Engineering 102
Larry Holloway
Materials Science and Engineering 102
Philip J. Reucroft
Mechanical Engineering 104
George P. Huang
Mining Engineering 107
Ricky Honaker

COLLEGE OF FINE ARTS
PROGRAMS

Art 56
Marilyn Hamann
Music 109
Lance Brunner
Theatre Arts 143
Rhoda-Gale Pollack

COLLEGE OF HEALTH SCIENCES
PROGRAMS

Communication Disorders 72
Jodelle Deem
Physical Therapy 120
Arthur J. Nitz
Physician Assistant Studies 121
Gil Boissonneault
Radiation Science 132
Ralph Christensen
Rehabilitation Sciences 135
Susan Effgen

COLLEGE OF HUMAN
ENVIRONMENTAL SCIENCES
PROGRAMS

Family Studies 87
Stephan Wilson
Hospitality and Dietetic Administration 97
Desmond Brown
Interior Design, Merch. & Textiles 98
Meg Portillo

COLLEGE OF MEDICINE
PROGRAMS

Anatomy and Neurobiology 53
Brian MacPherson
Integrated Biomedical Sciences 98
David S. Watt
Medical Sciences 106
Brett Spear and Brian MacPherson

Microbiology 106
Brett Spear
Molecular and Biomedical Pharmacology 108
Thomas C. Foster
Molecular and Cellular Biochemistry 109
Michael Mendenhall
Physiology 124
Timothy McClintock
Public Health (Preventive Medicine) 131
Sanford W. Horstman

COLLEGE OF NURSING

PROGRAMS

Nursing 114
(MSN) - Juliann G. Sebastian
(Ph.D.) - Lynne A. Hall

COLLEGE OF PHARMACY

PROGRAMS

Pharmaceutical Sciences 118
Paul M. Bummer

COLLEGE OF SOCIAL WORK

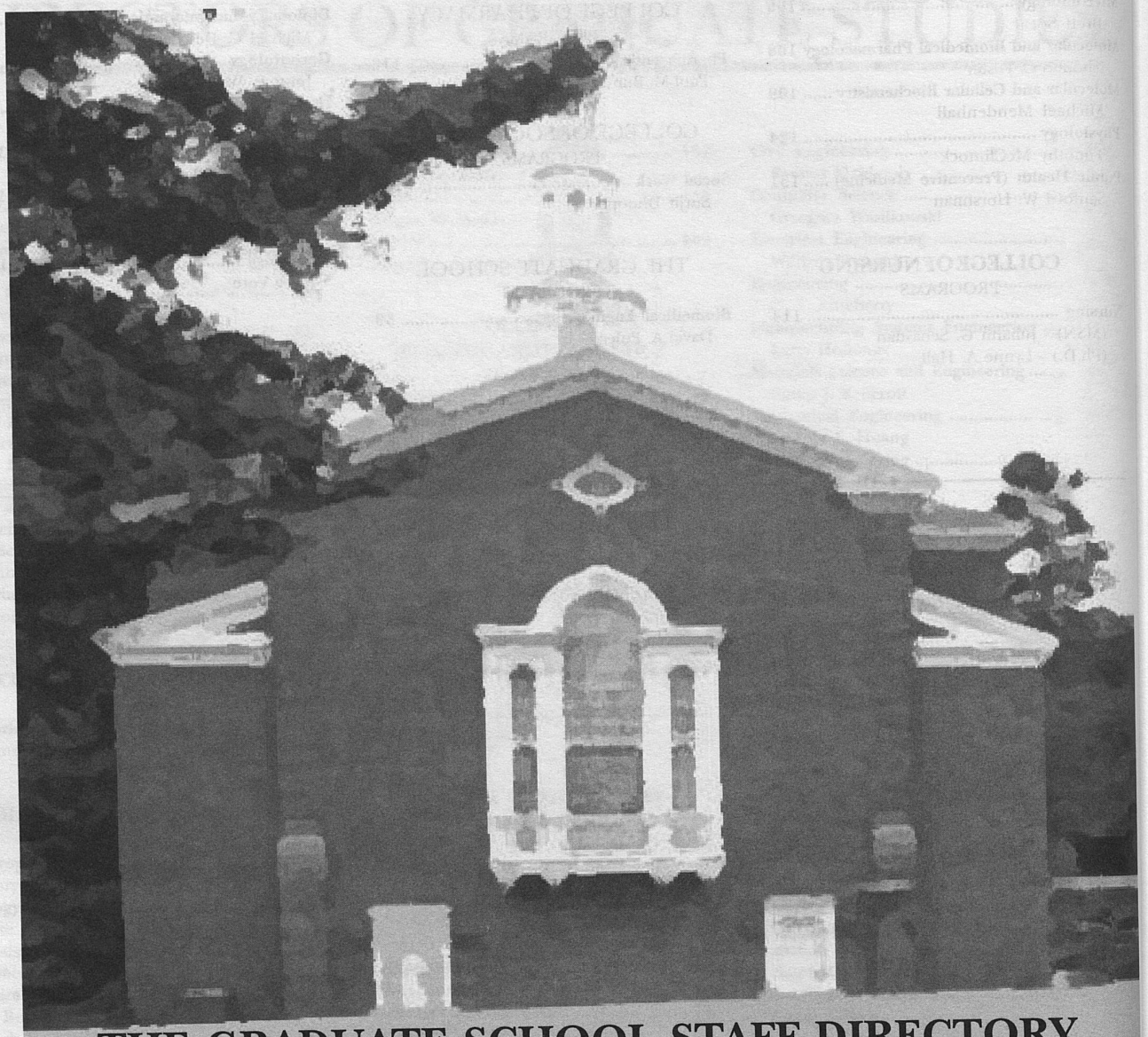
PROGRAMS

Social Work 136
Surjit Dhooper

THE GRADUATE SCHOOL

PROGRAMS

Biomedical Engineering 59
David A. Puleo
Diplomacy and International Commerce .. 77
Michael C. Desch
Gerontology 92
John F. Watkins
Health Administration 94
Jeffery Talbert
Nutritional Sciences 116
Linda H. Chen
Public Administration 129
(MPA) - Matt Gabel
(Ph.D.) - Merl M. Hackbart
Toxicology 143
Mary Vore



THE GRADUATE SCHOOL STAFF DIRECTORY

Office of the Dean

Douglass S. Kalika, Acting Dean	(859)257-1759
Rebecca Fister	(859)257-1759

Academic Administration

Jeannine Blackwell, Sr. Associate Dean	(859)257-4905
Patricia Bond, Assistant Dean	(859)257-4905
Stephanie Francis	(859)257-4905

Administrative and Fiscal Affairs

Christine Levitt, Director	(859)257-4121
Kate Wheeler	(859)257-6051

Admissions

Maureen Barker	(859)257-7129
Vivian Bowling	(859)257-4619
Michelle Finchum	(859)257-4618
Jonathan Garrett	(859)257-6111
Michelle Mossey	(859)257-4615

Assessment

Marilyn Lyons	(859)257-5851

Data Processing and Mail Center

Deborah Price	(859)257-4905
Patricia Henry	(859)257-4905

Degree Certification

Rebecca Scott	(859)257-4614

Distance Learning Programs

James E. O'Reilly, Associate Dean	(859)257-2411
Jennifer Willoughby	(859)257-2411

Fellowship Office

Lisa Collins, Assistant Dean	(859)257-3261
Cyndy Clark	(859)257-3261
Kami Dibble	(859)257-3261
Lynn Peters	(859)257-3261
Jonathan Prasse	(859)257-3261
Patricia Rowland	(859)257-3261

Graduate Council

Rebecca Fister	(859)257-1759

Records

Jennifer Myers	(859)257-8142

Recruitment

Kwaku Addo, Associate Dean	(859)257-4555
Virginia Elliott	(859)257-4555

Web Coordinator

Mary K. Kelly	(859)257-5222

GRADUATE DEGREE PROGRAMS

The course listings in The Graduate School Bulletin are current as of July 2002.

GS 600 Special Topical Graduate Course (1-3)
An interdisciplinary, topical or experimental course to be approved by the Dean of The Graduate School. A particular course can be offered no more than twice under the number GS 600. May be repeated to a maximum of six credits. Prereq: Consent of instructor.

GS 610 College Teaching (1)
This one-credit-hour seminar addresses teaching and learning issues in the college classroom. It is intended for graduate students who want to prepare for future academic careers and enhance current teaching activities. The seminar will examine pedagogical issues in a general format with opportunity for discipline-specific applications. This course can serve to augment any department-based programs.

GS 650 Preparing Future Faculty (1)
Preparing Future Faculty is designed to introduce graduate students to the roles and responsibilities of the college teacher and to assist them in understanding the variety of institutions in which effective teaching takes place. Students will focus on the academic expectations, institutional identities, and particular policies and procedures which characterize different types of institutions of higher learning. Skills to help students apply for positions and achieve success in their appointments will also be addressed. Lecture, two hours per week.

GS 660 Multidisciplinary Sensing Technology Seminar (1)
A multi-disciplinary seminar in Sensors and Sensing Architectures. May be repeated to a maximum of four credits. Prereq: Graduate status.

Accounting

GRADUATE FACULTY
Full Members
Professors
Thomas Howard, Dan N. Stone.
Associate Professors
Myrtle W. Clark, Jean C. Cooper, James R. Holmes, David S. Hulse, Stuart Keller, C. Douglas Poe, Thomas Pope, Robert J. Ramsay, Cynthia Vines.
Associate Members
Assistant Professors
Uday Chandra, Terry Neal, Sean Peffer.
Emeritus Professors
A. Knoblett, Donald L. Madden.

Master of Science

Plan A

The Master of Science (Plan A) is primarily for students who wish to have a program of advanced study in accounting. This program provides adequate preparation for employment in public accounting, business, government and other organizations, or for initial employment as an instructor at the college level. The program can be structured to prepare a student for further graduate work in related fields. Specifically, the program's objectives are to:

1. Develop the ability to carry out significant research and communicate the results thereof.
2. Provide for greater concentration in a selected area of accounting.
3. Expand the student's knowledge of accounting theory, the significance of professional literature, and controversial concepts at an advanced level.
4. Further the student's understanding of the close relationship between accounting and other fields of business, and between accounting and disciplines outside the business area.
5. Provide the opportunity to study in an area (or areas) outside the business fields, when such study is consistent with the student's educational needs and objectives.

Admission Requirements

1. Graduate study in accounting presumes a minimum preparation of 30 hours in business and economics, including the completion of the following basic courses (examples of acceptable courses at the University of Kentucky are given in parentheses):
   Principles of Economics (ECO 201, ECO 202)
   Principles of Accounting (ACC 201, ACC 202)
   Statistical Methods (STA 291, ECO 391)
   Management (MGT 301)
   Finance (FIN 300)
   Marketing (MKT 300)
   Strategic Management (MGT 499)
   Business Law (MGT 340)
   Prerequisites to graduate study in accounting include courses in intermediate accounting, managerial accounting, tax accounting, auditing, and systems.
2. The Graduate Management Admission Test (GMAT) must be taken prior to being admitted.

Degree Requirements

1. A minimum of 30 semester hours must be completed in courses carrying graduate credit. At least 20 semester hours must be in courses reserved exclusively for graduate students and at least 15 of these must be in accounting.
2. The course requirements are:
   a. One course in each of the following fields:
      Advanced Managerial Accounting
      Income Taxation
      Accounting Theory
      Attest Function
      One additional accounting course at the 600 level.
   b. At least six semester hours of graduate credit outside the Department of Accounting, three of which must be production related.
   c. A course in Computer Science or Data Processing.
   d. The candidate must submit evidence of competence in statistics at the graduate level.
3. Maintaining a minimum of 3.0 in all courses attempted for graduate credit after being admitted to The Graduate School. A minimum GPA of 3.0 must similarly be maintained for all accounting courses attempted after being admitted to the Graduate School. Students obtaining two grades of C below a B average will be dropped by the School of Accountancy.

4. Successful completion of a comprehensive examination.

Note: Students interested in the five-year degree program in Accounting should consult the Director of Graduate Studies for specific information.

Master of Science
Five-Year Program

Plan B

This program was developed in response to the belief that the traditional baccalaureate program no longer provided the level of training and proficiency required for entry into the profession. As the admissions and retention standards indicate, students must apply for admission during the second semester, junior year and to the Graduate School prior to the beginning of the second semester, senior year, and complete the 150-semester-hour requirement. Because the program is highly structured, interested students are encouraged to a) familiarize themselves with its requirements as early as their sophomore year so that they may plan their course work accordingly, and b) consult with the School's Director of Graduate Studies as to class schedules each semester.

The program facilitates specialization in the areas of auditing, taxation, not-for-profit, financial, managerial, and accounting-based management information and analytical systems.

Upon completion of the program, both a bachelor's degree and a master's degree will be awarded.

Admission Requirements

1. Application for admission into the professional program must be made during the first four weeks of the second semester, junior year.
2. Applicants shall have: a) completed the general education component of the curriculum plus ACC 301 and ACC 408 or ACC 324; and b) earned the following GPA:

Overall	3.00
Accounting	3.25

3. Students must be admitted to The Graduate School prior to the beginning of the second semester, senior year. To be admitted, students must have at least 1,100 points based on the following formula: 200 times upper division GPA plus the total GMAT score.

Retention Standards

Retention in the professional program requires that a student maintain a 3.0 GPA in all hours attempted throughout the five-year program. The faculty will assess each student's progress after the first semester and advise the students whether they should continue in the professional program or change to the four-year program.

Curriculum Requirements

General Education

General Education Component	0-9
Mathematics 109 or a score > 25 on ACT	
Foreign Language or 2 years of high school preparation.	
Inference and Communications	10-15
English 101 and 102 or 105	
Communications 181 or 287	
Mathematics 123 and 162 or 113	
Disciplinary Requirements	18
Natural Science (6 hours)	
Social Science (Economics 201 & Political Science 101 recommended)	
Humanities (HIS 108 and 109 recommended)	
Cross-disciplinary Requirements (Communications 325 and Sociology 342)	
Cross-cultural Requirement	3
	37-51

Pre-Major Requirements

Accounting 201and 202	6
Economics 202	3
Computer Science 101	3
Professional Ethics (Philosophy 330)	3
Statistics 291	3
	18

College Core Requirements

Marketing 300	3
Management 301	3
Management 499	3
Finance 300	3
Management 340	3
Economics 485G	3
Quantitative Analysis (DIS 300)	3
Economics 391 (Economics and Business Statistics)	3
	24

Additional Program Requirements

Legal and Social Environment (MGT 341 and 441)	6
Computer Science (CS121)	4
Organizational Behavior (MGT 410) or Financial Decisions (FIN 445)	3
Management Information Systems (DIS 620)	3
Managerial Economics (ECO 610)	3
English 203	3
Electives	3
	25

Accounting Requirements

Financial (ACC 301, 302 and 601)	9
Managerial (ACC 408G and 608)	6
Taxation (ACC 417G and 577 or 617)	6
Attestation (ACC 403G and 503 or 603)	6
Systems (ACC 324 and 524 or 624)	6
Professional Issues (ACC 611)	3
Electives	6
	42
	146-160

NOTE: A minimum of 150 semester hours are required for the Master of Science in Accounting Degree. Thirty semester hours must be taken in courses carrying graduate credit. Of these thirty hours, twenty must be taken in courses reserved exclusively for graduate students, and fifteen of the twenty must be in Accounting.

GRADUATE COURSES

ACC 401G ACCOUNTING THEORY ..... (3)
ACC 507 ADVANCED TOPICS IN TAXATION ..... (3)
ACC 508 CONTROLLERSHIP ..... (3)
ACC 516 ADVANCED TOPICS IN FINANCIAL REPORTING ..... (3)
ACC 600 INQUIRY, COMMUNICATION, AND LEADERSHIP IN ACCOUNTING ..... (3)
ACC 601 RESEARCH IN ACCOUNTING THEORY ..... (3)
ACC 603 ATTEST FUNCTION ..... (3)
ACC 608 ADVANCED MANAGERIAL ACCOUNTING ..... (3)
ACC 610 NOT-FOR-PROFIT AND REGULATORY ACCOUNTING ..... (3)
ACC 617 SELECTED TOPICS IN TAXATION ..... (3)
ACC 619 INDEPENDENT STUDY IN ACCOUNTING ..... (1-3)
ACC 624 ENTERPRISE INFORMATION AND CONTROL SYSTEMS ..... (3)
ACC 627 CORPORATE TAXATION ..... (3)
ACC 628 FINANCIAL/MANAGERIAL ACCOUNTING ..... (3)
ACC 637 TAXATION OF FLOW-THROUGH ENTITIES ..... (3)
ACC 647 MULTIJURISDICTIONAL TAXATION ..... (3)
ACC 700 TOPICAL SEMINAR IN ACCOUNTING RESEARCH (SUBTITLE REQUIRED) ..... (1-3)
ACC 708 SEMINAR IN MANAGEMENT ACCOUNTING ..... (3)
ACC 795 INDEPENDENT STUDY IN ACCOUNTING ..... (1-6)

Administration and Supervision

GRADUATE FACULTY
Full Members
Professors
J. John Harris III, Jane Clark Lindle.
Associate Professors
Lars Gordon Björk, Joyce P. Logan, James S. Rinehart, Susan J. Scollay.
Associate Members
Professors
Stephen Fardo.
Assistant Professors
Patricia Brown-Ferrigno, D. Keith Gurley, Bonnie C. Johnson.
Emeritus Professors
Charles Faber, James Ogletree, Eddy J. VanMeter.

The Department of Administration and Supervision offers programs leading to the Master of Education (M.Ed.) in School Administration and the Specialist in Education (Ed.S) degree. In cooperation with the Department of Curriculum and Instruction, it offers a program in Instruction and Administration leading to the Doctor of Education (Ed.D.) degree. These advanced degree programs are designed to prepare candidates for leadership positions in public schools and other educational agencies or for the professorship in educational administration. The department participates in a Cooperative Doctoral Program with four regional comprehensive universities.

Master of Education

The Master of Education (M. Ed.) in School Administration is a degree program through which one may prepare for certification as a school principal in Kentucky public schools. This preparation program includes 33 hours of course work and leads to a letter of eligibility for the Instructional Leader, School Principalship, All Grades professional certificate. If this is a student's initial master's degree, it will lead to Rank II. For those who already have one master's degree, a 30-hour Rank I program can be completed.

Admission Requirements

Admission to the M.Ed. program includes the following criteria:

1. Bachelor's degree from an accredited institution;
2. On a.4.0 scale, a GPA of 2.75 for all undergraduate work and 3.0 GPA on all graduate work;
3. Official scores on all three sections of the Graduate Record Examination (GRE);
4. One year of professional experience in an educational or other organizational setting;
5. Complete program application with supporting materials;
6. Professional and scholarly references; and
7. Positive recommendation for admission from the UK Department of Administration and Supervision.

With the M.Ed. tied to principal certification, the state of Kentucky establishes the following additional requirements for a letter of eligibility for Kentucky principalship certification:

1. Master's degree in education from an accredited institution;
2. GPA of 2.5 on a 4.0 scale for all collegiate work;
3. Eligibility for a Kentucky classroom teaching certificate;
4. Completion of the Kentucky Teacher Internship Program (KTIP) or two years out-of state full-time teaching experience;
5. Three years full-time teaching experience completed;
6. Passing score on the National Teacher Examination (as required of KY teachers);
7. Passing of national and state tests as specified by the Kentucky Education Professional Standards Board,
8. Completion of a preparation program approved by the Kentucky Education Professional Standards Board.

Specialist in Education

The Department of Administration & Supervision in the College of Education at the University of Kentucky offers a practice-oriented, academic program leading to the awarding of the Specialist in Education degree (Ed.S.). This program is intended to serve two interrelated and complementary purposes:

- to provide professional educators with an opportunity to develop specialized expertise in the area of educational leadership with a focus on school administration and instructional supervision: and
- to provide those professional educators who desire it, a bridge from their master's-level academic work to doctoral-level study in the specialized area of educational administration and supervision.

The content of the Ed.S. program is divided into two segments. The classroom-based segment of the program consists usually of 39 hours of formal course work that can be structured to meet the course-based subject matter requirements for Kentucky certification as a building-level principal, as an instructional supervisor, or as a school district superintendent. The second segment of the EdS program consists of the design, implementation, and formal written description of a field-based inquiry project.

Admission Requirements

Admission to the EdS program follows the basic requirements of The Graduate School at the University of Kentucky and any additional requirements imposed by the Kentucky Educational Professional Standards Board for the particular certificate sought in conjunction with the Ed.S., plus professional references, a complete program application to the Department of Administration & Supervision, and a positive recommendation by the Department's admissions committee.

Doctor of Education

The Department of Administration & Supervision offers the Ed.D. (Doctor of Education degree) in Instruction and Administration with a program emphasis in Educational Leadership. Four important themes are embedded in the Department's Ed.D. program emphasis and are reflected throughout the content of course work:

- Valuing Research and the Use of Data
- Fostering Educational Improvement
- Focusing on Leadership Development
- Addressing Concerns for Social Justice

Every student's program of study for this Ed.D. has three essential elements: (1) the core curriculum; (2) a program major emphasis; and (3) a research sequence.

Admission Requirements

Admission to the doctoral program in EDA requires completion of the Graduate School's application requirements plus a complete application and references to the Department of Administration & Supervision with the following attachments to the EDA application:

- Autobiographical Statement:
  A short (2 - 3 typed pages) autobiographical statement explaining how you came to be where you are at this point in your life.
- Professional Goals Statement:
  A short (2 - 3 typed pages) explanation of your professional goals highlighting future plans and aspirations.

- Professional Perspectives Essay:
  A short (3-5 typed pages) essay responding to one of the topics below. This essay will be reviewed on the basis of the content of your ideas, the clarity and logic used in developing, organizing, and presenting those ideas, and on the use of correct grammar, spelling, punctuation, etc., as well.
- Essay Topic For Ed.D. Degree Program Applicants: Contemporary educational leaders must provide leadership relative to many complex and sometimes controversial issues. Pick ONE set of issues from the list below (i.e., #1, #2, or #3). In your essay, explain briefly your understanding of the issue set you selected and discuss briefly your own current thinking about what it means to provide responsible educational leadership in reference to it.

  1. Culture, gender, ethnicity, and social class;
  2. Teaching, learning, and professional ethics;
  3. New organizational structures for schools, political demands, and fiscal limitations.

The Ed.D. Curriculum

Course work for the Ed.D. in Instruction and Administration within the department will consist of a minimum of 45 hours of graduate course work beyond the master's in addition to the required 18 hours of dissertation research. All course work plans include work in the following:

a. Instruction and Administration,
b. Support work in education,
c. Research methodology course sequence, and,
d. Support work outside of education.

Internships for graduate students can be arranged with public school systems and other educational agencies.

A limited number of graduate assistantships are available through the department. These involve up to 20 hours per week of service to the department or some other unit of the University, designed in such a way that the work contributes to the educational development of the student. A modest stipend is paid for this service. The University also provides some financial aid in the form of loans and fellowships.

For further information, write to the Director of Graduate Studies in the Department of Administration and Supervision, 111 Dickey Hall, College of Education, University of Kentucky, Lexington, Kentucky 40506, requesting materials for the specific program of interest.

GRADUATE COURSES

EDA 600 ORGANIZATION AND ADMINISTRATION OF AMERICAN EDUCATION ..... (3)
EDA 601 INTRODUCTION TO SCHOOL LEADERSHIP AND ADMINISTRATION ..... (3)
EDA 608 INTERNSHIP IN EDUCATIONAL ADMINISTRATION AND SUPERVISION ..... (3)
EDA 610 SCHOOL LEADERSHIP PRACTICUM I: SUMMER ..... (1)
EDA 611 SCHOOL LEADERSHIP PRACTICUM II ..... (1)
EDA 612 SCHOOL LEADERSHIP PRACTICUM III ..... (1)
EDA 627 SCHOOL FINANCE AND SUPPORT SERVICES ..... (3)
EDA 628 SCHOOL LAW AND ETHICS ..... (3)
EDA 629 THE PRINCIPAL ..... (3)
EDA 631 LEADERSHIP FOR SCHOOL PROGRAM COLLABORATION ..... (3)
EDA 632 ADMINISTRATION OF EDUCATIONAL REFORM ..... (3)
EDA 634 LEADERSHIP FOR HUMAN RESOURCES DEVELOPMENT IN SCHOOLS ..... (3)
EDA 638 THE SUPERVISOR ..... (3)
EDA 639 THE SCHOOL SUPERINTENDENCY ..... (3)
EDA 642 MICROCOMPUTER APPLICATIONS IN ADMINISTRATION ..... (3)
EDA 646 LEADERSHIP FOR SCHOOL COMMUNITY RELATIONS ..... (3)
EDA 649 SCHOOL SYSTEM ADMINISTRATION ..... (3)
EDA 650 LEADERSHIP FOR SCHOOL PROGRAM IMPROVEMENT ..... (3)
EDA 651 FOUNDATIONS OF INQUIRY ..... (3)
EDA 659 STRATEGIC MANAGEMENT IN EDUCATION ..... (3)
EDA 669 LEADERSHIP FOR SCHOOL PROBLEM SOLVING ..... (3)
EDA 679 SCHOOL SUPERINTENDENT PRACTICUM I: SPRING ..... (1)
EDA 680 SCHOOL SUPERINTENDENT PRACTICUM II: SUMMER ..... (1)
EDA 681 SCHOOL SUPERINTENDENT PRACTICUM III: FALL ..... (1)
EDA 694 THE ADMINISTRATION OF VOCATIONAL EDUCATION (SAME AS AED/HEE 694) ..... (3)
EDA 701 LEADERSHIP IN EDUCATIONAL ORGANIZATIONS I ..... (3)
EDA 702 LEADERSHIP IN EDUCATIONAL ORGANIZATIONS II ..... (3)
EDA 749 DISSERTATION RESEARCH ..... (0)
EDA 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
EDA 770 TOPICAL SEMINAR IN EDUCATIONAL LEADERSHIP ..... (1-3)
EDA 771 SEMINAR IN ADMINISTRATION ..... (1-3)
EDA 785 INDEPENDENT WORK IN SCHOOL ADMINISTRATION ..... (3)
EDA 792 RESEARCH IN EDUCATIONAL ADMINISTRATION AND SUPERVISION ..... (3)

Agricultural Economics

GRADUATE FACULTY
Full Members
Professors
Joe T. Davis, David L. Debertin, David Freshwater, Angelos Pagoulatos, Michael R. Reed, Lynn W. Robbins, Jerry Skees.
Extension Professors
Larry D. Jones.
Associate Professors
Carl Dillon, Mary Marchant, Loys L. Mather.
Assistant Professors
Ron Fleming, Leigh J. Maynard.
Associate Members
Professors
Donald H. Graves.
Extension Professors
Steven G. Isaacs, A. Lee Meyer, William M. Snell, Lionel Williamson.
Extension Associate Professors
Timothy Woods.
Assistant Professors
Steven Vickner.
Emeritus Professors
Robert D. Beck, Fred Benson, Barry W. Bobst, Russell H. Brannon, Fred E. Justus, Harold G. Love, D. Milton Shuffett, Eldon D. Smith.

The Department of Agricultural Economics provides programs leading to the degrees of Master of Science and the Doctor of Philosophy. Graduate Faculty in the department provide areas of emphasis in agricultural policy, price analysis, agricultural marketing, farm management, domestic and international economic development, and resource and production economics. Students must complete a core of courses in agricultural economics, economics and statistics.

Students holding degrees in agricultural economics are employed by academic institutions, local, state, and federal agencies that deal with agriclture, natural resources and economic development; private firms in the agricultural and business sectors; and agencies and governments of foreign countries. These agricultural economists conduct research, develop extension services, teach classes, and serve as managers and administrators in various types of firms and agencies.

Admission Requirements

Students entering the M.S. program are expected to have at least one course in each of the following areas: intermediate microeconomics, intermediate macroeconomics, calculus, and statistics. An undergraduate degree in agricultural economics or economics is advantageous. There are no minimum GPA or GRE requirements beyond those of the Graduate School, but such information, along with letters of recommendation is used qualitatively in the admission decision.

Students entering the Ph.D. program are expected to have the following courses: a two-course calculus sequence, M.S. level

microeconomic theory, M.S. level macroeconomic theory, and statistics theory. Some of these courses may be taken during the student's first semester. A Master's degree in a relevant discipline is required for entry into the Ph.D. program. There are no minimum GPA or GRE requirements beyond the Graduate School's, but such information, along with letters of recommendation is used qualitatively in the admission decision.

Degree Requirements

The master's program is offered in either Plan A or Plan B. The thesis option (Plan A) requires a minimum of 24 hours of graduate credit, a research thesis and an oral final exam. Plan B requires a minimum of 36 hours of graduate credit and an oral final exam.

In addition to the course work requirements, students in the Ph.D. program are required to take a comprehensive examination in microeconomics and macroeconomics administered by the Department of Economics. Students also must complete a qualifying examination on the application of economic analysis to agriculture and related fields within the Department of Agricultural Economics. The ability to conduct original research in agricultural economics, documented through the completion of a dissertation, is required.

Graduate students have considerable flexibility to structure their program with respect to course work and research topics consistent with individual interests. Each student has a major professor and an advisory committee to assist in course work selection and in the thesis and dissertation research.

A graduate handbook is available that provides information regarding program content, degree options and available financial assistance. Send request to:

Director of Graduate Studies
Department of Agricultural Economics
400 Charles E. Barnhart Building
University of Kentucky
Lexington, KY 40506-0276
aecdgs@lsv.uky.edu
www.uky.edu/AG/AgEcon

GRADUATE COURSES

AEC 441G AGRICULTURAL FINANCIAL MANAGEMENT ..... (3)
AEC 445G INTRODUCTION TO RESOURCE AND ENVIRONMENTAL ECONOMICS ..... (3)
AEC 516 RURAL REAL ESTATE APPRAISAL ..... (3)
AEC 531 AGRICULTURAL PRICE ANALYSIS ..... (3)
AEC 532 AGRICULTURAL AND FOOD POLICY ..... (3)
AEC 545 RESOURCE AND ENVIRONMENTAL ECONOMICS ..... (3)
AEC 580 SPECIAL PROBLEMS IN AGRICULTURAL ECONOMICS ..... (1-3)
AEC 590 INTRODUCTION TO QUANTITATIVE ECONOMICS I (SAME AS ECO 590) ..... (3)
AEC 606 ADVANCED AGRICULTURAL MARKETING ..... (3)
AEC 610 INTERNATIONAL TRADE IN AGRICULTURAL PRODUCTS ..... (3)
AEC 620 ADVANCED PRODUCTION ECONOMICS I ..... (3)
AEC 624 ADVANCED QUANTITATIVE METHODS IN AGRICULTURAL ECONOMICS ..... (3)
AEC 626 AGRICULTURE AND ECONOMIC DEVELOPMENT (SAME AS ECO 674) ..... (3)
AEC 627 PROJECT ANALYSIS FOR RURAL DEVELOPMENT ..... (3)
AEC 640 ADVANCED AGRICULTURAL POLICY ..... (3)
AEC 645 NATURAL RESOURCE ECONOMICS ..... (3)
AEC 646 INTERTEMPORAL ALLOCATION OF NATURAL RESOURCES ..... (3)
AEC 653 LOCAL ECONOMIC DEVELOPMENT (SAME AS PA 653) ..... (3)
AEC 661 PROGRAMMING MODELS IN AGRICULTURAL ECONOMICS ..... (3)
AEC 662 QUANTITATIVE METHODS IN RENEWABLE RESOURCE MANAGEMENT (SAME AS FOR 662) ..... (3)
AEC 691 STRUCTURE OF U.S. AGRICULTURE (SAME AS SOC 691) ..... (3)
AEC 748 MASTER'S THESIS RESEARCH ..... (0)
AEC 749 DISSERTATION RESEARCH ..... (0)
AEC 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
AEC 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
AEC 780 SPECIAL PROBLEMS IN AGRICULTURAL ECONOMICS ..... (1-3)
AEC 796 SEMINAR (SUBTITLE REQUIRED) ..... (3)

Agronomy*

The Department of Agronomy offers graduate work leading to the Master of Science in Crop Science and the Doctor of Philosophy degree in Crop Science or Soil Science. The department also participates in interdepartmental graduate programs leading to the Master of Science in Plant and Soil Science and to the Ph.D. degree in Plant Physiology.

See Crop Science, Soil Science, Plant and Soil Science, and Plant Physiology for detailed information about these graduate programs.

**Agronomy is not a Degree Program.*

Anatomy and Neurobiology

GRADUATE FACULTY
Full Members
Professors
Thomas E. Curry Jr., Don M. Gash, James W. Geddes, Greg A. Gerhardt, Kurt F. Hauser, Lothar H. Jennes, Brian R. MacPherson, William R. Markesbery, Stephen W. Scheff, Kim B. Seroogy, Betty Sisken, Joe E. Springer, Harold H. Traurig.
Associate Professors
Guoying Bing, Wayne Cass, Marilyn J. Duncan, Pamela E. Knapp, Bruce Maley.
Associate Members
Research Professors
Marilyn L. Getchell.
Associate Professors
William F. Maragos, Diane M. Snow, David M. Yurek.
Assistant Professors
Subramian Apparsundaram, Annadora Bruce-Keller, Jennifer Brueckner, Paul Glaser, Douglas Gould, Jane Joseph, Jeffrey Keller.
Emeritus Professors
Peter Bosomworth.

Graduate study in anatomy and neurobiology is designed to prepare candidates for research careers in academics, industry, and government laboratories. Admission to the graduate program is competitive and is based upon academic background, professional recommendations, performance on the Graduate Record Examination (GRE), experience, and when possible, personal interviews. Students should have completed an undergraduate degree in biology, biochemistry, chemistry, engineering, mathematics, neurosciences, physics, pharmacy or psychology. Some students who have already completed an M.D. or D.M.D. degree may be interested in obtaining specific training in anatomy and neurobiology in order to complete their professional education. For traditional students with only an undergraduate degree, undergraduate courses in organic chemistry, physical chemistry, calculus, physics, and the biological sciences are highly recommended.

Students will have the opportunity to join faculty research programs across a spectrum of topics including: neuroendocrinology and reproductive biology, development and aging in the nervous system, neurodegeneration and regeneration, and neurochemistry. The program of study is tailored to the individual background and career goals of the student and stresses an interdepartmental approach both in the selection of courses and in the pursuit of research. Students are expected to participate in graduate seminars, journal clubs, research seminars; to interact with visiting scholars; and to present the results of their research at local and national meetings. Financial aid is available for highly qualified students.

Admission Requirements

Admission to the Ph.D. program in Anatomy and Neurobiology is through the Integrated Biomedical Sciences (IBS) Curriculum.

Inquiries regarding admission should be directed to the Director, Integrated Biomedical Sciences Curriculum, University of Kentucky College of Medicine. For information about the Ph.D. program in Anatomy and Neurobiology, please contact the Director of Graduate Studies, Department of Anatomy and Neurobiology. Information may also be obtained from the department Web site: <www.mc.uky.edu/neurobiology/>.

GRADUATE COURSES

ANA 503 INDEPENDENT WORK IN ANATOMY ..... (3)
ANA 511 INTRODUCTION TO HUMAN ANATOMY ..... (5)
ANA 512 MICROSCOPY AND ULTRASTRUCTURE ..... (4)
ANA 516 ANATOMY OF THE NERVOUS SYSTEM ..... (3)
ANA 529 CONCEPTS OF MORPHOLOGY ..... (2)
ANA 530 COMBINED HISTOLOGY AND SPECIAL ORAL MICRO-ANATOMY ..... (5)
ANA 532 SYSTEMIC HUMAN ANATOMY ..... (2)
ANA 534 ANATOMY OF THE HUMAN HEAD AND NECK ..... (3)
ANA 536 HUMAN EMBRYOLOGY, AN ABBREVIATED COURSE ..... (1)
ANA 538 HUMAN NEUROANATOMY, AN ABBREVIATED COURSE ..... (1)
ANA 600 SEMINAR IN ANATOMY ..... (1)
ANA 605 PRINCIPLES OF NEUROBIOLOGY (SAME AS NEU/PGY/BCH/PHA 605) ..... (4)
ANA 606 MECHANISMS OF NEUROLOGIC DISEASE (SAME AS NEU/PHA 606) ..... (4)
ANA 611 REGIONAL HUMAN ANATOMY ..... (5)
ANA 612 BIOLOGY OF AGING (SAME AS BIO/GRN/PGY 612) ..... (3)
ANA 613 BEHAVIORAL ECOLOGY AND COMPARATIVE NEUROBIOLOGY (SAME AS BIO/PSY/ENT/PGY 613) ..... (2)
ANA 614 TECHNIQUES IN BEHAVIORAL ECOLOGY AND COMPARATIVE NEUROBIOLOGY (SAME AS BIO/PSY/ENT/PGY 614) ..... (2)
ANA 618 MOLECULAR NEUROBIOLOGY (SAME AS MI/PGY/BIO 618) ..... (4)
ANA 629 TECHNIQUES OF ANATOMICAL RESEARCH ..... (2)
ANA 631 ADVANCED HUMAN ANATOMY ..... (3-5)
ANA 633 ADVANCED DEVELOPMENTAL ANATOMY ..... (2-5)
ANA 636 ADVANCED NEUROANATOMY ..... (3-5)
ANA 638 DEVELOPMENTAL NEUROBIOLOGY (SAME AS BIO/PGY/PSY 638) ..... (3)
ANA 660 BIOLOGY OF REPRODUCTION (SAME AS PGY/ASC 660) ..... (3)
ANA 662 ULTRASTRUCTURAL ANATOMY ..... (2-5)
ANA 710 AGING OF THE NERVOUS SYSTEM (SAME AS PHA/PGY/GRN 710) ..... (3)
ANA 748 MASTER'S THESIS RESEARCH ..... (0)
ANA 749 DISSERTATION RESEARCH ..... (0)
ANA 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
ANA 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
ANA 790 RESEARCH IN ANATOMY ..... (1-12)

Animal Sciences

GRADUATE FACULTY

Full Members

Professors

Debra K. Aaron, James Boling, Gary Cromwell, Donald Ely, David L. Harmon, Robert J. Harmon, Bernhard Hennig, Clair L. Hicks, Laurie M. Lawrence, Merlin D. Lindemann, Frederick Thrift, Youling L. Xiong.

Adjunct Professors

Karl A. Dawson.

Associate Professors

Austin H. Cantor, Lee Edgerton, James A. Jackson, Michael J. Lacki, Keith Schillo, William J. Silvia, Herbert J. Strobel.

Associate Members

Extension Professors

Thomas G. Barnes, Alan McAllister, W. Benjy Mikel, Anthony J. Pescatore.

Associate Professors

W. Luke Boatright, David Maehr.

Extension Associate Professors

Darrh Bullock, Richard D. Coffey.

Assistant Professors

Sharon Franklin, James Matthews, Melissa Newman, Eric Vanzant.

Extension Assistant Professors

Leslie H. Anderson, Robert J. Coleman.

Emeritus Professors

Neil W. Bradley, Virgil W. Hays, George E. Mitchell Jr., William G. Moody.

The degrees of Master of Science (Plan A and Plan B) and Doctor of Philosophy are available in Animal Sciences.

Admission Requirements

The minimum requirements for admission to the graduate program in Animal Sciences conform to the admission standards of the Graduate School. Applicants to the Master's program must have completed a four-year degree at an accredited institution of higher education, must have achieved at least a 2.75 GPA for all undergraduate courses, and must submit scores from the verbal, quantitative, and analytical portions of the Graduate Record Exam (GRE). Applicants to the Ph.D. program, in addition to the above requirements, must have completed or be completing a Master's Degree or equivalent and must have achieved a 3.0 GPA for all graduate courses. In addition, all applicants must submit to the Director of Graduate Studies in Animal Sciences three letters of recommendation and a completed Personal Data Record form (obtained from the Director of Graduate Studies).

Degree Requirements

Programs in Animal Sciences are divided into the disciplinary areas of animal nutrition, nutritional and anaerobic microbiology, physiology of reproduction and lactation, and genetics and animal breeding. Special interests in beef cattle, dairy cattle, horses, poultry, sheep or swine may be pursued within many of these areas. Programs in food science offer specialization in dairy technology, food chemistry, food microbiology, food safety, meat biochemistry, and meat processing.

Candidates for the Ph.D. degree are required to declare a minor outside the department. On approval of the student's advisory committee, a minimum of 12 credits in not more than two departments may be substituted for the minor.

GRADUATE COURSES

ASC 404G SHEEP SCIENCE ..... (4)
ASC 408G SWINE SCIENCE ..... (3)
ASC 410G EQUINE SCIENCES ..... (3)
ASC 420G DAIRY CATTLE SCIENCE ..... (3)
ASC 462G ARTIFICIAL INSEMINATION AND FERTILITY OF FARM ANIMALS ..... (2)
ASC 564 MILK SECRETION ..... (3)
ASC 580 PHYSIOLOGY OF NUTRIENT DIGESTION AND ABSORPTION ..... (3)
ASC 601 MAMMALIAN ENDOCRINOLOGY (SAME AS PGY 601) ..... (3)
ASC 602 MICRONUTRIENT METABOLISM (SAME AS NS 602) ..... (4)
ASC 630 ADVANCED MEAT SCIENCE (SAME AS FSC 630) ..... (4)
ASC 660 BIOLOGY OF REPRODUCTION (SAME AS PGY/ANA 660) ..... (3)
ASC 664 ADVANCED ANIMAL BREEDING ..... (3)
ASC 680 LABORATORY METHODS IN NUTRITIONAL SCIENCES (SAME AS NS 680) ..... (4)
ASC 681 ENERGY METABOLISM ..... (2)
ASC 682 MICROBIAL ECOLOGY OF DIGESTION ..... (4)
ASC 683 PROTEIN METABOLISM ..... (2)
ASC 684 ADVANCED RUMINANT NUTRITION ..... (3)
ASC 685 MINERAL METABOLISM (SAME AS NFS 685) ..... (2)
ASC 686 ADVANCED NONRUMINANT NUTRITION ..... (3)
ASC 687 VITAMIN METABOLISM ..... (2)
ASC 688 EQUINE NUTRITION ..... (2)
ASC 748 MASTER'S THESIS RESEARCH ..... (0)
ASC 749 DISSERTATION RESEARCH ..... (0)
ASC 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
ASC 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
ASC 771 ANIMAL SCIENCE SEMINAR ..... (1)
ASC 780 SPECIAL PROBLEMS IN ANIMAL DERIVED FOODS (SAME AS FSC 780) ..... (1-4)
ASC 781 SPECIAL PROBLEMS IN GENETICS AND ANIMAL BREEDING ..... (1-4)
ASC 782 SPECIAL PROBLEMS IN ANIMAL NUTRITION ..... (1-4)
ASC 783 SPECIAL PROBLEMS IN REPRODUCTIVE PHYSIOLOGY (SUBTITLE REQUIRED) ..... (1-4)
ASC 790 RESEARCH IN ANIMAL DERIVED FOODS (SAME AS FSC 790) ..... (1-6)
ASC 791 RESEARCH IN GENETICS AND ANIMAL BREEDING ..... (1-6)
ASC 792 RESEARCH IN ANIMAL NUTRITION ..... (1-6)
ASC 793 RESEARCH IN REPRODUCTIVE PHYSIOLOGY (SUBTITLE REQUIRED) ..... (1-6)

FSC 434G FOOD CHEMISTRY ..... (4)
FSC 530 FOOD MICROBIOLOGY ..... (5)

FSC 535 FOOD ANALYSIS ..... (4)
FSC 536 ADVANCED FOOD TECHNOLOGY ..... (4)
FSC 538 FOOD FERMENTATION AND THERMAL PROCESSING ..... (4)
FSC 540 FOOD SANITATION ..... (3)
FSC 630 ADVANCED MEAT SCIENCE (SAME AS ASC 630) ..... (4)
FSC 632 FOODBORNE DISEASE AGENTS ..... (3)
FSC 636 FOOD PACKAGING ..... (2)
FSC 638 FOOD PROTEINS ..... (3)
FSC 640 FOOD LIPIDS ..... (3)
FSC 780 SPECIAL PROBLEMS IN ANIMAL DERIVED FOODS (SAME AS ASC 780) ..... (1-4)
FSC 790 RESEARCH IN ANIMAL DERIVED FOODS (SAME AS ASC 790) .... (1-6)

Anthropology

GRADUATE FACULTY
Full Members
Professors
Tom D. Dillehay, Peter D. Little, Karl B. Raitz, John van Willigen.
Associate Professors
Mary K. Anglin, Lee X. Blonder, Beth L. Goldstein, Richard W. Jefferies, Christopher A. Pool, Shaunna L. Scott, H. Jean Wiese.
Associate Members
Associate Professors
Deborah L. Crooks, Monica Udvardy.
Assistant Professors
Lisa Cliggett, Donald Linebaugh, Michele Rivkin-Fish, Paul Trawick.
Adjunct Assistant Professors
Kim McBride.
Emeritus Professors
William Adams, Art Gallaher Jr., Donald L. Hochstrasser, Margaret Lantis.

The Department of Anthropology offers graduate programs leading to the Master of Arts (Plan A and Plan B) and the Doctor of Philosophy degrees. The degree programs, which share a core curriculum, include education leading to the general understanding of anthropological theory and knowledge, research methods, and a specialized area of concentration. Following the completion of the core courses, students are allowed opportunity for specialization. Areas of potential specialization include applied anthropology (with emphasis on agricultural development), medical anthropology, and archaeology.

Generally, graduate students are admitted into the M.A. program with the potential to enter the Ph.D. program upon completion of the M.A. or with a faculty approved by-pass of the M.A. Students entering with master's degrees in anthropology or other fields may enter the Ph.D. program directly, following a review of their previous experiences. Students entering with master's degrees may be required to take the Core and Methods courses designated under the Master's Program. In lieu of the core curriculum and thesis, these students may present evidence of alternative course work and the design and completion of a research project similar in scale to a thesis or practicum.

Undergraduate training in anthropology is not required. However, students with limited background in history of anthropological theory, biological anthropology, social organization, and statistics may be required to take graduate courses in these areas early in their program. These courses carry graduate credit and are included in the student's overall course of study.

Requirements in the Ph.D. program consist of 1) a core course in Research Design (ANT 662), 2) an area of concentration consisting of 12 credit hours (applied anthropology students must take ANT 735), 3) a regional focus consisting of 6 credit hours at the 400G-700 level, 4) three 700-level seminars outside the area of concentration (does not include independent study courses), 5) successful completion of the doctoral qualifying examination, 6) a dissertation based on original research carried out by the student, and 7) a final oral defense of the dissertation.

Reading knowledge of one foreign language is required for the Ph.D. Because language skill is an important component of research in anthropology, a student's advisory committee may require additional training, experience, and evaluation of a Ph.D. student's language ability as part of the academic program. It is assumed that this will apply to any student who is working in an area where English is not the language.

Requirements for the M.A. program consist of 1) core seminars (ANT 601, 602,& 603); 2) a research methods sequence (ANT 660 & 661 or ANT 650 & 651); and 3) an area of concentration (applied anthropology students must take ANT 525 & 735). There is no foreign language requirement for the M.A. unless required by the student's advisory committee. Plan A students must complete a thesis. Plan B students complete a practicum or additional course work. (Plan B option is not available for archaeology.) An oral final examination is required for both Plan A and Plan B.

Students in the applied anthropology program are required to have an experience in which they can apply their knowledge to solve practical problems under the supervision of a faculty mentor. This often will involve action and/or research work done in conjunction with an agency, community group, or firm. This experience can be expressed through either a practicum, dissertation project, independent study or previous work experience at the judgment of the Director of Graduate Studies, based on advice of the student's committee.

Anthropology faculty members have research experience in the following areas: South and Southeast Asia, Africa, Europe, Latin America, and North America, particularly in the rural U.S. and Appalachia. Members of the department participate in interdisciplinary research in the University's Center for Rural Health, the Sanders-Brown Center on Aging, the Gerontology Program, the College of Agriculture, the College of Medicine, and the College of Education. The Department of Behavioral Science, College of Medicine, includes anthropologists on its faculty, and students with interests in medical anthropology are encouraged to take behavioral science courses.

Admission Requirements

Department standards for admission to graduate work in anthropology include an undergraduate grade point average of B or better, satisfactory Graduate Record Examination scores, completion of a separate departmental application form, and three letters of recommendation. Write the Director of Graduate Studies, Department of Anthropology, for additional information on departmental requirements and opportunities for financial assistance.

GRADUATE COURSES

ANT 428G CONTEMPORARY CULTURES AND SOCIETIES IN SOUTHEAST ASIA ..... (3)
ANT 431G CULTURES AND SOCIETIES OF SUB-SAHARAN AFRICA (SAME AS AAS 431G) ..... (3)
ANT 470G REGIONAL AMERICAN ETHNOGRAPHY ..... (3)
ANT 515 PHONOLOGICAL ANALYSIS (SAME AS ENG/LIN 515) ..... (3)
ANT 516 GRAMMATICAL ANALYSIS (SAME AS ENG/LIN 516) ..... (3)
ANT 519 HISTORICAL LINGUISTICS (SAME AS LIN 519) ..... (3)
ANT 525 APPLIED ANTHROPOLOGY ..... (3)
ANT 526 PSYCHOLOGICAL ANTHROPOLOGY ..... (3)
ANT 527 CHILDREN AND FAMILY IN APPALACHIA (SAME AS FAM 550) ..... (3)
ANT 532 PRIVATE INTERESTS IN THE PUBLIC DOMAIN: THE COMPARATIVE STUDY OF POLITICS ..... (3)
ANT 534 THE SOUTHERN APPALACHIANS: A SOCIOLOGICAL INTERPRETATION (SAME AS SOC 534) ..... (3)
ANT 538 BEYOND ECONOMICS, BEYOND GROWTH: ANTHROPOLOGY'S CRITIQUE OF AN ANTI-SOCIAL SCIENCE ..... (3)
ANT 541 ARCHAEOLOGICAL METHOD AND THEORY ..... (3)
ANT 543 CULTURAL RESOURCE MANAGEMENT ..... (3)
ANT 545 HISTORICAL ARCHAEOLOGY ..... (3)

ANT 550 SYMBOLS AND CULTURE ..... (3)
ANT 551 BIOARCHAEOLOGY ..... (3)
ANT 555 EASTERN NORTH AMERICAN ARCHAEOLOGY ..... (3)
ANT 580 ADVANCED TOPICS IN ANTHROPOLOGY ..... (3)
ANT 581 INDEPENDENT WORK IN ANTHROPOLOGY ..... (1-4)
ANT 582 SENIOR INTEGRATIVE SEMINAR ..... (3)
ANT 585 FIELD LABORATORY IN ARCHAEOLOGICAL RESEARCH ..... (3-6)
ANT 600 PRACTICUM IN TEACHING ANTHROPOLOGY ..... (1)
ANT 601 THEORIES AND CONCEPTS IN ANTHROPOLOGY ..... (3)
ANT 602 SEMINAR IN CULTURE DYNAMICS ..... (3)
ANT 603 HUMAN BIOLOGY IN CONTEXT OF SOCIOCULTURAL CHANGE ..... (3)
ANT 604 SOCIAL ORGANIZATION ..... (3)
ANT 607 FOOD RELATED BEHAVIORS (SAME AS NFS/NS/BSC 607) ..... (3)
ANT 620 TOPICS AND METHODS OF EVALUATION (SAME AS EDP/EPE 620/SOC 622) ..... (3)
ANT 621 ADVANCED TOPICS AND METHODS OF EVALUATION (SAME AS EDP/EPE 621) ..... (3)
ANT 637 SOCIOCULTURAL DIMENSIONS OF ECONOMIC DEVELOPMENT (SAME AS SOC 637) ..... (3)
ANT 638 FOOD SYSTEMS AND AGRARIAN CHANGE (SAME AS SOC 638) ... (3)
ANT 639 AGING IN CROSS-CULTURAL PERSPECTIVE ..... (3)
ANT 640 SCIENCE, AGRICULTURE, AND DEVELOPMENT (SAME AS SOC 640) ..... (3)
ANT 641 GENDER ISSUES IN DEVELOPMENT (SAME AS SOC 641) ..... (3)
ANT 645 ANTHROPOLOGY AND EPIDEMIOLOGY (SAME AS BSC 645) ..... (3)
ANT 646 GLOBAL HEALTH: PEOPLE, INSTITUTIONS AND CHANGE ..... (3)
ANT 650 THEORY IN ARCHAEOLOGY ..... (3)
ANT 651 ARCHAEOLOGICAL DATA ANALYSIS ..... (3)
ANT 652 DEMOGRAPHIC ARCHAEOLOGY ..... (3)
ANT 653 PREHISTORIC ECONOMICS ..... (3)
ANT 654 ARCHAEOLOGY OF POLITICAL SYSTEMS ..... (3)
ANT 660 ETHNOGRAPHIC RESEARCH METHODS ..... (3)
ANT 661 ETHNOGRAPHIC DATA ANALYSIS ..... (3)
ANT 662 RESEARCH DESIGN ..... (3)
ANT 691 CULTURAL RESOURCE MANAGEMENT CLERKSHIP ..... (1-3)
ANT 720 SEMINAR IN CULTURAL ANTHROPOLOGY ..... (3)
ANT 725 SEMINAR IN APPLIED ANTHROPOLOGY ..... (3)
ANT 726 AMERICAN MATERIAL CULTURE (SAME AS ARC 726) ..... (3)
ANT 731 SEMINAR IN SOCIAL AND POLITICAL DYNAMICS ..... (3)
ANT 732 SEMINAR IN ECOLOGICAL ANTHROPOLOGY ..... (3)
ANT 733 SEMINAR IN SYMBOLS AND MEANING ..... (3)
ANT 734 SEMINAR IN ECONOMIC ANTHROPOLOGY ..... (3)
ANT 735 SEMINAR IN PRACTICE AND ACTION ..... (3)
ANT 736 CULTURE, ENVIRONMENT AND DEVELOPMENT (SAME AS SOC 737) ..... (3)
ANT 748 MASTER'S THESIS RESEARCH ..... (0)
ANT 749 DISSERTATION RESEARCH ..... (0)
ANT 750 GRADUATE FIELD STUDY IN ANTHROPOLOGY ..... (1-6)
ANT 765 ADVANCED SEMINAR IN MEDICAL ANTHROPOLOGY (SAME AS BSC 765) ..... (3)
ANT 766 GENDER, ETHNICITY AND HEALTH ..... (3)
ANT 767 PRACTICUM IN APPLIED ANTHROPOLOGY ..... (1-6)
ANT 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
ANT 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
ANT 770 TOPICAL SEMINAR: (SUBTITLE REQUIRED) ..... (3)
ANT 774 FOOD AND FOOD SECURITY IN A CHANGING WORLD (SAME AS BSC 774) ..... (3)
ANT 776 SEMINAR IN DEPENDENCY BEHAVIOR (SAME AS BSC/SOC/PSY 776) ..... (3)
ANT 790 RESEARCH PROBLEMS IN ANTHROPOLOGY ..... (1-6)

Art

GRADUATE FACULTY
Full Members
Professors
Arturo A. Sandoval, Robert Shay.
Associate Professors
Garry Bibbs, Dennis Carpenter, Alice T. Christ, Gerald Ferstman, Jack Gron, Marilyn Hamann, Christine Havice, Robert W. Jensen, Jane S. Peters, Allan Richards, Robert Scroggins, George Szekely, Robert Tharsing, Teresa Unseld.
Associate Members
Assistant Professors
Ruth Adams, Doreen Maloney, Susan Waller.
Emeritus Professors
Georgia C. Collins, Donald Hoffman, Elizabeth Finkenstaedt.

The Department of Art offers graduate course work in three areas: Art Studio, Art History and Art Education. Both the Art History area and the Art Education area confer the Master of Arts degree with an area of specialization in each. Studio degree recipients are awarded the Master of Fine Arts.

Master of Arts

Art History

The program for the Master of Arts in Art History is intended to provide students with the course work, language skills, research experience, and professional preparation needed for further graduate study or for work in a museum or educational setting. The curriculum is structured to provide both breadth and depth of inquiry through a variety of approaches to art history that reflect our faculty's research and teaching strengths.

Admission Requirements

Experience suggests that applicants from a wide variety of educational backgrounds may earn an M.A. degree in Art History. Prospective applicants who do not have an undergraduate art history major are advised to consult with the Graduate Advisor to assess how their prior undergraduate/graduate education and experience prepare them for this graduate program. Undergraduate course work may be supplemented by additional non-seminar courses in art history, further language study, and continued development of research and writing skills.

For those wishing to be considered for a teaching assistantship in Art History, the application deadline is February 1. All other application dossiers must be complete no later than May 1. The Graduate School and the Department of Art each require different application materials. Application forms for admission, GRE scores, and two sets of official transcripts should be sent directly to the Graduate School. The following materials should be sent directly to the Art History Graduate Advisor at the Department of Art: 1) a letter of intent which explains your educational experience, interest in art history graduate study, and future professional plans, 2) a sample of research (such as an undergraduate research paper) or professional writing, and 3) two letters of recommendation. If you wish to be considered for a teaching assistantship, please include an additional letter indicating your interest and credentials.

Degree Requirements

The Master of Arts degree in Art History has three components:

1. Graduate course work of at least 24 credit hours
2. Foreign language reading competency in German and one other language, French usually being recommended
3. Satisfactory completion and defense of a thesis

We recommend that courses in art history be broadly selected to take full advantage of the multiple approaches, expertise, and insights of all the art history faculty as well as to attain the breadth and depth necessary to attain one's professional objectives. Six of the minimum 24 required credit hours may be taken in related areas such as studio art, history, philosophy, literature and critical studies, or anthropology. The foreign language competency requirement may be satisfied by any of the means established by the Graduate School.

Art Education

Admission Requirements

Students admitted to the graduate program in art education are expected to have completed course work equivalent to an undergraduate major in Art Education (in no case less than 18 hours in Art Education and Education, 12 hours in Art History, and 18 hours in Art Studio). Prospective students who do not meet these requirements should seek the counsel of the Program Faculty Committee to make up deficits prior to acceptance into the program. In addition, candidates must submit for review by the Program Faculty Committee, a portfolio of recent studio work (slides) and professional writing and other evidence of professional attainment, along with a 300-500 word statement of interest and objectives.

Work toward the master's degree is pursued under Plan A or Plan B. Successful candidates for the Master of Arts (Plan A) with an area of specialization in art education are to satisfactorily complete: 1) thesis preparation demonstrating substantial research or theoretical inquiry in Art Education; 2) a finished thesis and an oral/written examination; 3) 30 credit hours of graduate course work to be divided as follows: 1) 9 to 12 graduate credit hours in art education; 2) 9 to 12 graduate credit hours in Art History or Art Studio; 3) the remaining 9 graduate credit hours may be taken in related course work in the College of Fine Arts, the College of Education, or elsewhere in the University, as well as in the Department of Art.

Under Plan B, successful candidates are to satisfactorily complete 36 credit hours of graduate course work. At least 24 of the credit hours should be taken in the Department of Art and are to be divided as follows: 12 to 15 graduate credit hours in Art Education and 9 to 12 graduate credit hours in Art History or Art Studio. The remaining 12 graduate credit hours may be taken in related course work in the College of Fine Arts, the College of Education, or elsewhere in the University, as well as in the Department of Art.

In accordance with Graduate Faculty rules, a final comprehensive examination is required in both Plan A and Plan B.

Master of Fine Arts

Admission Requirements

Applicants who seek admission to the Master of Fine Arts (M.F.A.) degree program should submit a portfolio of recent studio work in the form of at least 20 35-mm slides, a slide key, a letter of intent and three letters of recommendation directly to the Department of Art. Application forms for admission, GRE scores, and transcripts should be sent directly to the Graduate School. The deadline for all materials is February 1. In no case will this requirement be waived. Undergraduate art work must be substantially equal in quality, scope, and number of hours to the undergraduate major at the University of Kentucky.

The M.F.A. degree will be awarded on the completion of 60 hours of graduate course work. Of these, thirty hours must be at or above the 600 level and forty hours must be in regular courses (not independent study). In addition, the 60 credit hours will include 30 to 36 credit hours in Art Studio courses (including Graduate Studio Seminar and Studio Thesis Project), 6 to 12 credit hours in Art History and/or Art Education (a total of 24 credit hours of undergraduate and graduate Art History study is required), and up to 18 credit hours in related graduate courses which may be taken outside the Department of Art in the College of Fine Arts or elsewhere in the University.

Students must also complete successfully a final one-person M.F.A. exhibition of studio work and a visual documentation of that work together with an explanatory essay which is to be filed with the department prior to the exhibition. A total of 6 credits of A-S 767 (Studio Thesis Project) is required for the preparation of the exhibition and essay. Work toward the one-person exhibition will begin at a time determined by the department.

The student will designate a major area with the advice of a senior professor at the outset of graduate work and will carry at least 12 hours in that area under the guidance of one professor selected as an adviser. A foreign language is not required, and the M.F.A. degree is offered only according to Plan B.

Candidates for the M.F.A. degree who hold an M.A. degree in studio work from another school will be required to complete a year's residence and 18 credit hours of graduate work at the University of Kentucky, including two semesters of Graduate Studio Seminar and all other requirements for the degree. Total hours toward the M.F.A. degree must equal 60 credit hours of graduate work.

GRADUATE COURSES

A-E 515 INTRODUCTION TO ART THERAPY ..... (3)
A-E 525 THE ELDERLY AND THE ARTS ..... (3)
A-E 538 ADVANCED ARTS AND CRAFTS IN THE ELEMENTARY SCHOOL .. (3)
A-E 545 TOPICAL STUDIES IN ART EDUCATION (SUBTITLE REQUIRED) . (3)
A-E 577 ART IN SECONDARY SCHOOLS ..... (3)
A-E 578 ART IN ELEMENTARY SCHOOLS ..... (3)
A-E 579 SEMINAR IN ART EDUCATION ..... (2)
A-E 645 TOPICAL RESEARCH IN ART EDUCATION (SUBTITLE REQUIRED) ..... (3)
A-E 670 SCHOOL AND COMMUNITY ART ..... (3)
A-E 695 INDEPENDENT WORK: ART EDUCATION ..... (1-3)
A-E 748 MASTER'S THESIS RESEARCH ..... (0)

A-H 415G TOPICAL STUDIES IN ART HISTORY (SUBTITLE REQUIRED) .... (3)
A-H 501 MUSEUM STUDIES I: INTRODUCTION ..... (3)
A-H 502 MUSEUM STUDIES II: INTERNSHIP ..... (3)
A-H 503 ART HISTORY THROUGH THE ART OBJECT (SUBTITLE REQUIRED) ..... (3)
A-H 525 STUDIES IN GENRES AND MEDIA (SUBTITLE REQUIRED) ..... (3)
A-H 526 ART AND THE ARTIST IN SOCIETY (SUBTITLE REQUIRED) ..... (3)
A-H 527 ART WITHIN ITS INTERDISCIPLINARY FRAMEWORK (SUBTITLE REQUIRED) ..... (3)
A-H 528 TOPICAL SEMINAR IN ART HISTORY (SUBTITLE REQUIRED) ..... (3)
A-H 555 METHODS IN ART HISTORY ..... (3)
A-H 592 AESTHETICS (SAME AS PHI 592) ..... (3)
A-H 598 COORDINATE STUDY ..... (3)
A-H 603 THE ART OBJECT: (SUBTITLE REQUIRED) ..... (3)
A-H 625 PROBLEMS IN GENRES AND MEDIA: (SUBTITLE REQUIRED) ..... (3)
A-H 626 THE ARTIST IN SOCIETY: (SUBTITLE REQUIRED) ..... (3)
A-H 627 INTERDISCIPLINARY APPROACHES TO ART HISTORY: (SUBTITLE REQUIRED) ..... (3)
A-H 628 ART HISTORY TOPICAL SEMINAR: (SUBTITLE REQUIRED) ..... (3)
A-H 738 MASTER'S SEMINAR ..... (3)
A-H 748 MASTER'S THESIS RESEARCH ..... (0)
A-H 780 INDEPENDENT WORK: ART HISTORY ..... (1-3)

A-S 510 PAINTING III ..... (3)
A-S 511 PAINTING IV ..... (3)
A-S 520 PRINTMAKING III ..... (3)
A-S 521 PRINTMAKING IV ..... (3)
A-S 530 ADVANCED DRAWING ..... (3)
A-S 540 GRAPHIC DESIGN: PUBLICATION DESIGN ..... (3)
A-S 541 GRAPHIC DESIGN: ADVANCED DESIGN ..... (3)
A-S 550 FIBER III ..... (3)
A-S 551 FIBER IV ..... (3)
A-S 560 SCULPTURE III ..... (3)
A-S 561 SCULPTURE IV ..... (3)
A-S 570 CERAMICS III ..... (3)
A-S 571 CERAMICS IV ..... (3)
A-S 580 PHOTOGRAPHY III ..... (3)
A-S 581 PHOTOGRAPHY IV ..... (3)
A-S 584 COLOR PHOTOGRAPHY II ..... (3)
A-S 586 NONSILVER PHOTOGRAPHY II ..... (3)
A-S 596 WORKSHOP ..... (1-6)
A-S 610 PAINTING V ..... (3)
A-S 611 PAINTING VI ..... (3)
A-S 620 PRINTMAKING V ..... (3)

A-S 621 PRINTMAKING VI ..... (3)
A-S 630 GRADUATE DRAWING ..... (3)
A-S 650 FIBER V ..... (3)
A-S 651 FIBER VI ..... (3)
A-S 660 SCULPTURE V ..... (3)
A-S 661 SCULPTURE VI ..... (3)
A-S 670 CERAMICS V ..... (3)
A-S 671 CERAMICS VI ..... (3)
A-S 680 PHOTOGRAPHY V ..... (3)
A-S 681 PHOTOGRAPHY VI ..... (3)
A-S 710 PROBLEMS IN PAINTING ..... (3)
A-S 720 PROBLEMS IN PRINTMAKING ..... (3)
A-S 730 PROBLEMS IN DRAWING ..... (3)
A-S 740 PROBLEMS IN FIBER ..... (3)
A-S 750 PROBLEMS IN SCULPTURE ..... (3)
A-S 767 M.F.A. STUDIO THESIS PROJECT ..... (1-6)
A-S 770 PROBLEMS IN CERAMICS ..... (3)
A-S 779 PROBLEMS IN PHOTOGRAPHY ..... (3)
A-S 780 PROBLEMS IN DESIGN ..... (3)
A-S 793 GRADUATE STUDIO SEMINAR ..... (1)
A-S 795 INDEPENDENT RESEARCH ..... (1-3)
ART 748 MASTER'S THESIS RESEARCH ..... (0)
ART 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)

Behavioral Science*

GRADUATE FACULTY**
Full Members
Professors
Michael A. Andrykowski, Eugene B. Gallagher, Thomas F. Garrity, Thomas H. Kelly, Carl G. Leukefeld, Phyllis Nash, Timothy A. Smith, John F. Wilson.
Associate Professors
Lee X. Blonder, Cynthia M. Cole, Kitzi M. S. Johnson, H. Jean Wiese.
Associate Members
Associate Professors
Craig Rush, Nancy Schoenberg.
Assistant Professors
Joseph Gaugler.
Emeritus Professors
John Haley, Phillip Moody, Robert Straus.

**Behavioral Science is not a Degree Program.*
***Behavioral Science faculty have Graduate Faculty appointments in degree-granting programs.*

The Department of Behavioral Science in the College of Medicine offers a certificate of study and a minor in Medical Behavioral Science for doctoral students in sociology, anthropology, psychology, other behavioral science disciplines, and nursing. The certificate and minor have three objectives:

1. Provide students with a multi-disciplinary approach incorporating their basic discipline with other social and behavioral sciences with identification of areas of convergence and interrelation in content, theories and methods.
2. Orient students to health and medical settings, including an enculturation to the attitudes, values, professional interrelationships and educational objectives of health personnel and organizations and the nature of behavioral science research in these areas.
3. Train students in research to equip them with basic skills and approaches to research design, data acquisition, and data analysis, as well as manuscript and research grant preparation in medical behavioral science through collaboration with ongoing research projects.

Students interested in pursuing the certificate of study and/or minor should consult with the Director of Graduate Studies for requirements.

The certificate and minor are partially supported by a training grant from the National Institute of Mental Health, which provides pre- and postdoctoral trainee stipends. A limited number of departmental assistantships are also available to qualified students.

GRADUATE COURSES

BSC 527 SOCIETY AND HEALTH (SAME AS SOC 527) ..... (3)
BSC 529 SURVEY OF MEDICAL ANTHROPOLOGY ..... (3)
BSC 546 SOCIAL FACTORS IN MENTAL HEALTH (SAME AS SOC 546) ..... (3)
BSC 607 FOOD RELATED BEHAVIORS (SAME AS NFS/ANT/NS 607) ..... (3)
BSC 620 ORIENTATION TO MEDICAL BEHAVIORAL SCIENCE (SAME AS SPH 841) ..... (1)
BSC 626 SURVEY OF HEALTH PSYCHOLOGY (SAME AS PSY 626) ..... (3)
BSC 645 ANTHROPOLOGY AND EPIDEMIOLOGY (SAME AS ANT 645) ..... (3)
BSC 745 RESEARCH METHODS IN MEDICAL BEHAVIORAL SCIENCE ..... (3)
BSC 765 ADVANCED SEMINAR IN MEDICAL ANTHROPOLOGY (SAME AS BSC 765) ..... (3)
BSC 766 CONCEPTS IN MEDICAL SOCIOLOGY (SAME AS SOC 766) ..... (3)
BSC 770 PSYCHOSOCIAL ISSUES IN HEALTH AND AGING ..... (3)
BSC 772 TOPICAL SEMINAR IN MEDICAL BEHAVIORAL SCIENCE ..... (1-3)
BSC 773 PSYCHOSOCIAL ONCOLOGY ..... (3)
BSC 774 FOOD AND FOOD SECURITY IN A CHANGING WORLD (SAME AS ANT 774) ..... (3)
BSC 775 HUMAN RESPONSE TO STRESS ..... (3)
BSC 776 SEMINAR IN DEPENDENCY BEHAVIOR (SAME AS SOC/ANT/PSY 776) ..... (3)
BSC 777 SEMINAR IN MENTAL ILLNESS CONCEPTS, RESEARCH AND POLICY (SAME AS SOC 777) ..... (3)
BSC 779 BEHAVIORAL FACTORS IN DEATH AND DYING ..... (3)
BSC 781 HEALTH RELATED BEHAVIORS: MODELS AND APPLICATIONS (3)
BSC 782 WOMEN HEALTH AND AGING (SAME AS GRN 782) ..... (3)
BSC 785 COMPARATIVE HEALTH CARE SYSTEMS (SAME AS SOC 785) ..... (3)
BSC 790 RESEARCH IN MEDICAL BEHAVIORAL SCIENCE ..... (1-6)

Biology

GRADUATE FACULTY
Full Members
Professors
Carol C. Baskin, Jerry M. Baskin, Wesley J. Birge, Philip H. Crowley, Grace M. Jones, Judith A. Lesnaw, John M. Rawls Jr., Brian C. Rymond, R. Craig Sargent, Sheldon M. Steiner, David F. Westneat.
Associate Professors
Philip Bonner, Jim D. Clark, William S. Cohen, Robin L. Cooper, Elizabeth A. Debski, Scott K. Gleeson, Denny O. Harris, Peter M. Mirabito, Robert N. Muller, Brent D. Palmer, Charles A. Staben, Hong Y. Yan.
Assistant Professors
Rebecca Kellum.
Associate Members
Associate Professors
D. Nicholas McLetchie.
Assistant Professors
Kathleen Donohue, Adria Elskus, Douglas A. Harrison, Brian S. Shepherd.
Emeritus Professors
M.I.H. Aleem, Lester Goldstein, John J. Just, Willem Meijer, Gerald A. Rosenthal, Jesse Sisken, Gary Uglem.

The Biology Graduate Program is housed in the Thomas Hunt Morgan School of Biological Sciences. The Program provides training in three areas of contemporary biological research: Ecology, Evolution and Behavior; Molecular and Cellular Biology; and Organismal and Integrative Biology. These areas correspond to the three sections of the School of Biological Sciences around which faculty research programs are clustered:

Ecology, Evolution and Behavior – Evolution of life histories, growth strategies, mating, social and predator-prey behavior; effects of these traits on population and community ecology. Organisms studied include: birds, amphibians, fish, invertebrates, woody and herbaceous vascular plants as well as non-vascular plants such as bryophytes.

Molecular and Cellular Biology – Biological sciences have been revolutionized in recent years by studies and applications at the cellular and molecular levels. The Molecular and Cellular Biology (MCB) area provides graduate training in fields at the forefront of this discipline such as gene expression, cell division, and developmental regulation. Emphasis is placed on the application of molecular genetic and biochemical tools to genetically tractable systems including viruses, fungi, cultured cells, and

insects. The graduate course work and laboratory experiences prepare MCB students for scientific careers in high demand areas of basic and applied research.

Organismal and Integrative Biology – Behavioral, anatomical, physiological and molecular techniques are applied to questions of animal development and function. Students entering this area receive training and select a dissertation topic in one or more of the following areas: neurobiology, environmental physiology, neurophysiology, endocrinology, and metabolism.

The primary emphasis of our Graduate Program is on doctoral training, however, we also provide training towards the Master's of Science (both Plan A and Plan B).

Admission Requirements

All students admitted to one of the graduate degree programs in Biology must meet the minimum admission requirements of the Graduate School.

Although we welcome applications from students who have completed (or are nearing completion of) a Master's degree, Master's training is not a prerequisite for admission to our doctoral program.

As preparation for graduate work in Biology, students generally have completed one year of physics, two years of chemistry, one semester of calculus, one year of general biology, and upper-level courses providing a working knowledge of contemporary biology.

Currently, all students admitted to the program are financially supported through teaching assistantships, research assistantships, or fellowships. Course work and research projects in the program are tailored to the background and interests of each student, under the guidance of the student's committee.

Requests for application forms and inquiries about the Biology Graduate Program should be directed to:

Staff Coordinator
Biology Graduate Program
T.H. Morgan School of Biological Sciences
10 1 Morgan Building
University of Kentucky
Lexington, KY 40506-0225
(859) 257-3255 or 1-800-313-2465
E-mail bgp@uky.edu
darwin.ceeb.uky.edu/micro/sbs/sbs.html

GRADUATE COURSES

BIO 430G PLANT PHYSIOLOGY ..... (3)
BIO 452G LABORATORY IN ECOLOGY ..... (2)
BIO 476G GENERAL MICROBIAL PHYSIOLOGY ..... (4)
BIO 494G IMMUNOBIOLOGY (SAME AS MI 494G) ..... (3)
BIO 502 PRINCIPLES OF SYSTEMS, CELLULAR AND MOLECULAR PHYSIOLOGY (SAME AS PGY 502) ..... (5)
BIO 508 EVOLUTION ..... (3)
BIO 510 RECOMBINANT DNA TECHNIQUES LABORATORY ..... (4)
BIO 520 BIOINFORMATICS (SAME AS INF 520) ..... (3)
BIO 529 DEVELOPMENTAL BIOLOGY ..... (3)
BIO 530 BIOGEOGRAPHY AND CONSERVATION (SAME AS GEO 530) ..... (3)
BIO 535 COMPARATIVE NEUROBIOLOGY AND BEHAVIOR (SAME AS PGY 535) ..... (3)
BIO 540 FUNDAMENTALS OF RADIATION BIOLOGY (SAME AS RAS 540) . (2)
BIO 541 RADIOISOTOPE METHODOLOGY (SAME AS RAS 541) ..... (2)
BIO 542 HISTOLOGY ..... (5)
BIO 544 EMBRYOLOGY ..... (5)
BIO 549 COMPARATIVE ENDOCRINOLOGY (SAME AS PGY 549) ..... (3)
BIO 550 COMPARATIVE PHYSIOLOGY ..... (3)
BIO 551 PLANT AUTECOLOGY ..... (4)
BIO 553 FISH BIOLOGY ..... (4)
BIO 554 MAMMALOGY ..... (3)
BIO 555 VERTEBRATE ZOOLOGY ..... (5)
BIO 556 COMMUNICATION BIOLOGY ..... (3)
BIO 559 ORNITHOLOGY ..... (4)
BIO 560 ENVIRONMENTAL PHYSIOLOGY AND TOXICOLOGY (SAME AS TOX 560) ..... (4)
BIO 561 MEDICAL ENTOMOLOGY (SAME AS ENT 561) ..... (4)
BIO 564 INSECT TAXONOMY (SAME AS ENT 564) ..... (4)
BIO 565 LIMNOLOGY ..... (4)
BIO 567 APPLICATIONS OF GENETICS (SAME AS ENT 567) ..... (4)
BIO 568 INSECT BEHAVIOR (SAME AS ENT 568) ..... (3)
BIO 570 INVERTEBRATE ZOOLOGY ..... (4)
BIO 571 ALGOLOGY ..... (4)
BIO 573 MYCOLOGY ..... (4)
BIO 575 PLANT ANATOMY AND MORPHOLOGY ..... (4)
BIO 580 METABOLISM OF MICROORGANISMS ..... (4)
BIO 582 VIROLOGY ..... (3)
BIO 595 IMMUNOBIOLOGY LABORATORY (SAME AS MI 595) ..... (2)
BIO 601 SPECIAL TOPICS IN MOLECULAR AND CELLULAR GENETICS (SAME AS BCH/MI/PLS/PPA 601) ..... (1)
BIO 605 EMPIRICAL METHODS IN ECOLOGY AND EVOLUTION (SAME AS ENT/FOR 605) ..... (2)
BIO 606 CONCEPTUAL METHODS IN ECOLOGY AND EVOLUTION (SAME AS ENT/FOR 606) ..... (3)
BIO 607 ADVANCED EVOLUTION (SAME AS ENT/FOR 607) ..... (2)
BIO 608 BEHAVIORAL ECOLOGY AND LIFE HISTORIES (SAME AS ENT/FOR 608) ..... (2)
BIO 609 POPULATION AND COMMUNITY ECOLOGY (SAME AS ENT/FOR 609) ..... (2)
BIO 611 BIOPATHOLOGY (SAME AS MI 611) ..... (3)
BIO 612 BIOLOGY OF AGING (SAME AS ANA/GRN/PGY 612) ..... (3)
BIO 613 BEHAVIORAL ECOLOGY AND COMPARATIVE NEUROBIOLOGY (SAME AS PSY/ENT/PGY/ANA 613) ..... (2)
BIO 615 MOLECULAR BIOLOGY (SAME AS MI/BCH 615) ..... (3)
BIO 618 MOLECULAR NEUROBIOLOGY (SAME AS MI/ANA/PGY 618) ..... (4)
BIO 620 PLANT MOLECULAR BIOLOGY (SAME AS PLS 620) ..... (3)
BIO 621 TOPICS IN MODERN BIOLOGY (SUBTITLE REQUIRED) ..... (1-3)
BIO 622 PHYSIOLOGY OF PLANTS I (SAME AS PLS/FOR 622) ..... (3)
BIO 623 PHYSIOLOGY OF PLANTS II (SAME AS PLS/FOR 623) ..... (3)
BIO 625 INSECT-PLANT RELATIONSHIPS (SAME AS ENT 625) ..... (3)
BIO 632 ADVANCED CELL BIOLOGY I ..... (3)
BIO 633 ADVANCED CELL BIOLOGY II ..... (3)
BIO 635 INSECT PHYSIOLOGY AND INTERNAL MORPHOLOGY (SAME AS ENT 635) ..... (4)
BIO 638 DEVELOPMENTAL NEUROBIOLOGY (SAME AS ANA/PGY/PSY 638) ..... (3)
BIO 650 ANIMAL PHYSIOLOGY LABORATORY (SAME AS PGY 650) ..... (2)
BIO 665 INSECT ECOLOGY (SAME AS ENT 665) ..... (3)
BIO 684 PHYLOGENETIC SYSTEMATICS (SAME AS ENT 684) ..... (3)
BIO 685 ADVANCED IMMUNOBIOLOGY (SAME AS MI 685) ..... (3)
BIO 720 MICROBIAL STRUCTURE AND FUNCTION (SAME AS MI/OBI 720) ..... (4)
BIO 740 MAMMALIAN RADIATION BIOLOGY (SAME AS RM 740) ..... (2)
BIO 748 MASTER'S THESIS RESEARCH ..... (0)
BIO 749 DISSERTATION RESEARCH ..... (0)
BIO 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
BIO 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
BIO 770 SEMINAR IN BIOLOGY (SUBTITLE REQUIRED) ..... (1)
BIO 772 SEMINAR IN MICROBIOLOGY (SAME AS MI 772) ..... (0-1)
BIO 773 SEMINAR IN PLANT PHYSIOLOGY (SAME AS PLS 773) ..... (1)
BIO 782 ADVANCED VIROLOGY (SAME AS VS 782) ..... (3)
BIO 790 MENTORING UNDERGRADUATE RESEARCH IN BIOLOGY ..... (1)
BIO 795 RESEARCH IN BIOLOGY ..... (1-9)
BIO 798 RESEARCH IN MICROBIOLOGY (SAME AS MI 798) ..... (1-9)

Biomedical Engineering

GRADUATE FACULTY

Full Members

Professors

Kimberly Ward Anderson, Eugene N. Bruce, Charles F. Knapp, Stephen Lai-Fook, David C. Randall, Keith E. Rouch, Val M. Runge, Robert Shapiro, Betty F. Sisken, Charles D. Smith.

Associate Professors

James Abbas, Dayong Gao, Ranu Jung, David Pienkowski, David A. Puleo, Janet L. Walker.

Assistant Professors

Jean McCrory.

Associate Members

Professors

William T. Abraham.

Associate Professors
Abhijit R. Patwardhan.
Assistant Professors
John H. Lawrence, Fabio M. Leonelli.
Research Assistant Professors
Anders Andersen, Peter Hardy.
Emeritus Professors
Donald T. Frazier, James F. Lafferty.

The Graduate Center for Biomedical Engineering offers master's and doctoral degrees in Biomedical Engineering. This graduate program emphasizes the application of engineering principles to the areas of medicine and biology and covers the broad aspects of mechanics, fluids, instrumentation, signal processing, systems analysis, materials, physiology, cellular processes, and laboratory experimentation. The course work also stresses the application of these techniques to specific areas in rehabilitation engineering, sports medicine, computational neuroscience, space physiology, cardiopulmonary physiology, tissue regeneration, implantology, medical instrumentation, and image processing.

The Center for Biomedical Engineering brings together engineers, life scientists, and physicians to conduct original research in a variety of medical-related problems. Areas of research include cardiopulmonary mechanics and controls, neuromuscular function, musculoskeletal mechanics, rehabilitation engineering, computational neuroscience, motor control, orthopedic biomaterials, tissue-biomaterial interactions, orthopedic biomechanics, cryobiology, artificial kidney mass transport, electromagnetic stimulation of tissue, and instrumentation for minimally invasive surgery. The Center is located in the Wenner-Gren Research Laboratory that provides the framework for multidisciplinary research. Faculty and staff of the Center collaborate with investigators from other units of the University including the Departments of Physiology, Anatomy and Neurobiology, Cardiology, Medicine, Surgery, Physical Medicine and Rehabilitation, Orthopedics, Sports Medicine, and Kinesiology and Health Promotion, as well as the Departments of Biosystems and Agricultural, Chemistry, Chemical and Materials, Electrical, and Mechanical Engineering, the College of Pharmacy, the College of Dentistry, and the Center for Robotics and Manufacturing Systems. Center faculty and staff provide opportunities and support for graduate students, medical residents, and selected undergraduates. Graduates of the program enter careers in research institutes, academia, hospitals, and the biomedical industry

Admission Requirements

Entering students are expected to have an ABET-accredited degree in engineering with some course work in the biological sciences. Applicants with degrees in physical or biological sciences may be required to complete course work in the undergraduate engineering curriculum before being admitted to the graduate program. Admission to the biomedical engineering graduate programs normally requires a GPA of at least 3.0/4.0 for all graduate and undergraduate work and Graduate Record Examination scores of at least 1200 (Quantitative + Analytical) and 550 (Verbal). Additional application materials to be submitted to the Center include a statement describing your reasons for wanting to pursue graduate education in Biomedical Engineering and letters of recommendations from three faculty members who are familiar with your academic record. Satisfying the above requirements does not guarantee admission to the biomedical engineering graduate program.

Master of Science

The Master of Science degree provides students with a combination of experiences in basic research, design, development, and practical applications. The M.S. degree requires successful completion of the core curriculum (26 credit hours) plus an acceptable thesis. In special cases, a non-thesis option consisting of 31 credit hours is available for students with significant previous research or design experience. Enrollment in the non-thesis option requires approval of the Director of Graduate Studies and must be requested within the student's first 9 credit hours of graduate course work.

Core M.S. Curriculum
BME 530 Biomedical Instrumentation (3)
BME 605 Biomedical Signal Processing (3)
BME 661 Biomaterials Science and Engineering (3)
BME 6xx Biomechanics Elective (3)
BME xxx BME Technical Elective (3)
BME 774 Graduate BME Seminar (1)
PGY 412G Principles of Human Physiology (4)
Math Elective (3)
Technical Elective (3)

Doctor of Philosophy

The Doctor of Philosophy is a research degree granted on the basis of broad knowledge of engineering applications in biology and medicine and an in-depth study in a specific area leading to a dissertation reflecting original and independent work by the candidate. Applicants to the Ph.D. program are generally expected to have a master's degree. Under special circumstances, exceptional students may bypass the M.S. or be admitted directly to the Ph.D. program upon approval of the biomedical engineering faculty. Courses for advanced study are determined in consultation with an advisory committee and will be selected from the areas of engineering, mathematics, life sciences, and chemistry. To earn a Ph.D. degree, students must:

1. Meet the general requirements of the Graduate School.
2. Successfully complete PGY 502.
3. Pass the Qualifying Examination. This exam, consisting of written and oral components, is designed and administered by the student's Doctoral Advisory Committee.
4. Present and satisfactorily defend a dissertation documenting independent and comprehensive scholarship.

Further information may be obtained by writing to the Director of Graduate Studies, Center for Biomedical Engineering, Wenner-Gren Research Laboratory, University of Kentucky, Lexington, KY 40506-0070, by e-mail at cbmedgs@uky.edu, or by visiting our Web site at <www.uky.edu/RGS/CBME>.

GRADUATE COURSES

BME 481 G TOPICS IN BIOMEDICAL ENGINEERING (SUBTITLE REQUIRED) ..... (3)
BME 501 FOUNDATIONS OF BIOMEDICAL ENGINEERING ..... (3)
BME 530 BIOMEDICAL INSTRUMENTATION ..... (3)
BME 579 NEURAL ENGINEERING: MERGING ENGINEERING WITH NEUROSCIENCE (SAME AS EE 579) ..... (3)
BME 605 BIOMEDICAL SIGNAL PROCESSING I ..... (3)
BME 610 BIOMEDICAL CONTROL SYSTEMS I ..... (3)
BME 615 BIOMEDICAL SIGNAL PROCESSING II ..... (3)
BME 620 BIOMEDICAL CONTROL SYSTEMS II ..... (3)
BME 625 ANALYSIS OF NONLINEAR BIOMEDICAL SYSTEMS ..... (3)
BME 635 MAGNETIC RESONANCE INSTRUMENTATION AND MEASUREMENT ..... (3)
BME 641 PRACTICES OF BIOMEDICAL ENGINEERING ..... (3)
BME 661 BIOMATERIALS SCIENCE AND ENGINEERING ..... (3)
BME 662 TISSUE-IMPLANT INTERFACE ..... (3)
BME 670 BIOMECHANICS I ..... (3)
BME 672 MUSCULOSKELETAL BIOMECHANICS ..... (3)
BME 685 BIOFLUID MECHANICS ..... (3)
BME 690 RESEARCH IN BIOMEDICAL ENGINEERING (SUBTITLE REQUIRED) ..... (1-3)

BME 699 SPECIAL TOPICS IN BIOMEDICAL ENGINEERING (SUBTITLE REQUIRED) ..... (1-3)
BME 748 MASTER'S THESIS RESEARCH ..... (0)
BME 749 DISSERTATION RESEARCH ..... (0)
BME 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
BME 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
BME 772 SEMINAR ..... (0)
BME 774 GRADUATE BME SEMINAR ..... (0-1)
BME 781 SPECIAL PROBLEMS IN BIOMEDICAL ENGINEERING (SUBTITLE REQUIRED) ..... (1-3)

Biosystems and Agricultural Engineering

GRADUATE FACULTY

Full Members

Professors

Dwayne R. Edwards, Richard S. Gates, Frederick Payne, Scott A. Shearer, Linus Walton, Larry G. Wells.

Associate Professors

Donald G. Colliver, Sue E. Nokes, Stephen R. Workman.

Associate Members

Extension Professors

Robert Fehr, Joseph Taraba, Larry Turner, Richard Warner.

Assistant Professors

Czarena Crofchek, Michael Montross.

Emeritus Professors

Blaine F. Parker, Ira J. Ross, Edward Smith, John Walker.

The Biosystems and Agricultural Engineering Department offers programs leading to the M.S. in Biosystems and Agricultural Engineering (Plan A and Plan B available) and the Ph.D. degree.

Admission Requirements

Admission into the M.S. graduate program of the Biosystems and Agricultural Engineering Department requires the concurrence of the Department Graduate Committee, and the Director of Graduate Studies, and the Department Chair and the availability of an advisor for the student. The Biosystems and Agricultural Engineering Graduate Committee reviews the applicant's three letters of recommendation, resume, statement of professional objective and transcripts with special emphasis given to the science and mathematics area. The department requires a minimum grade point average of 2.8 and a GRE score of at least 1500. An engineering B.S. degree from an ABET-accredited engineering program (or international equivalent) is generally required, however, non-engineering students may be admitted by agreeing to take additional undergraduate courses specified by the graduate committee. An advisor for a student is required prior to admittance into the program. Exceptions to these requirements are considered on a case-by-case basis and require approval of the Department Chair.

Admission into the Ph.D. graduate program of the Biosystems and Agricultural Engineering Department requires the concurrence of the Department Graduate Committee, the Director of Graduate Studies, and the Department Chair, and the availability of an advisor for the student. The Biosystems and Agricultural Engineering Graduate Committee reviews the applicant's previous graduate record, three letters of recommendation, resume, statement of professional objective, and transcripts with special emphasis given to the science and mathematics area. The department requires a minimum grade point average of 3.2 on all previous graduate work and a GRE score of at least 1500. An advisor for a student is required prior to admittance into the program. Exceptions to these requirements are considered on a case-by-case basis and require approval of the Department Chair. Ph.D. students are admitted into Candidacy after they have successfully completed the Qualifying Exam.

Degree Requirements

The biosystems and agricultural engineering graduate program has as its objectives the development of:

1. The ability to plan and conduct research and design involving the application of engineering science to biological and agricultural systems.
2. The understanding of the mathematical, physical, and biological sciences to permit the reading and understanding of the present and future literature in these and related fields.
3. The skills required to use precision instruments, techniques and computers in research and design.
4. The ability to make sound engineering and management decisions.
5. The ability to teach college level courses in biosystems and agricultural engineering, particularly at the doctoral level.

In the attainment of the above objectives the graduate student will combine courses in biosystems engineering, the physical sciences, other engineering fields, and the biological sciences in developing a program of study. The advanced degrees, however, are primarily research degrees awarded for significant creative research accomplishment, not for the completion of a specified number of courses. Therefore, the program concentrates on a strong thesis or dissertation problem completed under the supervision of the graduate faculty of the department. Strong course support is essential if the thesis or dissertation problem is to be properly undertaken and completed.

The design-oriented, non-thesis option is also available for the master's degree.

GRADUATE COURSES

BAE 435G WASTE MANAGEMENT FOR BIOSYSTEM.S. ..... (3)
BAE 438G FUNDAMENTALS OF GROUNDWATER HYDROLOGY (SAME AS CE 460) ..... (3)
BAE 502 MODELING OF BIOLOGICAL SYSTEM.S. ..... (3)
BAE 513 SOIL DYNAMICS IN TILLAGE AND TRACTION ..... (3)
BAE 515 FLUID POWER SYSTEM.S. ..... (3)
BAE 536 FLUVIAL HYDRAULICS (SAME AS CE 546) ..... (3)
BAE 537 IRRIGATION AND DRAINAGE ENGINEERING ..... (3)
BAE 545 ENGINEERING HYDRAULICS (SAME AS CE 549) ..... (3)
BAE 549 FOOD AND BIOPROCESS ENGINEERING ..... (3)
BAE 556 SOLID AND HAZARDOUS WASTE MANAGEMENT (SAME AS CE 556) ..... (3)
BAE 569 WATER RESOURCES SYSTEM DESIGN (SAME AS CE 569) ..... (4)
BAE 580 HEATING, VENTILATING AND AIR CONDITIONING (SAME AS ME 580) ..... (3)
BAE 581 PHYSICS OF PLANT AND ANIMAL ENVIRONMENTS ..... (3)
BAE 599 TOPICS IN AGRICULTURAL ENGINEERING ..... (2-3)
BAE 618 ADVANCED PLANT, SOIL, AND MACHINERY RELATIONSHIPS .. (3)
BAE 625 TOPICS IN ADVANCED ENVIRONMENT CONTROL AND ANALYSIS (SUBTITLE REQUIRED) ..... (3)
BAE 638 GROUNDWATER HYDROLOGY (SAME AS CE 660) ..... (3)
BAE 642 OPEN CHANNEL FLOW (SAME AS CE 642) ..... (3)
BAE 648 ENERGY AND MASS TRANSFER IN AGRICULTURAL PROCESSING ..... (3)
BAE 653 WATER QUALITY IN SURFACE WATERS (SAME AS CE 653) ..... (3)
BAE 658 INSTRUMENTATION FOR ENGINEERING RESEARCH ..... (3)
BAE 660 SIMILITUDE IN ENGINEERING ..... (3)
BAE 665 WATER RESOURCES SYSTEM.S. (SAME AS CE 665) ..... (3)
BAE 667 STORMWATER MODELING (SAME AS CE 667) ..... (3)
BAE 748 MASTER'S THESIS RESEARCH ..... (0)
BAE 749 DISSERTATION RESEARCH ..... (0)
BAE 750 SPECIAL PROBLEM.S. IN AGRICULTURAL ENGINEERING ..... (1-3)
BAE 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
BAE 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
BAE 775 SEMINAR ..... (0)
BAE 795 THESIS ..... (0)

AEN 463G AGRICULTURAL SAFETY AND HEALTH ..... (3)
AEN 647 SYSTEM OPTIMIZATION I (SAME AS ME 647) ..... (3)
AEN 680 BIOCHEMICAL ENGINEERING (SAME AS CME 680) ..... (3)

EGR 537 NUMERICAL ANALYSIS (SAME AS CS/MA 537) ..... (3)
EGR 599 TOPICS IN ENGINEERING (SUBTITLE REQUIRED) ..... (1-3)
EGR 611 BOUNDARY ELEMENT METHODS IN ENGINEERING (SAME AS ME 611) ..... (3)

EGR 621 FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)
EGR 622 ADVANCED FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)
EGR 680 ENGINEERING APPLICATIONS OF STOCHASTIC DIFFERENTIAL EQUATIONS ..... (3)

Business Administration

GRADUATE FACULTY
Full Members
Professors
Brent Ambrose, Daniel J. Brass, Terry Childers, Chenhua Chung, Robert F. Dahlstrom, Gregory G. Dess, James H. Donnelly, Richard W. Furst, Merlin M. Hackbart, Clyde W. Holsapple, Paul Jarley, Keith H. Johnson, Bradford D. Jordan, Albert L. Lederer, Fred W. Morgan, Donald J. Mullineaux, Krish Muralidhar, Joe Peek, Steven J. Skinner, Michael Tearney, Kelly Tepper Tian.
Associate Professors
Terry L. Amburgey, I. Keong Chew, Paul Childs, Walter J. Ferrier, James W. Freeman, Jule Gassenheimer, Nancy Brown Johnson, Susan D. Jordan, Scott W. Kelley, Anita Lee-Post, Dennis T. Officer, Ramakrishnan Pakath, Radhika Santhanam.
Associate Members
Professors
Bruce Skaggs.
Associate Professors
Jason D. Shaw.
Assistant Professors
Jack Cooney, Devon DelVecchio, Michelle Duffy.
Emeritus Professors
Philip K. Berger, James Gibson, Andrew J. Grimes, Charles Haywood.

Business Administration Graduate Programs

The College of Business and Economics offers the Master of Business Administration and the Doctor of Philosophy degrees. Faculty participating in the M.B.A. and Ph.D. programs are members of the School of Accountancy, the School of Management (Decision Science and Information Systems, Finance, Management, Marketing) and the Department of Economics. A description of the graduate programs and graduate faculty in Accounting and in Economics can be found in those sections of this Bulletin.

Master of Business Administration

The M.B.A. program is designed to provide students with the necessary educational foundation so that they are prepared to assume managerial responsibility in a variety of organizational settings. The integrated sequenced program of study consists of two distinct tracks, based on one's background. One track is for students who hold an undergraduate degree in business and are seeking a course of study that will provide them an opportunity to develop more specialized skills in a functional area of business. The other track is for students who do not have an undergraduate degree in business but often have technical training, (e.g., engineering, computer science, etc.) and are seeking a course of study that will provide them an opportunity to seek broad-based management training. Both programs of study are 36 hours after completion of all prerequisites (see description) and have a common core of seven courses. Core courses are designed to provide an understanding of business enterprise; an understanding of quantitative methods and the applications of analysis to business decision making; a knowledge of leadership skills; the ability to solve complicated and realistic business problems; and an understanding of managing a business enterprise in a global environment.

For business undergraduates, the remaining five courses are electives which will permit students to develop skills in a particular functional area.

For nonbusiness undergraduates, the remaining five courses will provide students an understanding of functional problems encountered in business enterprise as related to organizational behavior, production, marketing, finance and one elective course.

Admission Requirements

1. Required course prerequisites for the M.B.A. Program are two Principles of Accounting courses (one in financial accounting and one in managerial accounting), two Principles of Economics courses (one in micro economics and one in macro economics), a Statistics and Probability course, and an Elementary Calculus course. All courses should be equivalent to at least 3 semester hours. The prerequisites may be satisfied by:
   a) passing the required prerequisite courses (ACC 201 and ACC 202, ECO 201 and ECO 202, STA 291, and MA 123) at the University of Kentucky,
   b) passing similar courses at another accredited university,
   c) passing college-level proficiency (CLEP) examinations, or
   d) successfully completing correspondence courses.
2. In addition to satisfying required course prerequisites, applicants should possess a four-year undergraduate degree (or its equivalent) with a minimum cumulative grade point average (GPA) of 2.75/4.0.
3. The Graduate Management Admission Test (GMAT) is a requirement, and international students (with the exception of those who hold a degree from a U.S. institution of higher education) must present a Test of English as a Foreign Language (TOEFL) with an overall minimum score of 550 written or 213 computer.
4. All international students who are not permanent residents of the U.S. must present a Test of Written English (TWE) with a score of 4.5 or higher.
5. No student will be admitted to the M.B.A. Program before completion of all prerequisites and the GMAT.

Degree Requirements

1. The M.B.A. program of study requires 36 semester credit hours of M.B.A. course work.

Business Undergraduate

ACC 628 Financial/Managerial Accounting	3
ECO 610 Managerial Economics	3
DIS 651 Quantitative Analysis for Decisions	3
BA 610 Global Business Management	3
DIS 620 Management Information Systems in Decision Making	3
MGT 697 Top Management Leadership in the Contemporary Business Environment	3
MGT 699 Business Policy and Strategy II	3
Electives	15
	Total 36

Non-business Undergraduate

ACC 628 Financial/Managerial Accounting	3
ECO 610 Managerial Economics	3
DIS 651 Quantitative Analysis for Decisions	3
MGT 611 Organizational Behaviour	3
DIS 620 Management Information Systems in Decision Making	3
FIN 600 Corporate Financial Policy	3
MKT 600 Marketing Management	3
MGT 697 Top Management Leadership in the Contemporary Business Environment	3
MGT 699 Business Policy and Strategy II	3
DIS 600 Production Management	3
BA 610 Global Business Management	3
Elective	3
	Total 36

2. Minimum average of grade B in all courses attempted for graduate credit after being admitted to the Graduate School.

Students receiving two grades of C below a B average or one grade of E will be subject to dismissal from the M.B.A. program.

3. Successful completion of a comprehensive final examination.

B.S. in Engineering/M.B.A.

An opportunity to study for an M.B.A. degree while pursuing a Bachelor of Science in Engineering degree is offered to eligible students admitted to the College of Engineering. Students must meet all prerequisites for the M.B.A. degree before being considered for the program.

J.D./M.B.A. Option

The College of Business and Economics and the College of Law offer the opportunity to obtain the Master of Business Administration (M.B.A.) and Juris Doctor (J.D.) degrees in a dual degree program. Because both schools recognize that some aspects of business and law are compatible and interrelated, students can usually obtain both degrees in less time than if the degrees were pursued separately. As a result, students gain marketable skills and specialized employment opportunities in less time than might otherwise be required. Students interested in the J.D./M.B.A. program must apply to both the College of Law and the Graduate School.

M.D./M.B.A. and Pharm.D./M.B.A.

Through agreements with the College of Medicine and the College of Pharmacy, the Gatton College admits eligible students to pursue the M.B.A. degree jointly with the M.D. or Pharm.D. degrees. Students interested in these programs must apply to the College of Medicine or the College of Pharmacy as appropriate and also to the Graduate School and the Gatton College M.B.A. program.

Application for Admission

Students who wish to apply for admission to the M.B.A. program in the Gatton College of Business and Economics should a) write to The Graduate School, University of Kentucky, Lexington, KY 40506-0027, and request application forms for admission and financial aid together with the Graduate Bulletin, and b) write The Graduate Center, Gatton College of Business and Economics, University of Kentucky, Lexington, KY 40506-0034 and request program applications and information.

Doctor of Philosophy

The mission of the doctoral program is to prepare students for successful academic careers. To accomplish this mission, the program prepares graduates to comprehend and evaluate research, to perform research which advances knowledge and to provide effective instruction, all within a business-related discipline. Specifically, the program is designed to provide:

a) An understanding of the philosophies and basic methodological issues of academic inquiry.
b) An understanding of the theoretical foundations and state-of-the-art research methods in a specific discipline.
c) The ability to design and execute substantive research projects.

Admission Requirements

1. Background Training in Business and Business Related Areas. The Ph.D. is designed to provide specialization beyond the master's level. The educational background of each candidate will be reviewed by the faculty in the student's major area to identify any deficiencies. In most cases, an M.B.A. (M.S. in Accounting) from an AACSB accredited institution provides the necessary background.
2. Applicants with previous graduate credits are evaluated generally according to the following rules, but each case is individually examined by the faculty of the appropriate business department. A minimal grade point average of 3.2/4.0 is required on all previous graduate credits. Also, students without GMAT scores must take the exam before admission, reporting no less than a minimal score of 500.

Degree Requirements

1. Core Requirements (18-19 credit hours):*
   a) BA 762 Research Methodology (3)
   b) Theoretical Foundations—Six hours selected by the student from among:
      MGT 700 Administrative Science (3)
      ECO 601 Microeconomic Theory (3)
      ECO 602 Macroeconomic Theory (3)
      MGT 751 Management Science II (3)
      PSY 624 Social Psychology (3)
   c) Research Tools—Nine hours selected by the student from among:
      Six hours statistics sequence (6)
      Research tools elective (3)
   d) BA 700 Teaching Methods in Business (1)*

   *Students who serve as Teaching Assistants are required to enroll in BA 700, Teaching Methods in Business, for one additional credit hour.
2. Major Field Requirements:
   The major field will consist of at least 21 hours of graduate credit course work including at least 12 credit hours of 700 level courses exclusive of the core. Currently available major fields include:
      Accounting
      Decision Science and Management Information Systems
      Finance
      Marketing
      Organizational Behavior and Human Resource Management
      Strategic Management

   All course work must be approved by the Director of Graduate Studies.
3. Written and oral comprehensive examinations are required in the major field.
4. The dissertation will be based on original research on a significant topic. The dissertation will be defended in an oral examination.
5. Minimum average of grade of B for graduate credit and in all courses attempted after being admitted to The Graduate School. Students obtaining two grades of C below a B average will be subject to dismissal from the program.

For application forms and information, please write or call:

The Office of the Associate Dean
of Administration and Academic Affairs
Gatton College of Business and Economics
University of Kentucky
Lexington, KY 40506-0034
(859) 257-3024 or (895) 257-3592
gatton.uky.edu

GRADUATE COURSES

BA 601 TOTAL QUALITY MANAGEMENT ..... **(3)**

BA 610 GLOBAL BUSINESS MANAGEMENT ..... (3)
BA 700 TEACHING METHODS IN BUSINESS (SAME AS ECO 700) ..... (1)
BA 749 DISSERTATION RESEARCH ..... (0)
BA 762 RESEARCH METHODOLOGY ..... (3)
BA 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
BA 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)

DIS 506 PRODUCTIVITY AND QUALITY CONTROL ..... (3)
DIS 520 ADVANCED BUSINESS DATA PROCESSING AND INFORMATION . (3)
DIS 600 PRODUCTION MANAGEMENT ..... (3)
DIS 611 THE MANAGEMENT OF COMPUTER INTEGRATED MANUFACTURING ..... (3)
DIS 620 MANAGEMENT INFORMATION SYSTEMS IN DECISION MAKING (3)
DIS 621 BUSINESS EXPERT SYSTEMS ..... (3)
DIS 622 BUSINESS DATA SYSTEM ANALYSIS AND DESIGN ..... (3)
DIS 623 BUSINESS DECISION SUPPORT SYSTEMS ..... (3)
DIS 624 MANAGEMENT OF INFORMATION RESOURCES (SAME AS MGT 624) ..... (3)
DIS 651 QUANTITATIVE ANALYSIS IN BUSINESS DECISION MAKING ..... (3)
DIS 700 TOPICS IN OPERATIONS MANAGEMENT ..... (3)
DIS 720 MANAGEMENT INFORMATION SYSTEMS THEORY ..... (3)
DIS 751 MANAGEMENT SCIENCE II ..... (3)
DIS 752 TOPICS IN OPTIMIZATION ..... (3)
DIS 753 SEMINAR IN MANAGEMENT SCIENCE ..... (3-6)
DIS 780 STUDIES IN DECISION SCIENCE AND INFORMATION SYSTEMS .. (3)
DIS 790 SPECIAL TOPICS IN MANAGEMENT DECISION SYSTEMS (SUBTITLE REQUIRED) ..... (3)

FIN 585 BANK MANAGEMENT ..... (3)
FIN 600 CORPORATE FINANCIAL POLICY ..... (3)
FIN 623 INTERNATIONAL FINANCIAL MANAGEMENT ..... (3)
FIN 637 HEALTH FINANCE (SAME AS PA/HA/HSM 637) ..... (3)
FIN 645 CORPORATE INVESTMENT AND FINANCING POLICY ..... (3)
FIN 647 WORKING CAPITAL POLICY ..... (3)
FIN 650 INVESTMENTS ..... (3)
FIN 656 PORTFOLIO MANAGEMENT ..... (3)
FIN 664 REAL ESTATE FINANCE ..... (3)
FIN 680 MONEY, INTEREST AND CAPITAL ..... (3)
FIN 691 ADVANCED TOPICS IN FINANCE (SUBTITLE REQUIRED) ..... (1-3)
FIN 695 INDIVIDUAL WORK IN FINANCE ..... (1-6)
FIN 700 SEMINAR IN FINANCIAL THEORY ..... (3)
FIN 701 SEMINAR IN FINANCIAL THEORY II ..... (3)
FIN 745 SEMINAR IN MANAGERIAL FINANCE ..... (3)
FIN 750 SEMINAR IN INVESTMENT THEORY ..... (3)
FIN 763 RESEARCH, DESIGN AND ANALYSIS (SAME AS MGT/MKT 763) .... (3)
FIN 780 SEMINAR IN FINANCIAL INSTITUTIONS ..... (3)
FIN 791 SEMINAR IN FINANCE (SUBTITLE REQUIRED) ..... (1-3)
FIN 795 INDEPENDENT WORK IN FINANCE ..... (1-6)

MGT 608 COMPARATIVE INTERNATIONAL MANAGEMENT ..... (3)
MGT 611 ORGANIZATIONAL BEHAVIOR (SAME AS MFS 611) ..... (3)
MGT 620 PERSONNEL AND INDUSTRIAL RELATIONS ..... (3)
MGT 624 MANAGEMENT OF INFORMATION RESOURCES (SAME AS DIS 624) ..... (3)
MGT 640 LEGAL AND REGULATORY ENVIRONMENT ..... (3)
MGT 695 INDIVIDUAL WORK IN MANAGEMENT ..... (1-6)
MGT 697 TOP MANAGEMENT LEADERSHIP IN THE CONTEMPORARY BUSINESS ENVIRONMENT ..... (3)
MGT 699 BUSINESS POLICY AND STRATEGY II ..... (3)
MGT 700 ADMINISTRATIVE SCIENCE ..... (3)
MGT 711 ORGANIZATIONS AND EXTERNAL SYSTEMS ..... (3)
MGT 712 ORGANIZATIONS AND INDIVIDUAL BEHAVIOR ..... (3)
MGT 713 SEMINAR IN ADVANCED ORGANIZATION THEORY ..... (3)
MGT 714 SEMINAR IN MANAGEMENT THEORY AND POLICY ..... (3)
MGT 763 RESEARCH, DESIGN AND ANALYSIS (SAME AS MKT/FIN 763) .... (3)
MGT 780 SPECIAL TOPICS IN MANAGEMENT (SUBTITLE REQUIRED) ..... (3)
MGT 781 INDEPENDENT WORK IN MANAGEMENT ..... (1-6)

MKT 600 MARKETING MANAGEMENT ..... (3)
MKT 601 MARKETING RESEARCH ..... (3)
MKT 621 PRODUCT MANAGEMENT ..... (3)
MKT 622 SALES MANAGEMENT ..... (3)
MKT 623 MARKETING IN SERVICE AND NONPROFIT ORGANIZATIONS ... (3)
MKT 624 INTERNATIONAL MARKETING MANAGEMENT ..... (3)
MKT 695 INDIVIDUAL WORK IN MARKETING ..... (1-6)
MKT 700 SEMINAR IN MARKETING MANAGEMENT ..... (3)
MKT 710 SEMINAR IN CONSUMER BEHAVIOR ..... (3)
MKT 720 SEMINAR IN MARKETING THEORY ..... (3)
MKT 763 RESEARCH, DESIGN AND ANALYSIS (SAME AS MGT/FIN 763) .... (3)
MKT 771 SEMINAR IN BUSINESS ADMINISTRATION ..... (3)
MKT 781 INDEPENDENT WORK IN MARKETING ..... (1-6)

Note: See also course listings under the Accounting and the Economics programs in this Bulletin.

Chemical Engineering

GRADUATE FACULTY

Full Members

Professors

Kimberly Ward Anderson, Dibakar Bhattacharyya, Eric A. Grulke, Gerald P. Huffman, Richard Kermode, Lynn Penn, Asit K. Ray, James T. Schrodt, Tate T. H. Tsang.

Associate Professors

Douglass S. Kalika, Mark Keane, Barbara L. Knutson.

Associate Members

Adjunct Associate Professors

B. K. Parekh.

Assistant Professors

Paul Dunbar, Rhonda Lee, Stephen Rankin, David Silverstein, James Smart.

Emeritus Professors

Charles E. Hamrin Jr.

The Department of Chemical and Materials Engineering offers programs leading to the M.S. and Ph.D. degrees in Chemical Engineering, with research specialization in the following areas:

Aerosol Chemistry and Physics
Biocellular Engineering
Catalysis
Environmental Engineering
Finite Element Analysis
Fuel Science and Fuel Cells
Materials Synthesis and Nanotubes
Membrane Science and Technology
Polymer Processing
Polymer Science and Engineering
Supercritical Fluids Processing
Thermodynamics
Transport Phenomena

Admission Requirements

Admission to the M.S. and Ph.D. degree programs is on a competitive basis, and financial assistance is available through teaching and research assistantships, as well as a limited number of fellowships. Applicants should have a minimum grade point average of 3.0/4.0 on all undergraduate work, and should hold a Bachelor of Science degree in Chemical Engineering or its equivalent. Meeting the minimum requirements does not guarantee admission, as acceptance is on a competitive and space-available basis. Students with undergraduate majors not in chemical engineering (for example, chemistry or physics) will be expected to complete a program of undergraduate remedial courses prior to admission into the graduate program.

Master of Science

The M.S. degree in Chemical Engineering requires 24 hours of course work, plus completion of an acceptable thesis (Plan A). This course work includes the chemical engineering graduate core, which is comprised of CME 505, CME 620, CME 630, CME 650, and a graduate-level mathematics elective. In certain exceptional cases (as determined by the faculty), a non-thesis M.S. may be undertaken (Plan B). The non-thesis option requires 30 hours of course work which includes the chemical engineering core, as well as 3 hours of CME 780 (Special Problems in Chemical Engineering). The non-thesis option is only available to those students with prior research or industrial experience. For both Plan A and Plan B, at least half of all graduate course work must be at the 600 level or above.

Doctor of Philosophy

The Ph.D. degree is a research degree granted on the basis of broad knowledge of chemical engineering and specialized study in

a specific area of interest. The student must conduct original and significant research and must submit and defend a dissertation based on that research. Course work requirements include the chemical engineering graduate core, and additional courses so as to fulfill the pre-candidacy residency requirements set forth by the Graduate School; the plan of study is developed by the student in consultation with the research advisor. Advancement to doctoral candidacy is contingent upon successful completion of both the written and oral portions of the Qualifying Examination. The written portion addresses four areas of the chemical engineering discipline: Kinetics and Reactor Design, Mathematics (as applied to chemical engineering problems), Thermodynamics, and Transport. The oral portion consists of a presentation and defense of the student's proposed dissertation research; a prospectus prepared by the student must be submitted to the doctoral advisory committee prior to the examination. There is no language requirement for the M.S. or Ph.D. degrees in Chemical Engineering.

A wide selection of research topics is available under the direction of the Chemical Engineering faculty. CME 580 and CME 599 topics include aerosols, membrane technology, bioseparations, and finite element analysis. For more information on degree requirements, financial aid, and facilities contact the Director of Graduate Studies.

GRADUATE COURSES

CME 404G POLYMERIC MATERIALS (SAME AS MSE 404G) ..... (3)
CME 505 ANALYSIS OF CHEMICAL ENGINEERING PROBLEMS ..... (3)
CME 515 AIR POLLUTION CONTROL ..... (3)
CME 550 CHEMICAL REACTOR DESIGN ..... (3)
CME 554 CHEMICAL AND PHYSICAL PROCESSING OF POLYMER SYSTEMS (SAME AS MSE/MFS/ME 554) ..... (3)
CME 556 INTRODUCTION TO COMPOSITE MATERIALS (SAME AS MSE/ME 556) ..... (4)
CME 558 PRINCIPLES OF POLYMER CHARACTERIZATION AND ANALYSIS (SAME AS MSE 558) ..... (3)
CME 580 DESIGN OF RATE AND EQUILIBRIUM PROCESSES FOR WATER POLLUTION CONTROL ..... (3)
CME 583 FUEL SCIENCE ..... (3)
CME 599 TOPICS IN CHEMICAL ENGINEERING ..... (3)
CME 620 EQUILIBRIUM THERMODYNAMICS ..... (3)
CME 621 NONEQUILIBRIUM THERMODYNAMICS ..... (3)
CME 622 PHYSICS OF POLYMERS (SAME AS MSE 622) ..... (3)
CME 625 PROPERTIES OF GASES AND LIQUIDS ..... (3)
CME 630 TRANSPORT I ..... (3)
CME 631 TRANSPORT II ..... (3)
CME 635 STAGED MASS TRANSFER OPERATIONS ..... (3)
CME 637 BIOLOGICAL TRANSPORT PHENOMENA ..... (3)
CME 650 ADVANCED CHEMICAL REACTOR DESIGN ..... (3)
CME 671 BASIC ELECTRODE PROCESSES IN ELECTROCHEMICAL ENGINEERING ..... (3)
CME 680 BIOCHEMICAL ENGINEERING (SAME AS AEN 680) ..... (3)
CME 748 MASTER'S THESIS RESEARCH ..... (0)
CME 749 DISSERTATION RESEARCH ..... (0)
CME 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
CME 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
CME 771 SEMINAR ..... (0)
CME 779 MEMBRANE SCIENCES COLLOQUIUM (SAME AS CHE/PHR/BCH/PHA 779) ..... (1)
CME 780 SPECIAL PROBLEMS IN CHEMICAL ENGINEERING ..... (1-3)
CME 790 RESEARCH IN CHEMICAL ENGINEERING ..... (1-9)
EGR 537 NUMERICAL ANALYSIS (SAME AS CS/MA 537) ..... (3)
EGR 599 TOPICS IN ENGINEERING (SUBTITLE REQUIRED) ..... (1-3)
EGR 611 BOUNDARY ELEMENT METHODS IN ENGINEERING (SAME AS ME 611) ..... (3)
EGR 621 FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)
EGR 622 ADVANCED FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)

Chemistry

GRADUATE FACULTY
Full Members
Professors
Leonidas G. Bachas, Fitzgerald B. Bramwell, Carolyn P. Brock, D. Allan Butterfield, Dennis J. Clouthier, Sylvia Daunert, Robert D. Guthrie, Boyd Haley, F. James Holler, Tae Ji, William R. Markesbery, Mark S. Meier, John P. Selegue, David Watt, Steven W. Yates.
Associate Professors
John Anthony, David A. Atwood, Arthur Cammers-Goodwin, Louis E. DeMoll, Robert B. Grossman, Folami Ladipo, Bert C. Lynn, Anne-Frances Miller, James E. O'Reilly.
Assistant Professors
Stephen M. Holmes, Mark Lovell, Stephen Testa, Dong-Sheng Yang.
Associate Members
Adjunct Professors
Burtron H. Davis.
Emeritus Professors
William D. Ehmann, Robert W. Kiser, John M. Patterson, Donald E. Sands, Paul E. Sears, Stanford L. Smith, Walter T. Smith, Joseph W. Wilson.

The Department of Chemistry offers the Master of Science and the Doctor of Philosophy degrees. Plan A or B may be used to satisfy the requirements for the M.S. degree. Areas of specialization in chemistry are analytical, biological, inorganic, organic, physical, and radio-nuclear. All candidates for the Ph.D. degree are required to serve as a teaching assistant for one semester.

Admission Requirements

The only specific departmental requirement for admission to the Graduate Program in Chemistry is an undergraduate degree in chemistry or its equivalent. The Chemistry Department asks applicants to submit three letters of recommendation and considerable weight in each admission decision is given to these written evaluations from the applicant's instructors and mentors. Otherwise the criteria for admission are those set by the Graduate School. For persons applying for admission to the Graduate Program in Chemistry, Teaching Assistantships are only offered to Ph.D. aspirants. While enrolled students may choose or be required to obtain a Master's Degree, this is not a normal or necessary intermediate stage on the path to a Ph. D. Entering applicants targeting a Master's Degree are generally not offered financial support. An effort is made to match applicant interests with available research programs. Applicants for whom exceptions to the above-stated policies seem warranted are subject to special consideration by the Graduate Recruitment Committee.

A satisfactory reading knowledge of a modern foreign language is recommended for the M.S. and the Ph.D. degrees, but not required.

As part of the course requirements for both the M.S. and the Ph.D. degrees, all students must normally take four "core" courses. The student selects one course which best meets career objectives in each of four of the five areas of chemistry (analytical, biological, inorganic, organic, and physical) from a pair of such courses: CHE 524 or 626, CHE 550 or 552, CHE 510 or 514, CHE 535 or 538, CHE 547 or 548, respectively.

All new graduate students must take proficiency examinations in analytical, biological, inorganic, organic, and physical chemistry. The results of these examinations are used as a guide in establishing the student's program of courses. Students who do very well on any particular examination may bypass the core course in that area. Students are required to take a core course in each of the two areas where their proficiency exam scores were lowest.

Master of Science
Plan A (Thesis)

All Graduate School requirements must be met. In addition to four "core" courses, advanced or specialty courses relevant to a

student's career objectives are taken to total a minimum of 24 credits. Successful defense of a thesis describing original research of a caliber that could result in publication in refereed scientific journals is required of all M.S. Plan A students.

Master of Science
Plan B (Non-Thesis)

Students in the Department of Chemistry may satisfy the requirements for an M.S. degree by using Plan B, a course work M.S. Students wishing to follow this plan shall present for the approval of the Graduate Program Committee a program of courses that satisfies the Committee and meets all Graduate School requirements. This program of courses must meet distribution requirements within four of the five areas of chemistry, and include 6 or more credits of courses outside of Chemistry that are relevant to the student's career goals.

Doctor of Philosophy

Doctoral degrees are earned in the Department of Chemistry after a student has carried out productive and independent research on a problem that is of significant chemical interest. It is expected that the results of the dissertation work will be published in refereed scientific journals. All Graduate School requirements must be met. Subject to approval of the student's Advisory Committee, course work for the Ph.D. degree shall normally include four "core" courses and 8 credits of advanced or specialty courses. At least 3 credit hours must be in courses outside of the Department of Chemistry.

The Qualifying Examination consists of a written and an oral part. The written component of the Qualifying Examination consists of a series of cumulative examinations designed to test the application of fundamental principles and reasoning to literature or research problems. Scores of 3, 2, 1, or 0 can be obtained on each examination. Eight examinations per year in the areas of Analytical, Inorganic, Biological, Organic, and Physical Chemistry and four examinations per year in Radio-nuclear Chemistry are given. A Ph.D. student normally must attain a minimum of eight points within two years in order to take the oral part of the Qualifying Examination.

For further information on any degree program in Chemistry, contact the Director of Graduate Studies.

GRADUATE COURSES

CHE 440G PHYSICAL CHEMISTRY I ..... (4)
CHE 441G PHYSICAL CHEMISTRY LABORATORY ..... (2)
CHE 442G PHYSICAL CHEMISTRY II ..... (3)
CHE 446G PHYSICAL CHEMISTRY FOR ENGINEERS ..... (3)
CHE 450G PRACTICAL INORGANIC CHEMISTRY ..... (4)
CHE 510 ADVANCED INORGANIC CHEMISTRY ..... (3)
CHE 514 DESCRIPTIVE INORGANIC CHEMISTRY ..... (3)
CHE 520 RADIOCHEMISTRY ..... (3)
CHE 521 RADIOCHEMISTRY LABORATORY ..... (1-2)
CHE 522 INSTRUMENTAL ANALYSIS ..... (4)
CHE 524 CHEMICAL INSTRUMENTATION ..... (4)
CHE 526 CHEMICAL SEPARATIONS ..... (2)
CHE 532 SPECTROMETRIC IDENTIFICATION OF ORGANIC COMPOUNDS ..... (2)
CHE 533 QUALITATIVE ORGANIC ANALYSIS LABORATORY ..... (2)
CHE 535 SYNTHETIC ORGANIC CHEMISTRY ..... (3)
CHE 538 PRINCIPLES OF ORGANIC CHEMISTRY ..... (3)
CHE 547 PRINCIPLES OF PHYSICAL CHEMISTRY I ..... (3)
CHE 548 PRINCIPLES OF PHYSICAL CHEMISTRY II ..... (3)
CHE 550 BIOLOGICAL CHEMISTRY I ..... (3)
CHE 552 BIOLOGICAL CHEMISTRY II ..... (3)
CHE 555 HOMONUCLEAR NMR ..... (3)
CHE 558 HORMONE RECEPTORS AND CELL SIGNALS ..... (3)
CHE 559 INTERMOLECULAR FORCES: FROM MOLECULES TO MATERIALS ..... (3)
CHE 565 ENVIRONMENTAL CHEMISTRY ..... (3)
CHE 572 COMMUNICATION IN CHEMISTRY ..... (1)
CHE 580 TOPICS IN CHEMISTRY ..... (1-3)
CHE 610 CHEMISTRY OF THE TRANSITION METALS ..... (3)
CHE 612 INORGANIC CHEMISTRY OF THE NON-METALS ..... (3)
CHE 614 ORGANOTRANSITION METAL CHEMISTRY ..... (3)
CHE 616 NUCLEAR CHEMISTRY ..... (3)
CHE 620 ELECTROCHEMICAL METHODS OF ANALYSIS ..... (3)
CHE 625 OPTICAL METHODS OF ANALYSIS ..... (3)
CHE 626 ADVANCED ANALYTICAL CHEMISTRY ..... (3)
CHE 633 PHYSICAL ORGANIC CHEMISTRY ..... (3)
CHE 643 SPECTROSCOPY AND PHOTOPHYSICS ..... (3)
CHE 646 CHEMICAL KINETICS ..... (3)
CHE 710 TOPICS IN INORGANIC CHEMISTRY ..... (2-4)
CHE 736 TOPICS IN ORGANIC CHEMISTRY ..... (2-4)
CHE 746 TOPICS IN PHYSICAL CHEMISTRY ..... (2-4)
CHE 748 MASTER'S THESIS RESEARCH ..... (0)
CHE 749 DISSERTATION RESEARCH ..... (0)
CHE 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
CHE 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
CHE 772 SEMINAR IN CHEMISTRY INSTRUCTION ..... (1)
CHE 776 GRADUATE SEMINAR ..... (1)
CHE 779 MEMBRANE SCIENCES COLLOQUIUM (SAME AS CME/PHR/BCH/PHA 779) ..... (1)
CHE 780 INDIVIDUAL WORK IN CHEMISTRY ..... (1-5)
CHE 790 RESEARCH IN CHEMISTRY ..... (1-12)

Civil Engineering

GRADUATE FACULTY
Full Members
Professors
George E. Blandford, Hans Gesund, Donn E. Hancher, B.O. Hardin, Issam E. Harik, William F. Maloney, C. Eugene Miller, Lindell Ormsbee, Jerry G. Rose, Shien T. Wang, Yi-Tin Wan.
Associate Professors
Gail M. Brion, Srinivasa Lingireddy, Kamyar Mahboub, Sergio Serrano, Nikiforos Stamatiadis, Scott A. Yost.
Associate Members
Assistant Professors
Mei Chen, Paul Goodrum, Michael E. Kalinski.
Emeritus Professors
John A. Deacon, John A. Dearinger, Yang H. Huang, Don J. Wood.

The Department of Civil Engineering offers the Master of Science in Civil Engineering (Plan A and Plan B available), Master of Civil Engineering (Plan B), and Ph.D. with specialization in the following areas:

Civil Engineering Materials
Construction Engineering and Management
Environmental Engineering
Geotechnical Engineering
Hydraulics Engineering
Structural Engineering
Transportation Engineering
Water Resources Engineering

These areas utilize courses from other departments and such inter-departmental programs are encouraged. Mechanical Engineering, Chemical Engineering, Agricultural Engineering, Mining Engineering, Mathematics, Computer Science, Geology, Biology, and Chemistry are some of the departments whose offerings contribute to the programs in Civil Engineering.

For the Master of Science in Civil Engineering (M.S.C.E.) degree Plan A, 24 credit hours of course work and a thesis are required to fulfill degree requirements.

For the Master of Science in Civil Engineering (M.S.C.E.) degree Plan B, a minimum of 30 credit hours of graduate work are required, including at least 3 credit hours of independent work. The requirement for independent work may be satisfied by either taking an approved curriculum of courses which contain integral independent study components totalling a minimum of 3 credit hours, or by completing at least three credit hours of CE 790 and/or CE 791.

Students who wish to complete the independent work requirement by choosing from an approved curriculum of courses containing integral independent study components, shall present a plan of study which satisfies this requirement, and all other Graduate School requirements, to the Director of Graduate Studies for approval before the completion of 12 credit hours of graduate course work. Preferably this should occur no later than the end of the first semester of graduate residence.

The requirement for all independent work must be satisfied under the direction of one faculty member (for students choosing a CE790 and/or CE791), or several faculty members (for students following an approved curriculum of courses), who will assign, monitor, and evaluate the student's work as part of the specific course. Written reports will usually represent the work product to be evaluated.

All students must pass a Final Examination as specified by the rules of the Graduate School. The contents and style of the examination, and the evaluation of the student's performance, are the responsibility of a Graduate Faculty committee appointed by the Dean of the Graduate School.

The Ph.D. degree has no formal course requirement, but students must pass the Qualifying Examination before entering candidacy.

There is no language requirement for the M.C.E., M.S.C.E. and Ph.D. degrees in Civil Engineering.

Admission Requirements

In addition to satisfying general Graduate School and College of Engineering admissions requirements (a GPA of 2.8/4.0 on all undergraduate work is normally required), applicants for admission to the M.C.E., M.S.C.E., and Ph.D. degree programs in Civil Engineering must have been awarded a Bachelor of Science degree from an engineering program accredited by the Accrediting Board for Engineering and Technology (ABET).

This requirement may be waived for applicants who have been awarded bachelor's degrees other than in engineering or from unaccredited engineering programs (including those offered by foreign institutions) if the applicant has received an acceptable score on the Advanced Engineering Test of the Graduate Record Examination (GRE).

Students with undergraduate majors not in engineering must also take a certain number of undergraduate remedial courses.

Neither the M.C.E, the M.S.C.E. degree nor the Ph.D. degree in Civil Engineering will be conferred unless the candidates have successfully completed, during their undergraduate and/or graduate careers, at least one basic course in at least four of the following seven areas: civil engineering materials, fluid mechanics, geotechnical engineering, surveying, structural or solid mechanics, transportation engineering, and water quality engineering.

It is also required that a minimum GRE score of 1000 and 1100 (combination of verbal and quantitative sections) be obtained by Master's and Ph.D. degree applicants respectively. Scores on the analytical portion are also considered. Foreign applicants whose native language is other than English must take the Test of English as a Foreign Language (TOEFL) and score at least 550 on the written version or the equivalent on the computer version it before they can be admitted.

The Department of Civil Engineering has many well-equipped laboratories with active research programs in most areas. The research programs provide financial assistance for graduate students. In addition, financial assistance is available through teaching assistantships and a limited number of traineeships, fellowships and scholarships.

Information about the graduate program in Civil Engineering can be obtained by writing the Director of Graduate Studies, Department of Civil Engineering.

GRADUATE COURSES

CE 461G HYDROLOGY ..... (3)
CE 471G SOIL MECHANICS ..... (3)
CE 486G REINFORCED CONCRETE STRUCTURES ..... (3)
CE 487G STEEL STRUCTURES ..... (3)
CE 503 CONSTRUCTION ESTIMATING ..... (3)
CE 505 CONSTRUCTION PROJECT PLANNING AND MANAGEMENT ..... (3)
CE 506 THE ENGINEER, THE LAW, AND THE ENVIRONMENT ..... (3)
CE 517 BOUNDARY LOCATION PRINCIPLES ..... (3)
CE 518 ADVANCED SURVEYING ..... (3)
CE 521 ENGINEERING ECONOMY ..... (3)
CE 525 CIVIL ENGINEERING APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS ..... (3)
CE 531 TRANSPORTATION FACILITIES DESIGN AND OPERATIONS ..... (3)
CE 533 RAILROAD FACILITIES DESIGN AND ANALYSIS ..... (3)
CE 534 PAVEMENT DESIGN, CONSTRUCTION AND MANAGEMENT ..... (3)
CE 539 TRANSPORTATION SYSTEMS DESIGN ..... (4)
CE 546 FLUVIAL HYDRAULICS (SAME AS BAE 536) ..... (3)
CE 549 ENGINEERING HYDRAULICS (SAME AS BAE 545) ..... (3)
CE 556 SOLID AND HAZARDOUS WASTE MANAGEMENT (SAME AS BAE 556) ..... (3)
CE 560 GROUNDWATER MODELING ..... (3)
CE 566 SOLID AND HAZARDOUS WASTE MANAGEMENT (SAME AS AEN 556) ..... (3)
CE 569 WATER RESOURCES SYSTEM DESIGN (SAME AS BAE 569) ..... (4)
CE 579 GEOTECHNICAL ENGINEERING ..... (3)
CE 580 ASPHALT MIX DESIGN AND CONSTRUCTION ..... (3)
CE 581 CIVIL ENGINEERING MATERIALS II ..... (3)
CE 582 ADVANCED STRUCTURAL MECHANICS ..... (3)
CE 583 SUSPENSION BRIDGES ..... (3)
CE 586 PRESTRESSED CONCRETE ..... (3)
CE 589 DESIGN OF STRUCTURAL SYSTEMS ..... (4)
CE 599 TOPICS IN CIVIL ENGINEERING (SUBTITLE REQUIRED) ..... (1-4)
CE 601 CONSTRUCTION EQUIPMENT ..... (3)
CE 602 CONSTRUCTION PROJECT MANAGEMENT ..... (3)
CE 605 NEW ENGINEERING ENTERPRISES ..... (3)
CE 631 URBAN TRANSPORTATION PLANNING (SAME AS GEO 643) ..... (3)
CE 633 AIR TRANSPORT ENGINEERING ..... (3)
CE 634 TRAFFIC CHARACTERISTICS ..... (3)
CE 635 HIGHWAY SAFETY ..... (3)
CE 641 MECHANICS OF LIQUID FLOW IN PIPES ..... (3)
CE 642 OPEN CHANNEL FLOW (SAME AS BAE 642) ..... (3)
CE 651 FUNDAMENTALS OF WATER QUALITY CONTROL I ..... (3)
CE 652 FUNDAMENTALS OF WATER QUALITY CONTROL II ..... (3)
CE 653 WATER QUALITY IN SURFACE WATERS (SAME AS BAE 653) ..... (3)
CE 654 PRINCIPLES OF WATER AND WASTEWATER TREATMENT PROCESSES ..... (3)
CE 660 GROUNDWATER HYDROLOGY (SAME AS BAE 638) ..... (3)
CE 662 STOCHASTIC HYDROLOGY ..... (3)
CE 665 WATER RESOURCES SYSTEMS (SAME AS BAE 665) ..... (3)
CE 667 STORMWATER MODELING (SAME AS BAE 667) ..... (3)
CE 671 ADVANCED SOIL MECHANICS ..... (3)
CE 676 GROUNDWATER AND SEEPAGE ..... (3)
CE 679 GEOTECHNICAL EARTHQUAKE ENGINEERING ..... (3)
CE 681 ADVANCED CIVIL ENGINEERING MATERIALS ..... (3)
CE 682 ADVANCED STRUCTURAL ANALYSIS ..... (3)
CE 684 SLAB AND FOLDED PLATE STRUCTURES ..... (3)
CE 686 ADVANCED REINFORCED CONCRETE THEORY ..... (3)
CE 687 ADVANCED METAL STRUCTURES ..... (3)
CE 699 TOPICS IN CIVIL ENGINEERING (SUBTITLE REQUIRED) ..... (1-4)
CE 709 COMPUTER APPLICATIONS IN CONSTRUCTION ..... (3)
CE 748 MASTER'S THESIS RESEARCH ..... (0)
CE 749 DISSERTATION RESEARCH ..... (0)
CE 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
CE 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
CE 772 EXPERIMENTAL METHODS IN SOIL MECHANICS ..... (3)
CE 779 ADVANCED GEOTECHNICAL ENGINEERING ..... (3)
CE 782 DYNAMICS OF STRUCTURES ..... (3)
CE 783 STRUCTURAL FINITE ELEMENT ANALYSIS ..... (3)
CE 784 SHELL STRUCTURES ..... (3)
CE 790 SPECIAL RESEARCH PROBLEMS IN CIVIL ENGINEERING ..... (1-6)
CE 791 SPECIAL DESIGN PROBLEMS IN CIVIL ENGINEERING ..... (1-6)

EGR 537 NUMERICAL ANALYSIS (SAME AS CS/MA 537) ..... (3)
EGR 599 TOPICS IN ENGINEERING (SUBTITLE REQUIRED) ..... (1-3)
EGR 611 BOUNDARY ELEMENT METHODS IN ENGINEERING (SAME AS ME 611) ..... (3)

student's career objectives are taken to total a minimum of 24 credits. Successful defense of a thesis describing original research of a caliber that could result in publication in refereed scientific journals is required of all M.S. Plan A students.

Master of Science
Plan B (Non-Thesis)

Students in the Department of Chemistry may satisfy the requirements for an M.S. degree by using Plan B, a course work M.S. Students wishing to follow this plan shall present for the approval of the Graduate Program Committee a program of courses that satisfies the Committee and meets all Graduate School requirements. This program of courses must meet distribution requirements within four of the five areas of chemistry, and include 6 or more credits of courses outside of Chemistry that are relevant to the student's career goals.

Doctor of Philosophy

Doctoral degrees are earned in the Department of Chemistry after a student has carried out productive and independent research on a problem that is of significant chemical interest. It is expected that the results of the dissertation work will be published in refereed scientific journals. All Graduate School requirements must be met. Subject to approval of the student's Advisory Committee, course work for the Ph.D. degree shall normally include four "core" courses and 8 credits of advanced or specialty courses. At least 3 credit hours must be in courses outside of the Department of Chemistry.

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For further information on any degree program in Chemistry, contact the Director of Graduate Studies.

GRADUATE COURSES

CHE 440G PHYSICAL CHEMISTRY I ..... (4)
CHE 441G PHYSICAL CHEMISTRY LABORATORY ..... (2)
CHE 442G PHYSICAL CHEMISTRY II ..... (3)
CHE 446G PHYSICAL CHEMISTRY FOR ENGINEERS ..... (3)
CHE 450G PRACTICAL INORGANIC CHEMISTRY ..... (4)
CHE 510 ADVANCED INORGANIC CHEMISTRY ..... (3)
CHE 514 DESCRIPTIVE INORGANIC CHEMISTRY ..... (3)
CHE 520 RADIOCHEMISTRY ..... (3)
CHE 521 RADIOCHEMISTRY LABORATORY ..... (1-2)
CHE 522 INSTRUMENTAL ANALYSIS ..... (4)
CHE 524 CHEMICAL INSTRUMENTATION ..... (4)
CHE 526 CHEMICAL SEPARATIONS ..... (2)
CHE 532 SPECTROMETRIC IDENTIFICATION OF ORGANIC COMPOUNDS ..... (2)
CHE 533 QUALITATIVE ORGANIC ANALYSIS LABORATORY ..... (2)
CHE 535 SYNTHETIC ORGANIC CHEMISTRY ..... (3)
CHE 538 PRINCIPLES OF ORGANIC CHEMISTRY ..... (3)
CHE 547 PRINCIPLES OF PHYSICAL CHEMISTRY I ..... (3)
CHE 548 PRINCIPLES OF PHYSICAL CHEMISTRY II ..... (3)
CHE 550 BIOLOGICAL CHEMISTRY I ..... (3)
CHE 552 BIOLOGICAL CHEMISTRY II ..... (3)
CHE 555 HOMONUCLEAR NMR ..... (3)
CHE 558 HORMONE RECEPTORS AND CELL SIGNALS ..... (3)
CHE 559 INTERMOLECULAR FORCES: FROM MOLECULES TO MATERIALS ..... (3)
CHE 565 ENVIRONMENTAL CHEMISTRY ..... (3)
CHE 572 COMMUNICATION IN CHEMISTRY ..... (1)
CHE 580 TOPICS IN CHEMISTRY ..... (1-3)
CHE 610 CHEMISTRY OF THE TRANSITION METALS ..... (3)
CHE 612 INORGANIC CHEMISTRY OF THE NON-METALS ..... (3)
CHE 614 ORGANOTRANSITION METAL CHEMISTRY ..... (3)
CHE 616 NUCLEAR CHEMISTRY ..... (3)
CHE 620 ELECTROCHEMICAL METHODS OF ANALYSIS ..... (3)
CHE 625 OPTICAL METHODS OF ANALYSIS ..... (3)
CHE 626 ADVANCED ANALYTICAL CHEMISTRY ..... (3)
CHE 633 PHYSICAL ORGANIC CHEMISTRY ..... (3)
CHE 643 SPECTROSCOPY AND PHOTOPHYSICS ..... (3)
CHE 646 CHEMICAL KINETICS ..... (3)
CHE 710 TOPICS IN INORGANIC CHEMISTRY ..... (2-4)
CHE 736 TOPICS IN ORGANIC CHEMISTRY ..... (2-4)
CHE 746 TOPICS IN PHYSICAL CHEMISTRY ..... (2-4)
CHE 748 MASTER'S THESIS RESEARCH ..... (0)
CHE 749 DISSERTATION RESEARCH ..... (0)
CHE 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
CHE 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
CHE 772 SEMINAR IN CHEMISTRY INSTRUCTION ..... (1)
CHE 776 GRADUATE SEMINAR ..... (1)
CHE 779 MEMBRANE SCIENCES COLLOQUIUM (SAME AS CME/PHR/BCH/PHA 779) ..... (1)
CHE 780 INDIVIDUAL WORK IN CHEMISTRY ..... (1-5)
CHE 790 RESEARCH IN CHEMISTRY ..... (1-12)

Civil Engineering

GRADUATE FACULTY
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George E. Blandford, Hans Gesund, Donn E. Hancher, B.O. Hardin, Issam E. Harik, William F. Maloney, C. Eugene Miller, Lindell Ormsbee, Jerry G. Rose, Shien T. Wang, Yi-Tin Wan.
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The Department of Civil Engineering offers the Master of Science in Civil Engineering (Plan A and Plan B available), Master of Civil Engineering (Plan B), and Ph.D. with specialization in the following areas:

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Construction Engineering and Management
Environmental Engineering
Geotechnical Engineering
Hydraulics Engineering
Structural Engineering
Transportation Engineering
Water Resources Engineering

These areas utilize courses from other departments and such inter-departmental programs are encouraged. Mechanical Engineering, Chemical Engineering, Agricultural Engineering, Mining Engineering, Mathematics, Computer Science, Geology, Biology, and Chemistry are some of the departments whose offerings contribute to the programs in Civil Engineering.

For the Master of Science in Civil Engineering (M.S.C.E.) degree Plan A, 24 credit hours of course work and a thesis are required to fulfill degree requirements.

For the Master of Science in Civil Engineering (M.S.C.E.) degree Plan B, a minimum of 30 credit hours of graduate work are required, including at least 3 credit hours of independent work. The requirement for independent work may be satisfied by either taking an approved curriculum of courses which contain integral independent study components totalling a minimum of 3 credit hours, or by completing at least three credit hours of CE 790 and/or CE 791.

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The Ph.D. degree has no formal course requirement, but students must pass the Qualifying Examination before entering candidacy.

There is no language requirement for the M.C.E., M.S.C.E. and Ph.D. degrees in Civil Engineering.

Admission Requirements

In addition to satisfying general Graduate School and College of Engineering admissions requirements (a GPA of 2.8/4.0 on all undergraduate work is normally required), applicants for admission to the M.C.E., M.S.C.E., and Ph.D. degree programs in Civil Engineering must have been awarded a Bachelor of Science degree from an engineering program accredited by the Accrediting Board for Engineering and Technology (ABET).

This requirement may be waived for applicants who have been awarded bachelor's degrees other than in engineering or from unaccredited engineering programs (including those offered by foreign institutions) if the applicant has received an acceptable score on the Advanced Engineering Test of the Graduate Record Examination (GRE).

Students with undergraduate majors not in engineering must also take a certain number of undergraduate remedial courses.

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It is also required that a minimum GRE score of 1000 and 1100 (combination of verbal and quantitative sections) be obtained by Master's and Ph.D. degree applicants respectively. Scores on the analytical portion are also considered. Foreign applicants whose native language is other than English must take the Test of English as a Foreign Language (TOEFL) and score at least 550 on the written version or the equivalent on the computer version it before they can be admitted.

The Department of Civil Engineering has many well-equipped laboratories with active research programs in most areas. The research programs provide financial assistance for graduate students. In addition, financial assistance is available through teaching assistantships and a limited number of traineeships, fellowships and scholarships.

Information about the graduate program in Civil Engineering can be obtained by writing the Director of Graduate Studies, Department of Civil Engineering.

GRADUATE COURSES

CE 461G HYDROLOGY ..... (3)
CE 471G SOIL MECHANICS ..... (3)
CE 486G REINFORCED CONCRETE STRUCTURES ..... (3)
CE 487G STEEL STRUCTURES ..... (3)
CE 503 CONSTRUCTION ESTIMATING ..... (3)
CE 505 CONSTRUCTION PROJECT PLANNING AND MANAGEMENT ..... (3)
CE 506 THE ENGINEER, THE LAW, AND THE ENVIRONMENT ..... (3)
CE 517 BOUNDARY LOCATION PRINCIPLES ..... (3)
CE 518 ADVANCED SURVEYING ..... (3)
CE 521 ENGINEERING ECONOMY ..... (3)
CE 525 CIVIL ENGINEERING APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS ..... (3)
CE 531 TRANSPORTATION FACILITIES DESIGN AND OPERATIONS ..... (3)
CE 533 RAILROAD FACILITIES DESIGN AND ANALYSIS ..... (3)
CE 534 PAVEMENT DESIGN, CONSTRUCTION AND MANAGEMENT ..... (3)
CE 539 TRANSPORTATION SYSTEMS DESIGN ..... (4)
CE 546 FLUVIAL HYDRAULICS (SAME AS BAE 536) ..... (3)
CE 549 ENGINEERING HYDRAULICS (SAME AS BAE 545) ..... (3)
CE 556 SOLID AND HAZARDOUS WASTE MANAGEMENT (SAME AS BAE 556) ..... (3)
CE 560 GROUNDWATER MODELING ..... (3)
CE 566 SOLID AND HAZARDOUS WASTE MANAGEMENT (SAME AS AEN 556) ..... (3)
CE 569 WATER RESOURCES SYSTEM DESIGN (SAME AS BAE 569) ..... (4)
CE 579 GEOTECHNICAL ENGINEERING ..... (3)
CE 580 ASPHALT MIX DESIGN AND CONSTRUCTION ..... (3)
CE 581 CIVIL ENGINEERING MATERIALS II ..... (3)
CE 582 ADVANCED STRUCTURAL MECHANICS ..... (3)
CE 583 SUSPENSION BRIDGES ..... (3)
CE 586 PRESTRESSED CONCRETE ..... (3)
CE 589 DESIGN OF STRUCTURAL SYSTEMS ..... (4)
CE 599 TOPICS IN CIVIL ENGINEERING (SUBTITLE REQUIRED) ..... (1-4)
CE 601 CONSTRUCTION EQUIPMENT ..... (3)
CE 602 CONSTRUCTION PROJECT MANAGEMENT ..... (3)
CE 605 NEW ENGINEERING ENTERPRISES ..... (3)
CE 631 URBAN TRANSPORTATION PLANNING (SAME AS GEO 643) ..... (3)
CE 633 AIR TRANSPORT ENGINEERING ..... (3)
CE 634 TRAFFIC CHARACTERISTICS ..... (3)
CE 635 HIGHWAY SAFETY ..... (3)
CE 641 MECHANICS OF LIQUID FLOW IN PIPES ..... (3)
CE 642 OPEN CHANNEL FLOW (SAME AS BAE 642) ..... (3)
CE 651 FUNDAMENTALS OF WATER QUALITY CONTROL I ..... (3)
CE 652 FUNDAMENTALS OF WATER QUALITY CONTROL II ..... (3)
CE 653 WATER QUALITY IN SURFACE WATERS (SAME AS BAE 653) ..... (3)
CE 654 PRINCIPLES OF WATER AND WASTEWATER TREATMENT PROCESSES ..... (3)
CE 660 GROUNDWATER HYDROLOGY (SAME AS BAE 638) ..... (3)
CE 662 STOCHASTIC HYDROLOGY ..... (3)
CE 665 WATER RESOURCES SYSTEMS (SAME AS BAE 665) ..... (3)
CE 667 STORMWATER MODELING (SAME AS BAE 667) ..... (3)
CE 671 ADVANCED SOIL MECHANICS ..... (3)
CE 676 GROUNDWATER AND SEEPAGE ..... (3)
CE 679 GEOTECHNICAL EARTHQUAKE ENGINEERING ..... (3)
CE 681 ADVANCED CIVIL ENGINEERING MATERIALS ..... (3)
CE 682 ADVANCED STRUCTURAL ANALYSIS ..... (3)
CE 684 SLAB AND FOLDED PLATE STRUCTURES ..... (3)
CE 686 ADVANCED REINFORCED CONCRETE THEORY ..... (3)
CE 687 ADVANCED METAL STRUCTURES ..... (3)
CE 699 TOPICS IN CIVIL ENGINEERING (SUBTITLE REQUIRED) ..... (1-4)
CE 709 COMPUTER APPLICATIONS IN CONSTRUCTION ..... (3)
CE 748 MASTER'S THESIS RESEARCH ..... (0)
CE 749 DISSERTATION RESEARCH ..... (0)
CE 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
CE 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
CE 772 EXPERIMENTAL METHODS IN SOIL MECHANICS ..... (3)
CE 779 ADVANCED GEOTECHNICAL ENGINEERING ..... (3)
CE 782 DYNAMICS OF STRUCTURES ..... (3)
CE 783 STRUCTURAL FINITE ELEMENT ANALYSIS ..... (3)
CE 784 SHELL STRUCTURES ..... (3)
CE 790 SPECIAL RESEARCH PROBLEMS IN CIVIL ENGINEERING ..... (1-6)
CE 791 SPECIAL DESIGN PROBLEMS IN CIVIL ENGINEERING ..... (1-6)

EGR 537 NUMERICAL ANALYSIS (SAME AS CS/MA 537) ..... (3)
EGR 599 TOPICS IN ENGINEERING (SUBTITLE REQUIRED) ..... (1-3)
EGR 611 BOUNDARY ELEMENT METHODS IN ENGINEERING (SAME AS ME 611) ..... (3)

EGR 621 FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)
EGR 622 ADVANCED FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)

Classics

GRADUATE FACULTY
Full Members
Professors
Hubert Martin, Robert Rabel.
Associate Professors
James A. Francis, Jane Phillips, A. Ross Scaife, Terence Tunberg.
Emeritus Professors
Louis J. Swift.

The Department of Modern and Classical Languages, Literatures and Cultures offers the M.A. degree in Classics under both Plan A (thesis) and Plan B (non-thesis) options.

Each student will normally elect either Latin literature, Greek literature, or a combination of the two as an area of concentration. A program of courses will be selected from the list below with the advice of the Director of Graduate Studies. Appropriate courses in other areas of graduate study outside of the Department may be added with the approval of the Director of Graduate Studies. Individualized course programs are arranged for students who are preparing for secondary school teaching or who have additional interests in fields other than Classics. A comprehensive examination over the Greek and Roman authors specified in the Department's graduate reading list is required of all degree candidates. All students are expected to demonstrate a reading knowledge of a modern foreign language or a substitute skill approved by the Department. Normally the M.A. program is completed in two years of full-time study.

For additional information and details about graduate study in the Department, contact the Director of Graduate Studies.

Admission Requirements

The requirements for admission to the program in Classics are (a) a combined score of 1000 on any two of the three parts of the Graduate Record Examination and (b) an undergraduate grade point average of 3.0 or above on a 4.0 scale. The Director of Graduate Studies may admit students with lower GRE scores or an undergraduate grade point average below 3.0 if, on the basis of a student's last two years of work, classics grades, or general academic competence, he or she believes the student capable of successful graduate work.

The Department also requires from each applicant a two- or three-paragraph statement describing his or her reasons for seeking a master's degree, and three letters of reference from former professors or teachers. There is no special form to be filled out for letters of reference. All of these materials should be sent via e-mail by Feb. 15 to the Director of Graduate Studies, classics@lsv.uky.edu, or by regular mail to:

Director of Graduate Studies
Department of Modern and Classical Languages, Literatures and Cultures
POT 1015
University of Kentucky
Lexington, KY 40506-0027

GRADUATE COURSES

CLA 426G CLASSICAL DRAMA: TRAGEDY AND COMEDY IN GREECE AND ROME ..... (3)
CLA 450G SPECIAL TOPICS IN CLASSICAL LITERATURE IN TRANSLATION (SUBTITLE REQUIRED) ..... (3)
CLA 509 ROMAN LAW (SAME AS HIS 509) ..... (3)
CLA 511 STUDIES IN ROMAN PHILOLOGY ..... (3)
CLA 512 STUDIES IN ROMAN PHILOLOGY ..... (3)
CLA 522 ROMAN REPUBLICAN PROSE (SUBTITLE REQUIRED) ..... (3)
CLA 523 ROMAN REPUBLICAN POETRY (SUBTITLE REQUIRED) ..... (3)
CLA 526 ROMAN IMPERIAL PROSE (SUBTITLE REQUIRED) ..... (3)
CLA 527 ROMAN IMPERIAL POETRY (SUBTITLE REQUIRED) ..... (3)
CLA 552 GREEK EPIC AND LYRIC POETRY ..... (3)
CLA 553 GREEK PHILOSOPHICAL LITERATURE ..... (3)
CLA 556 GREEK DRAMATIC LITERATURE ..... (3)
CLA 557 GREEK HISTORICAL LITERATURE ..... (3)
CLA 561 STUDIES IN GREEK PHILOLOGY ..... (3)
CLA 580 INDEPENDENT WORK IN CLASSICS ..... (3)
CLA 601 STUDIES IN GREEK LITERATURE I: SUBTITLE REQUIRED ..... (3)
CLA 602 STUDIES IN GREEK LITERATURE II: SUBTITLE REQUIRED ..... (3)
CLA 603 STUDIES IN LATIN LITERATURE OF THE REPUBLIC: SUBTITLE REQUIRED ..... (3)
CLA 604 STUDIES IN LATIN LITERATURE OF THE EMPIRE: SUBTITLE REQUIRED ..... (3)
CLA 611 LATIN OF THE LATER ROMAN EMPIRE AND EARLY MIDDLE AGES ..... (3)
CLA 612 LATIN FROM THE LATER MIDDLE AGES TO THE MODERN WORLD ..... (3)
CLA 695 INDEPENDENT WORK ..... (3)
CLA 748 MASTER'S THESIS RESEARCH ..... (0)
CLA 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
CLA 790 RESEARCH IN THE TEACHING OF CLASSICAL LANGUAGES ..... (3)

Clinical Sciences

GRADUATE FACULTY
Full Members
Professors
Vincent S. Gallicchio.
Associate Professors
Doris Baker.
Associate Members
Associate Professors
Jean Brickell, Linda Gorman, Julie Ribes.
Adjunct Associate Professors
Jeanine Witmyer.

Graduate study in the clinical sciences is designed to prepare candidates for advanced study and research careers in academics, industry and pharmaceutical laboratories. Initial focus in the program will concentrate on reproductive laboratory sciences and hematology with special emphasis in transplantation immunology.

Admission Requirements

Admission to the graduate program is competitive and is based upon academic background, professional recommendations, performance on the Graduate Record Examination (GRE), experience and, when possible, personal interviews. Students should have completed an undergraduate degree in clinical laboratory sciences; however students will be considered who have degrees in biology, biochemistry, biomedical science, or chemistry. It is recommended that students have completed undergraduate courses in biological sciences, chemistry, and clinical laboratory sciences.

Students will have the opportunity to learn and study with a faculty assembled to deliver this program. Subject areas include fertility, reproductive immunology, andrology, signal transduction, disease mechanisms such as cancer with an emphasis in the leukemias and lymphomas, drug development and experimental therapeutics, hematopoiesis, stem cell biology, and quality assurance and control. The program of study stresses an interdepartmental approach both in the selection of courses and in the pursuit of research. Students are expected to participate in graduate seminars, journal clubs, and research seminars; to interact with visiting scholars, both domestic and international; and to present the results of their research at local, national and international conferences.

Master of Science

The foundation of the master's program is a 19-credit-hour core curriculum required of all students. Course work in the core builds upon the scientific and general education foundation of eligible students and prepares them for leadership roles in clinical science practice. The program of study will focus on disease processes, principles, and application of methods to ensure the accuracy and efficacy of laboratory results; federal, state, and accreditation policies and regulations; and an in-depth exploration of health care policy and ethical issues pertaining to any area of clinical science practice. The core curriculum provides the infrastructure applicable for all Clinical Sciences graduate students, regardless of their specialty and career aspirations. The program focuses on two areas of concentration: reproductive laboratory science and hematology/transplantation science. Students will have the opportunity to learn of the advances in cutting edge technology and conduct research in each of the two focus areas.

Degree Requirements

Core Courses (19 credit hours)
- CSC 600 Human Pathophysiology (4)
- CSC 601 Health Care Policy and Ethics (3)
- CSC 602 Clinical Sciences Seminar (taken twice for credit) (1)
- CSC 603 Quality Assurance and Laboratory Regulations (4)
- CSC 604 Research Methods for the Clinical Sciences (3)
- CSC 605 Epidemiology and Biostatistics or
- CSC 606 Advanced Laboratory Statistics & Administrative Analysis (3)

Areas of Concentration

Reproductive Laboratory Science (19 credit hours)
- CSC 620 Andrology (3)
- CSC 621 Reproductive Embryology (3)
- CSC 623 Reproductive Immunology (1)
- CSC 624 Gamete & Embryo Cryopreservation (1)
- CSC 625 Policy, Ethical and Legal Issues in Assisted Reproduction (2)
- CSC 626 Clinical Practicum in Andrology (2)
- CSC 627 Clinical Practicum in ART (3)
- CSC 630 RLS Research for MS (4)

Hematology/Transplant Science (18 credit hours)
- CSC 670 Histocompatability & Immunogenetics (3)
- CSC 671 Molecular Immunopathogenesis (3)
- CSC 672 Transplantation Science (3)
- CSC 673 Flow Cytometry (3)
- CSC 674 Hemopoiesis (3)
- CSC 675 Myeloproliferative Disorders (3)
- CSC 676 Advanced Hemostasis (3)
- CSC 690 Clinical Sciences Thesis Research (0-6)

Total Credits for the Master's Degree 37 or 38, respectively

Doctor of Science

The Clinical Sciences doctoral program is designed to produce both academic leaders and researchers in the area of hematology with an emphasis in transplantation science for those individuals with a background in the biological and clinical sciences. The core curriculum is the framework upon which the student builds a foundation for scholarship in the selected area of study. An in-depth course in the biosynthesis, structure and function of macromolecules lays the groundwork for genetic therapy applications and intensive study in hematology and transplantation science.

The program brings together the educational and research expertise of our University faculties in the College of Health Sciences and the College of Medicine. This collaboration will enable graduates to promote academic and clinical leadership in addressing health-related basic research and clinical issues that will increase in importance during the coming decade.

Integral to the scholarship of discovery is a thorough understanding of the analysis and interpretation of data. Course work in the principles, applications and implementation of research theory is an essential component of the doctoral program and requisite to the preparation of scholars as consumers of and contributors to intellectual investigation. These courses in conjunction with the research apprenticeship will prepare students for independent scholarship.

Degree Requirements

(Hematology/Transplantation Science only)

Core Courses (35-40 credit hours)
- STA 570 Statistics (4)
- STA 672 Design & Analysis of Experiments (2-6)
- CSC 602 Clinical Sciences Seminar (taken twice for credit) (1)
- CSC 772 Gene Therapy (3)
- CSC 774 Biosynthesis, Structure & Function of Macromolecules (4)
- CSC 787 Teaching Apprenticeship (2)
- CSC 789 Research Apprenticeship (2)
- CSC 790 Clinical Sciences Dissertation Research (taken two successive semesters) (9)

Individualized Course of Study (9 credit hours)
(Hematology/Transplantation Science only)
- CSC 776 Molecular Genetics & Chromosome Analysis of Hematopoietic Disorders (3)
- CSC 777 Hematopoietic Stem Cell and Bone Marrow Transplantation: Nontraditional Applications (3)
- CSC 778 Clinical Molecular Cytometry (3)

Additional Requirements
- Oral and/or Written Comprehensive Examination/Qualifying Exam
- Post Qualifying Exam Residency (two semesters)
- Dissertation
- The Final Examination

Inquiries regarding admission to the Clinical Sciences Graduate Program should be addressed to:

Professor Vincent S. Gallicchio, Director of Graduate Studies
Department of Clinical Sciences
University of Kentucky College of Health Sciences
E-mail: vsgall1@uky.edu

GRADUATE COURSES

CSC 528 LABORATORY TECHNIQUES FOR NON-CLS STUDENTS ..... (2)
CSC 600 HUMAN PATHOPHYSIOLOGY ..... (4)
CSC 601 HEALTH CARE POLICY AND ETHICS ..... (3)
CSC 602 CLINICAL SCIENCES SEMINAR ..... (1)
CSC 603 QUALITY ASSURANCE AND LABORATORY REGULATIONS ..... (4)
CSC 604 RESEARCH METHODS FOR THE CLINICAL SCIENCES ..... (3)
CSC 605 EPIDEMIOLOGY AND BIOSTATISTICS ..... (3)
CSC 606 ADVANCED LABORATORY STATISTICS AND ADMINISTRATIVE ANALYSIS ..... (3)
CSC 620 ANDROLOGY ..... (3)
CSC 621 EMBRYOLOGY/ASSISTED REPRODUCTIVE TECHNOLOGY ..... (3)
CSC 623 REPRODUCTIVE IMMUNOLOGY ..... (1)
CSC 624 GAMETE AND EMBRYO CRYOPRESERVATION ..... (1)
CSC 625 POLICY, MANAGEMENT, ETHICAL AND LEGAL ISSUES IN ASSISTED REPRODUCTION ..... (2)
CSC 626 CLINICAL PRACTICUM IN ANDROLOGY LABORATORY ..... (2)
CSC 627 CLINICAL PRACTICA IN ART LABORATORY ..... (3)
CSC 630 RLS RESEARCH FOR MS ..... (4)
CSC 670 HISTOCOMPATIBILITY AND IMMUNOGENETICS ..... (3)

CSC 671 MOLECULAR IMMUNOPATHOGENESIS ..... (3)
CSC 672 TRANSPLANTATION SCIENCE ..... (3)
CSC 673 FLOW CYTOMETRY ..... (3)
CSC 674 HEMOPOIESIS ..... (3)
CSC 675 MYELOPROLIFERATIVE DISORDERS ..... (3)
CSC 676 ADVANCED HEMOSTASIS ..... (3)
CSC 690 CLINICAL SCIENCES THESIS RESEARCH ..... (1-6)
CSC 772 GENE THERAPY ..... (3)
CSC 774 BIOSYNTHESIS, STRUCTURE AND FUNCTION OF MACROMOLECULES ..... (3)
CSC 776 MOLECULAR GENETICS AND CHROMOSOME ANALYSIS OF HEMATOPOIETIC DISORDERS ..... (3)
CSC 777 HEMATOPOIETIC STEM CELL AND BONE MARROW TRANSPLANTION: NONTRADITIONAL APPLICATIONS ..... (3)
CSC 778 CLINICAL MOLECULAR CYTOMETRY ..... (3)
CSC 787 TEACHING APPRENTICESHIP ..... (2)
CSC 789 RESEARCH APPRENTICESHIP ..... (1-4)
CSC 790 CLINICAL SCIENCES DISSERTATION RESEARCH ..... (0-5)

CLS 501 SEMINAR IN ADVANCED HEMATOLOGY ..... (2)
CLS 520 REPRODUCTIVE LABORATORY SCIENCE ..... (3)
CLS 610 ETHICS IN CLINICAL SCIENCES RESEARCH (SAME AS CD/PT/RAS 610) ..... (1)

Communication

GRADUATE FACULTY

Full Members

Professors

Michael A. Andrykowski, James L. Applegate, Douglas A. Boyd, Donald O. Case, J. David Johnson, Carl G. Leukefeld, Thomas R. Lindlof, Roy L. Moore, Philip C. Palmgreen, Nancy Schoenberg.

Associate Professors

Joyce Beaulieu, Alan DeSantis, Nancy G. Harrington, James K. Hertog, Ling Hwey Jeng, Joachim Knuf, Richard Labunski, Norman Van Tubergen, Rick S. Zimmerman.

Assistant Professors

Derek R. Lane.

Associate Members

Professors

William Fortune.

Associate Professors

Charles H. Griffith III, Stephen Wyatt.

Assistant Professors

James E. Andrews, Chike Anyaegbunam, Gerald Benoit, Sorin Matei, Leola McClure, Anthony J. Roberto.

Emeritus Professors

John Baseheart, Robert Bostrom, Lewis Donohew, Michael Harris, Ramona R. Rush.

Communication offers programs leading to the Master of Arts (either Plan A or Plan B) and Doctor of Philosophy degrees.

The primary areas of emphasis include communication processes, effects and functions within mass, mediated and interpersonal contexts. Applied areas include health communication, and communication and information systems.

The program offers special opportunities for students to apply communication theory and research in health contexts. Students pursuing work in health communication are encouraged to develop interdisciplinary programs involving the Department of Behavioral Science, the College of Medicine, as well as the Colleges of Dentistry, Health Sciences, Pharmacy, and Nursing. Communication also participates in interdisciplinary research programs with the Center for Prevention Research, the Sanders-Brown Center for Aging, and a variety of other health-related departments and institutes.

The program is designed to serve the needs of students whose goals may include teaching and academic research, professional research, or communication careers in the media or other organizations. Students with no previous course work in a communication area may be required to take undergraduate work without graduate credit.

Admission Requirements

The following are the admission requirements for individuals applying for admission the either the Master's program or the Doctoral program in Communication. Students with an undergraduate degree from a fully accredited institution of higher learning and a grade point average of 3.0 on a 4.0 scale are admissible to the graduate program. Students with degrees in areas not directly related to communication are encouraged to apply. They may be required to take 3 to 12 hours of undergraduate course work. In some cases, successful professional experience in a communication field will be considered in admitting students to the program.

All student applicants must submit scores on the Graduate Record Examination. Students whose native language is not English must also submit a score of at least 550 (or 213 on the computer version) of the Test of English as a Foreign Language (TOEFL). Applicants must also submit (1) two official copies of transcripts of all work taken at the college level, (2) at least three letters of recommendation focusing on their academic abilities, (3) a Graduate School application and the application fee, and (4) a two- to three-page biographical sketch indicating why they want to pursue a graduate degree and their reasons for applying to the program.

The Admissions and Financial Aid Committee will review only COMPLETED admission files on **February 1** and **October 1** of each year. Applicants must have their completed file on record with the Associate Dean for Graduate Studies in the College of Communications and Information Studies prior to the date on which they wish it to be reviewed. Results of the admissions committee's action will normally be available within 30 days from the date of review.

While applicants are admitted two times each year, new graduate students may enroll only during the fall semester or the summer term prior to the fall semester.

Master of Arts

All students are required to complete 30 credit hours to complete the Master of Arts degree. Students will be required to take 12 **core** credit hours consisting of Proseminar in Communication (CJT 601), Communication Theory (CJT 651), and Communication Research Methods (CJT 665), plus Statistics 570 (or its equivalent as determined by the Associate Dean for Graduate Studies).

Students may choose from either the Plan A or Plan B options to complete their Masters degree requirements.

Plan A

Students choosing Plan A (Thesis option) will take a minimum of 24 credit hours of actual course work, plus write a thesis (Note: the six thesis credits must be taken under CJT 768 - Residence Credit for the Master's degree). All students will also complete an **oral** examination in defense of the thesis.

Plan B

Students choosing Plan B (non-thesis) option, will take a minimum of 30 hours of course work, followed by a **written** and **oral** examination over the student's program.

At least 21 credit hours of the minimum requirements for the master's degree must be from offerings within the College of Communications and Information studies (both Plan A and Plan B). Plan A students may include six hours of CJT 768 in the 21 hours, since the thesis involves work in an area of communication. Also, at least 21 credit hours of the minimum requirements must be in courses at the 600 and 700 levels (both Plan A and Plan B). Plan A students may include six hours of CJT 768 in the 21 hours. No more than three credit yours in Plan A and 6 credit hours in Plan B (of the minimum requirements) may be earned in directed study,

directed reading, or internship courses (e.g., CJT 696, CJT 700, CJT 781, and CJT 790).

Students without previous course work in communication may be required to take undergraduate work that does not count toward graduate credit. The applicant is expected to have had at least twelve hours of appropriate undergraduate work in communication. Should the graduate faculty believe that there is a deficiency in the applicant's undergraduate work, it may require the deficiency to be removed by enrollment in specific undergraduate courses. Courses taken to remove a deficiency can not be counted towards the master's degree.

A **destination master's** degree program specifically designed with an applied focus to serve the needs of students seeking a terminal masters degree for a variety of professions is also available to graduate students. This applied focus is aimed at providing students with a combination of communication theory, research skills, and applied course work central to the graduate education experience. Testing over communication theory will be tailored to the student's area of study. Students who graduate from the program should be able to find positions in a broad cross-section of the media, particularly in management and policymaking, or to obtain promotions in their current positions.

Students in the destination master's program must complete a minimum of 30 credits of course work to earn this non-thesis destination masters degree. Students must also pass a written and oral final exam during the last semester of their course work. The required **core** curriculum (9 credits) is:

CJT 601 Proseminar in Communication
CJT 665 Communication Research Methods
EDP 557 Educational Statistics (or equivalent)

Individuals without significant practical experience are strongly encouraged to take CJT 696 - Internship in Communication, which could include opportunities to work with external agencies and funded projects, both within and outside the university.

Emphases within the program include communication and information systems, health communication, interpersonal communication, and mass communication.

Doctor of Philosophy

The Ph.D. program emphasizes communication as a social science. Graduates are prepared for university positions and careers in government, the media and other organizations as researchers, consultants and policy makers. Students must demonstrate general knowledge of communication, as well as competence in a core area of specialization. Current core areas include communication and information systems, health communication, interpersonal communication, and mass communication.

Students must demonstrate a thorough grasp of communication theory and research methods and must take course work in a cognate area outside of Communication. Proficiency in a foreign language is not required for successful completion of the Ph.D. in Communication. A student's advisory committee may, however, stipulate certain graduate-level courses in another language for the student's program that are consistent with the objectives of the student's program.

The required first-year curriculum is as follows:

Fall Semester
CJT 701
CJT 667
A 500-level or above statistics course
Spring Semester
CJT 631
CJT 665
CJT 645

All students are also required to complete at least 3 credit hours of CJT 790 by the last semester of course work.

The Associate Dean for Graduate Studies, in consultation with the Graduate Review committee, can waive any of the above requirements for a student who has previously taken the same or equivalent course at UK or another university for graduate credit.

Each student works with a major professor and an advisory committee to plan course work and complete the dissertation. The committee also administers the qualifying examination and the final oral examination. The qualifying examination consists of a written and oral examination over general communication, the core area of specialization, research methods/statistics and the cognate area.

Standards for admission to the doctoral program are similar to those of the Graduate School, including satisfactory scores on the verbal, quantitative and analytical portions of the Graduate Record Examination (GRE). For additional information about program requirements and opportunities for financial assistance, write to the Associate Dean for Graduate Studies, College of Communications and Information Studies.

GRADUATE COURSES

CJT 601 PROSEMINAR IN COMMUNICATION ..... (3)
CJT 608 MASS COMMUNICATIONS AND SOCIETY ..... (3)
CJT 619 PROSEMINAR IN INTERNATIONAL/INTERCULTRUAL COMMUNICATION ..... (3)
CJT 625 PROSEMINAR IN ORGANIZATIONAL COMMUNICATION ..... (3)
CJT 630 PROSEMINAR IN MASS MEDIA LAW AND PUBLIC POLICY ..... (3)
CJT 631 PROSEMINAR IN INTERPERSONAL COMMUNICATION ..... (3)
CJT 645 PRESEMINAR IN MASS COMMUNICATION THEORY ..... (3)
CJT 650 COMMUNICATION, LANGUAGE AND CULTURE ..... (3)
CJT 651 COMMUNICATION THEORY ..... (3)
CJT 665 COMMUNICATIONS RESEARCH METHODS ..... (3)
CJT 667 QUALITATIVE METHODS IN COMMUNICATION RESEARCH ..... (3)
CJT 671 PROSEMINAR IN HEALTH COMMUNICATION ..... (3)
CJT 682 COMMUNICATION AND PERSUASION ..... (3)
CJT 684 PROSEMINAR IN INSTRUCTIONAL COMMUNICATION ..... (3)
CJT 685 SEMINAR: PREPARING FUTURE FACULTY FOR THE MULTICULTURAL CLASSROOM ..... (1)
CJT 686 PRACTICUM IN PREPARING FUTURE FACULTY ..... (1)
CJT 696 INTERNSHIP IN COMMUNICATION ..... (3)
CJT 700 DIRECTED READING IN COMMUNICATION ..... (1-3)
CJT 701 ADVANCED TOPICS IN COMMUNICATION THEORY (SUBTITLE REQUIRED) ..... (3)
CJT 719 SEMINAR IN INTERNATIONAL/INTERCULTURAL COMMUNICATION (SUBTITLE REQUIRED) ..... (3)
CJT 725 SEMINAR IN ORGANIZATIONAL COMMUNICATION: (SUBTITLE REQUIRED) ..... (3)
CJT 730 SEMINAR IN MASS MEDIA AND PUBLIC POLICY (SUBTITLE REQUIRED) ..... (3)
CJT 731 SEMINAR IN INTERPERSONAL COMMUNICATION (SUBTITLE REQUIRED) ..... (3)
CJT 748 MASTER'S THESIS RESEARCH ..... (0)
CJT 749 DISSERTATION RESEARCH ..... (0)
CJT 765 ADVANCED SEMINAR IN COMMUNICATION RESEARCH METHODS ..... (3)
CJT 767 ADVANCED TOPICS IN QUALITATIVE RESEARCH METHODS ..... (3)
CJT 768 RESIDENCE CREDIT FOR THE MASTER' DEGREE ..... (1-6)
CJT 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
CJT 771 SEMINAR IN HEALTH COMMUNICATION ..... (3)
CJT 775 SEMINAR IN HEALTH COMMUNICATION CAMPAIGNS ..... (3)
CJT 780 SPECIAL TOPICS IN COMMUNICATION: (SUBTITLE REQUIRED) . (3)
CJT 781 DIRECTED STUDY IN COMMUNICATION ..... (1-6)
CJT 790 RESEARCH PROBLEMS IN COMMUNICATION ..... (1-6)

COM 525 ORGANIZATIONAL COMMUNICATION ..... (3)
COM 555 CYBERSPACE AND COMMUNICATION (SAME AS TEL 555) ..... (3)
COM 571 HEALTH COMMUNICATION ..... (3)
COM 581 STUDIES IN SMALL GROUP COMMUNICATION CONTEXTS ..... (3)
COM 584 TEACHING OF SPEECH COMMUNICATION ..... (3)
COM 591 SPECIAL TOPICS IN COMMUNICATION (SUBTITLE REQUIRED) ..... (1)

ISC 541 CRITICAL TOPICS IN INTEGRATED STRATEGIC COMMUNICATION (SUBTITLE REQUIRED) ..... (3)
ISC 543 REGULATION OF STRATEGIC COMMUNICATION ..... (3)

JOU 531 MEDIA LAW AND ETHICS ..... (3)

JOU 532 ETHICS OF JOURNALISM AND MASS COMMUNICATION ..... (3)
JOU 535 HISTORY OF JOURNALISM ..... (3)

TEL 504 MEDIA ORGANIZATIONS ..... (3)
TEL 510 MEDIA ECONOMICS ..... (3)
TEL 520 SOCIAL EFFECTS OF THE MASS MEDIA ..... (3)
TEL 525 THEORY OF MULTIMEDIA ..... (3)
TEL 530 PRO-SEMINAR IN TELECOMMUNICATIONS ..... (3)
TEL 555 CYBERSPACE AND COMMUNICATION (SAME AS COM 555) ..... (3)
TEL 590 ADVANCED TELECOMMUNICATIONS TOPICAL SEMINAR (SUBTITLE REQUIRED) ..... (3)

Communication Disorders

GRADUATE FACULTY
Full Members
Professors
Robert C. Marshall.
Associate Professors
Jodelle F. Deem, Lori S. Gonzalez, Judith L. Page, Sharon R. Stewart.
Associate Members
Assistant Professors
Heather Harris Wright.

The Division of Communication Disorders at the University of Kentucky offers a two-year master's degree program in speech-language pathology. Students who complete the program will typically meet the academic and clinical training requirements for the American Speech-Language-Hearing Association's (ASHA) Certificate of Clinical Competence in Speech-Language Pathology and for licensure in Kentucky and in most states with licensure requirements. Students seeking to fulfill ASHA certification requirements and those desiring certification for school employment should consult the Director of Graduate Studies.

The length of a student's program depends upon the certification options selected, the student's educational background, and the number of credits completed each semester. Students with an undergraduate major in communication disorders will typically complete the program in two years of full-time study. Students entering without an undergraduate major in communication disorders will need to apply to the undergraduate program to complete approximately one year of prerequisite undergraduate-content courses before applying for admission to the graduate program. Additional information regarding these prerequisites is available from the Director of Graduate Studies.

During the first full year of the graduate program, students typically complete course work and clinical practicum at the UK Communications Disorders Clinic. During the second year, students may be assigned to clinical externship rotations in a variety of clinical settings, including the Lexington Veterans' Affairs Medical Center, agencies providing services to children (e.g., public schools, preschools, clinics), and agencies in one of Kentucky's Area Health Education Centers (AHECs). Successful completion of a comprehensive examination is required for all degree candidates.

Admission Requirements

To be considered for admission, a student must have at least a 2.75 undergraduate GPA and submit Graduate Record Examination scores (verbal, quantitative and analytical). Students are only considered for admission into the master's program in Communication Disorders for the Summer and Spring terms. Admissions are competitive, so interested students should apply by February 1 for Summer admission or by November 1 for Spring admission.

Degree Requirements

The courses expected of all students in the master's degree curriculum include the following:

Core Courses

CD 521 Non-Speech Communication (3)
CD 647 Advanced Language Disorders (3)
CD 655 Advanced Diagnostic Procedures in Speech-Language Pathology (3)
CD 670 Disorders of Phonation (3)
CD 672 Aphasia And Related Neurogenic Disorders of Language (3)
CD 673 Neurogenic Disorders of Speech (3)
CD 674 Disorders of Fluency (3)
CD 701 Research Methodology in Communication Disorders (3)

Clinical Practicum

CD 657 Clinical Practicum in Speech-Language Pathology (6)
(Six credits of approved elective courses may be substituted with approval of the Director of Graduate Studies.)

Successful completion of written comprehensive examinations is required.

Certification Requirements

Students wishing to meet American Speech-Language-Hearing Association certification requirements must also complete the following additional clinical practicum and clinical rotation experiences:

CD 656 Clinical Practicum In Diagnostic Procedures for Speech-Language Pathology (1)
CD 657 Clinical Practicum in Speech-Language Pathology (3)
CD 658 Clinical Practicum in Audiology (1)
CD 659 Clinical Rotation in Speech-Language Pathology (21-36)

For additional information, contact:
Director of Graduate Studies
Division of Communication Disorders
1030 S. Broadway, Suite 5
Lexington, KY 40504-2605

GRADUATE COURSES

CD 511 SPEECH-LANGUAGE DEVELOPMENT AND DISORDERS FOR THE SEVERELY HANDICAPPED (SAME AS EDS 511) ..... (3)
CD 512 SPEECH-LANGUAGE DEVELOPMENT AND DISORDERS FOR THE MILDLY HANDICAPPED (SAME AS EDS 512) ..... (3)
CD 514 LANGUAGE DEVELOPMENT THROUGH THE LIFESPAN ..... (3)
CD 515 LANGUAGE ASSESSMENT AND REMEDIATION ..... (3)
CD 521 NON-SPEECH COMMUNICATION ..... (3)
CD 585 SPEECH SCIENCE ..... (3)
CD 587 AUDIOMETRY ..... (3)
CD 588 DISORDERS OF ARTICULATION ..... (3)
CD 591 AURAL REHABILITATION ..... (3)
CD 610 ETHICS IN CLINICAL SCIENCES RESEARCH (SAME AS CLS/PT/RAS 610) ..... (1)
CD 647 ADVANCED LANGUAGE DISORDERS ..... (3)
CD 655 ADVANCED DIAGNOSTIC PROCEDURES IN SPEECH-LANGUAGE PATHOLOGY ..... (3)
CD 656 CLINICAL PRACTICUM IN DIAGNOSTIC PROCEDURES FOR SPEECH-LANGUAGE PATHOLOGY ..... (1)
CD 657 CLINICAL PRACTICUM IN SPEECH-LANGUAGE PATHOLOGY ..... (3)
CD 658 CLINICAL PRACTICUM IN AUDIOLOGY ..... (1)
CD 659 CLINICAL ROTATION IN SPEECH-LANGUAGE PATHOLOGY .. (1-12)
CD 670 DISORDERS OF PHONATION ..... (3)
CD 671 APPLIED PHONOLOGY: DEVELOPMENT AND DISORDERS ..... (3)
CD 672 APHASIA AND RELATED NEUROGENIC DISORDERS OF LANGUAGE ..... (3)

CD 673 NEUROGENIC DISORDERS OF SPEECH ..... (3)
CD 674 DISORDERS OF FLUENCY ..... (3)
CD 701 RESEARCH METHODOLOGY IN COMMUNICATION DISORDERS (3)
CD 706 ADVANCED AUDIOLOGICAL ISSUES IN PEDIATRICS ..... (3)
CD 708 ADVANCED AUDIOLOGICAL ISSUES IN GERIATRICS ..... (3)
CD 747 SEMINAR IN LANGUAGE DEVELOPMENT IN CHILDREN ..... (3)
CD 771 DYSPHAGIA ..... (3)
CD 772 ADVANCED SEMINAR IN APHASIA ..... (3)
CD 773 SEMINAR IN MOTOR SPEECH DISORDERS ..... (3)
CD 774 SEMINAR IN ADULT SPEECH AND LANGUAGE ..... (3)
CD 775 SEMINAR IN LITERATE LANGUAGE ..... (3)
CD 789 INDEPENDENT STUDY IN COMMUNICATION DISORDERS ..... (1-6)

Computer Science

GRADUATE FACULTY

Full Members

Professors

Yuri Breitbart, Fuhua Cheng, Craig C. Douglas, Raphael A. Finkel, Andrew M. Klapper, Kenneth K. Kubota, Wiktor Marek, Mukesh Singhal, Miroslaw Truszczynski, Grzegorz W. Wasilkowski.

Associate Professors

Anthony Q. Baxter, Kenneth Calvert, Judy Goldsmith, James N. Griffioen, Jerzy Jaromczyk, Brent W. Seales, Jun Zhang.

Assistant Professors

D. Manivannan.

Associate Members

Assistant Professors

Duncan Clarke, Alexander Dekhtyar, Zongming Fei, Jane Hayes, Christopher Jaynes.

Emeritus Professors

A.R. Newbery.

The Department of Computer Science offers programs of study leading to the Master of Science and Doctor of Philosophy degrees. Admission to these programs is highly competitive and based upon academic record, GRE scores, and letters of recommendation. It is strongly suggested that applicants present evidence of mathematical maturity as well as competence in computer science. Full details of the requirements for degree programs are available from the department upon request.

Since very few specific courses are required for the graduate degree programs, all candidates in the M.S. program are expected to demonstrate proficiency in the fundamental areas of computer science by taking four core courses in specific areas. Participation in departmental seminars is also required.

Both thesis (Plan A) and non-thesis (Plan B) options are available in the program leading to the Master of Science degree. A project is required of non-thesis candidates. No language requirement (other than proficiency in English) is mandated.

The doctoral program in Computer Science is a research degree granted primarily on the demonstration of substantial research achievement. To be admitted to candidacy for this degree, candidates must satisfy the requirements of the Graduate School and pass the qualifying examination. This examination consists of written and oral sections covering breadth in computer science as well as depth in a specific area.

Areas of research actively pursued by faculty and students within the department include: artificial intelligence, numerical methods, operating systems, distributed computing and networking, theory of computation, data base technology, design and analysis of algorithms, cryptography, graphics and vision, parallel processing, and software engineering. Courses in these and other areas are available to permit students to complete studies of sufficient breadth and depth prior to engaging in independent research.

Admission Requirements

The admission decision is made by the High Degree Committee based on the overall application file consisting of GRE scores, TOEFL scores (for international students), GPA, grades in CS and Math courses, background in computer science, letters of recommendation, and statement of purpose.

Students admitted to the doctoral program in Computer Science who have already been awarded a master's degree in Computer Science from another institution are not eligible to receive a master's degree in Computer Science from the University of Kentucky. Exceptions to this policy must be approved by the Dean of the Graduate School upon petition by the Director of Graduate Studies.

GRADUATE COURSES

CS 405G INTRODUCTION TO DATABASE SYSTEMS ..... (3)
CS 415G GRAPH THEORY (SAME AS MA 415G) ..... (3)
CS 416G PRINCIPLES OF OPERATIONS RESEARCH I (SAME AS MA 416G) . (3)
CS 441G COMPILERS FOR ALGORITHMIC LANGUAGES ..... (3)
CS 450G FUNDAMENTALS OF PROGRAMMING LANGUAGES ..... (3)
CS 463G LOGIC AND ARTIFICIAL INTELLIGENCE ..... (3)
CS 470G INTRODUCTION TO OPERATING SYSTEMS ..... (3)
CS 471G NETWORKING AND DISTRIBTED OPERATING SYSTEMS ..... (3)
CS 485G TOPICS IN COMPUTER SCIENCE (SUBTITLE REQUIRED) ..... (2-4)
CS 505 INTERMEDIATE TOPICS IN DATABASE SYSTEMS ..... (3)
CS 515 ALGORITHM DESIGN ..... (3)
CS 521 COMPUTATIONAL SCIENCES ..... (3)
CS 522 MATRIX THEORY AND NUMERICAL LINEAR ALGEBRA I (SAME AS MA 522) ..... (3)
CS 535 INTERMEDIATE COMPUTER GRAPHICS ..... (3)
CS 536 SITUATED COMPUTING ..... (3)
CS 537 NUMERICAL ANALYSIS (SAME AS MA/EGR 537) ..... (3)
CS 538 NUMERICAL ANALYSIS II (SAME AS MA 538) ..... (3)
CS 541 COMPILER DESIGN ..... (3)
CS 555 DECLARATIVE PROGRAMMING ..... (3)
CS 570 MODERN OPERATING SYSTEMS ..... (3)
CS 571 COMPUTER NETWORKS ..... (3)
CS 575 MODELS OF COMPUTATION ..... (3)
CS 585 INTERMEDIATE TOPICS IN COMPUTER SCIENCE (SUBTITLE REQUIRED) ..... (3)
CS 587 MICROCOMPUTER SYSTEMS DESIGN (SAME AS EE 587) ..... (3)
CS 610 MASTER'S PROJECT ..... (3)
CS 612 INDEPENDENT WORK IN COMPUTER SCIENCE ..... (1-3)
CS 616 SOFTWARE ENGINEERING ..... (3)
CS 621 PARALLEL AND DISTRIBUTED COMPUTING ..... (3)
CS 622 MATRIX THEORY AND NUMERICAL LINEAR ALGEBRA II (SAME AS MA 622) ..... (3)
CS 623 PARALLEL ITERATIVE COMPUTING ..... (3)
CS 630 FREE-FORM SOLID MODELING ..... (3)
CS 631 COMPUTER-AIDED GEOMETRIC DESIGN ..... (3)
CS 633 3D COMPUTER ANIMATION ..... (3)
CS 634 MULTIMEDIA SYSTEMS ..... (3)
CS 635 IMAGE PROCESSING (SAME AS EE 635) ..... (3)
CS 636 COMPUTER VISION ..... (3)
CS 637 EXPLORING VIRTUAL WORLDS ..... (3)
CS 641 ADVANCED COMPILER DESIGN II ..... (3)
CS 642 DISCRETE EVENT SYSTEMS (SAME AS EE 642) ..... (3)
CS 655 PROGRAMMING LANGUAGES ..... (3)
CS 660 TOPICS IN ARTIFICIAL INTELLIGENCE (SUBTITLE REQUIRED) ... (3)
CS 663 ARTIFICIAL INTELLIGENCE ..... (3)
CS 670 DISTRIBUTED OPERATING SYSTEM THEORY ..... (3)
CS 671 ADVANCED COMPUTER NETWORKS ..... (3)
CS 673 ERROR CORRECTING CODES ..... (3)
CS 674 HEURISTIC ALGORITHMS ..... (3)
CS 675 COMPUTABILITY AND COMPLEXITY ..... (3)
CS 676 PARALLEL ALGORITHMS ..... (3)
CS 677 COMPUTATIONAL GEOMETRY ..... (3)
CS 678 CRYPTOGRAPHY ..... (3)
CS 679 ADVANCED GRAPH ALGORITHMS ..... (3)
CS 680 SEMINAR IN COMPUTER SCIENCE ..... (2)
CS 682 SWITCHING THEORY (SAME AS EE 682) ..... (3)
CS 683 FINITE-STATE MACHINES (SAME AS EE 683) ..... (3)
CS 684 SPECIAL TOPICS IN VISION, GRAPHICS AND MULTIMEDIA (SUBTITLE REQUIRED) ..... (3)
CS 685 SPECIAL TOPICS IN COMPUTER SCIENCE (SUBTITLE REQUIRED) ..... (3)
CS 686 SPECIAL TOPICS IN THE THEORY OF COMPUTATION (SUBTITLE REQUIRED) ..... (3)

CS 687 SPECIAL TOPICS IN SYSTEMS ..... (3)
CS 688 NEURAL NETWORKS (SAME AS EE 688) ..... (3)
CS 689 SPECIAL TOPICS IN NUMERICAL AND SCIENTIFIC COMPUTATION (SUBTITLE REQUIRED) ..... (3)
CS 690 OPERATING SYSTEMS THEORY ..... (3)
CS 748 MASTER'S THESIS RESEARCH ..... (0)
CS 749 DISSERTATION RESEARCH ..... (0)
CS 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
CS 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)

Crop Science

GRADUATE FACULTY
Full Members
Professors
Michael Barrett, Carol Baskin, Lowell P. Bush, Glenn B. Collins, Michael Collins, Paul L. Cornelius, Charles T. Dougherty, Dennis B. Egli, Robert L. Geneve, Larry Grabau, David Hildebrand, Arthur G. Hunt, Dewayne L. Ingram, Paul Legg, Todd Pfeiffer, Dennis M. TeKrony, David A. VanSanford, George Wagner.
Associate Professors
Harold R. Burton, Jack Buxton, Timothy D. Phillips, John Snyder, David Wagner, William W. Witt.
Associate Members
Extension Professors
Gerald R. Brown, Jonathan D. Green, Richard T. Jones, Garry D. Lacefield, James Martin, Andrew J. Powell Jr.
Extension Associate Professors
Winston Dunwell, Jimmy C. Henning.
Assistant Professors
A. Bruce Downie.
Adjunct Assistant Professors
Paul Cappiello.
Emeritus Professors
George Cheniae, Dean Knavel, Charles G. Poneleit, Norman L. Taylor.

The interdepartmental graduate program in Crop Science offers graduate work leading to the Master of Science and Doctor of Philosophy degrees with areas in plant breeding and genetics, crop physiology and management, turf science, cellular and molecular genetics, seed science and technology, and weed science. Faculty are from the Departments of Agronomy, Forestry, and Horticulture in the College of Agriculture.

Admission Requirements

All students with strong training in science, including but not limited to baccalaureate degrees in biology, chemistry, agronomy and horticulture are encouraged to apply. An undergraduate grade point average of at least 3.0 is generally required, and all applicants must take the Graduate Record Examination. Foreign students should submit scores from the Test of English as a Foreign Language. Official copies of transcripts, GRE scores, and TOEFL scores should be sent directly to the Graduate School. To be considered for departmental research assistantships, which are awarded on a competitive basis, three letters of recommendation should be sent to the Director of Graduate Studies.

In order that all entering Ph.D. students are at an academic level to successfully complete course requirements, the following courses or their equivalent should have been completed prior to admission:

- MA 113 – first semester course in calculus
- PHY 201 – first semester course in physics
- CHE 230 – first semester course in organic chemistry

Students are expected to make up any deficiencies in these courses within one year of enrollment.

Degree Requirements

For the M.S. degree, 24 hours of course work plus an acceptable thesis are required (Plan A). Work leading to advanced degrees must conform to the general rules and regulations of the Graduate School. Crop Science faculty also participate in the interdepartmental Plant and Soil Science graduate program which offers programs of study leading to the Master of Science degree.

Individual programs are developed to include a strong course work component and a meaningful research experience. A strong undergraduate background in the agricultural and biological sciences is required for all degree candidates.

GRADUATE COURSES

PLS 502 ECOLOGY OF ECONOMIC PLANTS ..... (3)
PLS 510 FORAGE MANAGEMENT AND UTILIZATION ..... (4)
PLS 515 TURF MANAGEMENT ..... (3)
PLS 556 SEED TECHNOLOGY ..... (3)
PLS 597 SPECIAL TOPICS IN PLANT AND SOIL SCIENCE (SUBTITLE REQUIRED) ..... (1-3)
PLS 599 SPECIAL PROBLEMS IN PLANT AND SOIL SCIENCE ..... (1-4)
PLS 601 SPECIAL TOPICS IN MOLECULAR AND CELLULAR GENETICS .. (1)
PLS 602 PRINCIPLES OF YIELD PHYSIOLOGY ..... (3)
PLS 619 CYTOGENETICS ..... (4)
PLS 620 PLANT MOLECULAR BIOLOGY ..... (3)
PLS 622 PHYSIOLOGY OF PLANTS I ..... (3)
PLS 623 PHYSIOLOGY OF PLANTS II ..... (3)
PLS 630 EXPERIMENTAL TECHNIQUES IN PLANT PHYSIOLOGY ..... (3)
PLS 650 SOIL-PLANT RELATIONSHIPS ..... (3)
PLS 657 SEED BIOLOGY ..... (3)
PLS 658 ADVANCED WEED SCIENCE ..... (4)
PLS 664 PLANT BREEDING I ..... (3)
PLS 676 QUANTITATIVE INHERITANCE IN PLANT POPULATIONS ..... (3)
PLS 697 SPECIAL TOPICS IN PLANT AND SOIL SCIENCE (SUBTITLE REQUIRED) ..... (1-3)
PLS 732 MINERAL NUTRITION OF PLANTS ..... (3)
PLS 748 MASTER'S THESIS RESEARCH ..... (0)
PLS 749 DISSERTATION RESEARCH ..... (0)
PLS 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
PLS 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
PLS 777 PLANT AND SOIL SCIENCE SEMINAR ..... (1)
PLS 773 SEMINAR IN PLANT PHYSIOLOGY ..... (1)
PLS 799 RESEARCH IN PLANT AND SOIL SCIENCE ..... (1-4)

Curriculum and Instruction

GRADUATE FACULTY
Full Members
Professors
Ronald K. Atwood, Jesus Garcia, Linda S. Levstik, Angene H. Wilson.
Associate Professors
Gary J. Anglin, Sharon Brennan, Robert W. Gaskins, Deneese L. Jones, Douglas L. Jones, Joan M. Mazur, Rosetta F. Sandidge, Mary C. Shake, Douglas C. Smith, J.T. Stevens.
Associate Members
Adjunct Professors
Robert S. Tannenbaum.
Associate Professors
Hariette J. Arrington, Mary Elizabeth Spalding.
Assistant Professors
William Bintz, Elinor Brown, Sara D. Moore.
Emeritus Professors
Virginia R. Atwood, Harry V. Barnard.

The Department of Curriculum and Instruction offers a wide range of graduate programs leading to the Master of Arts in Education, Master of Science in Education (Plan A or Plan B available), and Doctor of Education degrees. These programs are designed to prepare specialists for a variety of roles in curriculum and instruction including teaching, supervising, and coordinating subject matter areas at the elementary, middle school, senior high, and junior college levels. The doctoral programs prepare leaders for public schools, universities, and other educational agencies. Specialization is available in several graduate areas.

Doctor of Education

In cooperation with the Department of Administration and Supervision, the department offers a program leading to the Doctor of Education (Ed.D.) degree in Instruction and Administration.

Course work for the Ed.D. in Instruction and Administration, Curriculum and Instruction option, will consist of a minimum of 42 graduate credits beyond the master's degree planned by the major professor and advisory committee based on the student's background, needs and goals. All course work plans will include work in the following:

a. Curriculum and Instruction,
b. Support work in education,
c. Research tool courses (minimum of 9 semester hours required), and
d. Support work outside of education.

Admission Requirements

In addition to the admission requirements set by the Graduate School, departmental requirements include a statement of professional goals, an autobiographical sketch, professional writing samples, and four letters of professional reference. Interviews are frequently requested.

For more information about the program, consult the Director of Graduate Studies.

Master of Arts in Education (Elementary Education Option)

For a Master of Arts in Education, a minimum of 30 credit hours is required including 18 credit hours of professional education and 12 credit hours outside the College of Education related to the student's teaching certificate content area. Consult the Director of Graduate Studies for specific recommendations within this broad framework. The program qualifies teachers for a Rank II Certificate.

Admission Requirements

In addition to the admission requirements set by the Graduate School, departmental requirements for admission include initial teacher certification in elementary education and three letters of professional reference.

Master of Arts in Education and Master of Science in Education (Middle Grades Education)

The Master of Arts in Education/Master of Science in Education degree in Middle School Education is a 30-hour program leading to Rank II certification in Middle School. Students complete a minimum of 12 hours in the department, 6 hours in other areas of education, and 12 hours outside the college in an area appropriate to the teaching specialization. Students completing this subject-area course work in mathematics or science are eligible for the Master of Science in Education degree. Consult the Director of Graduate Studies for more detailed information regarding this program.

Admission Requirements

In addition to the admission requirements set by the Graduate School, departmental requirements for admission include initial teacher certification in middle grades education and three letters of professional reference.

Master of Arts in Education (Advanced Certification in Secondary Education Option)

For a Master of Arts in Education, a minimum of 30 credit hours are required including 18 credit hours of professional education and 12 credit hours outside the College of Education related to the student's content teaching certificate area. Consult the Director of Graduate Studies for specific recommendations within this broad framework. The program qualifies teachers for a Rank II teaching certificate. Students completing subject area course work in mathematics or science are eligible for the Master of Science in Education degree. Consult the Director of Graduate Studies for more detailed information regarding this program.

Admission Requirements

In addition to the admission requirements set by the Graduate School, departmental requirements for admission include initial teacher certification in secondary education and three letters of professional reference.

Master of Arts in Education (Initial Certification Option - Secondary Education)

This program is designed for students with a completed bachelor's degree in a content field. If it is a University of Kentucky degree, the degree must be in one of the following areas: business (or related field with a business minor), English, a foreign language, history, mathematics, a science, a social science, or in secondary education. Students having a bachelor's degree listed above from another institution are also eligible. Students not having a degree in one of the above areas may be required to complete additional course work. A departmental requirement is recommendation to a Teacher Education Program. That process involves compliance with admission requirements of the Kentucky Education Professional Standards Board.

Students meet state initial certification requirements while completing degree requirements. A minimum of 6 semester hours of graduate work must be completed outside the College of Education in the teaching specialty area. Dependent upon the student's background, one may need to complete undergraduate deficiencies to meet degree and certification requirements.

Consult the Director of Graduate Studies for specific information regarding degree requirements.

Master of Science in Education (Instructional Systems Design Option)

The Instructional Systems Design area offers a 36-hour program designed for individuals who wish to develop their knowledge and skills in planning and designing instruction. Persons choosing this area are frequently preparing for instructional systems design responsibilities in business and industry, government, education, and various training organizations.

This program does not require or lead to initial teacher certification. However, previously certified teachers can use the program to advance the rank of their teaching certificates.

Both a thesis option (Plan A, requiring 30 hours of course work and 6 hours of thesis credit) and a non-thesis option (Plan B, requiring 36 hours of course work) are offered. All students are required to complete an 18-hour common core including nine semester hours in the Department of Curriculum and Instruction. At least 6 hours must be taken outside the College of Education. An additional 12 credit hours of electives are required for the non-thesis option. The thesis option includes 6 credit hours of electives and 6 credit hours of thesis credit. Specific programs are planned with a faculty advisor subject to the approval of the Director of Graduate Studies.

Admission Requirements

For applicants who are not seeking advanced rank teaching certifications, in addition to the admission requirements set by the Graduate School, there is a departmental requirement of three references. For applicants who will pursue advanced teaching certificates, departmental requirements include initial teacher certification and three letters of professional reference.

Master of Arts in Education (Reading)

Candidates for a Master of Arts in Education with Reading as an area of concentration must meet the specifications for a Master of Arts in Education, Plan B.

The curriculum includes a minimum of 33 credit hours according to the following distribution:

a. A minimum of 18 credit hours in graduate level reading courses to include EDC 619, EDC 620, EDC 642, or EDC 641. An additional 6 credit hours are selected with the approval of an advisor.
b. Six to nine credit hours in the College of Education, selected to extend the humanistic, behavioral, multi-cultural and research components of the program, based on the student's educational background, with adviser approval.
c. Six to nine semester hours credit selected from appropriate support areas outside the College of Education, with advisor approval.

Completion of the Master of Arts in Education with Reading as an area of concentration will fulfill the academic requirements for certification as a reading specialist.

Admission Requirements

In addition to the admission requirements set by the Graduate School, departmental requirements for admission include initial teacher certification, a minimum of three years of successful classroom teaching, and three letters of professional reference.A minimum of three years of successful classroom teaching is an additional requirement for this certification.

GRADUATE COURSES

EDC 501 TEACHING INTERNSHIP ..... (1-12)
EDC 513 TEACHING ENGLISH AS A SECOND LANGUAGE (SAME AS ENG/LIN 513) ..... (3)
EDC 514 TESL MATERIALS AND METHODS (SAME AS ENG/LIN 514) ..... (3)
EDC 533 TEACHING READING IN THE SECONDARY SCHOOL ..... (3)
EDC 534 READING AND STUDY SKILLS IN ENGLISH ..... (3)
EDC 543 VIDEO FOR DISTANCE EDUCATION AND MULTIMEDIA ..... (3)
EDC 544 USE AND INTEGRATION OF INSTRUCTIONAL MEDIA ..... (3)
EDC 547 INSTRUCTIONAL COMPUTING I ..... (3)
EDC 548 INSTRUCTIONAL COMPUTING II ..... (3)
EDC 550 EDUCATION IN A CULTURALLY DIVERSE SOCIETY ..... (3)
EDC 554 CULTURE, EDUCATION AND TEACHING ABROAD (SAME AS EPE 554) ..... (3)
EDC 565 MODERN EDUCATIONAL PROBLEMS (GENERAL CURRICULUM) ..... (3)
EDC 575 MODERN EDUCATIONAL PROBLEMS (UNCLASSIFIED) ..... (3)
EDC 576 MODERN EDUCATIONAL PROBLEMS (UNCLASSIFIED) ..... (3)
EDC 580 INTRODUCTION TO GIFTED EDUCATION (SAME AS EDP 580) .. (3)
EDC 602 CURRICULA AND PROGRAMMING FOR THE GIFTED ..... (3)
EDC 607 INSTRUCTIONAL DESIGN I ..... (3)
EDC 608 INSTRUCTIONAL DESIGN II ..... (3)
EDC 609 INTERACTIVE MULTIMEDIA RESEARCH AND DESIGN ..... (3)
EDC 610 DISCIPLINE AND CLASSROOM MANAGEMENT ..... (3)
EDC 611 AUTHORING APPLICATIONS FOR TECHNOLOGY-BASED INSTRUCTION ..... (3)
EDC 612 INSTRUCTIONAL DESIGN AND TECHNOLOGY FOUNDATIONS (3)
EDC 615 ADVANCED INSTRUCTIONAL APPLICATIONS FOR THE EARLY ADOLESCENT LEARNER ..... (3)
EDC 616 THE MIDDLE SCHOOL ..... (3)
EDC 618 ADVANCED STUDY IN THE TEACHING OF READING ..... (3)
EDC 619 ASSESSMENT OF READING GROWTH AND DEVELOPMENT ..... (3)
EDC 620 DESIGN AND IMPLEMENTATION OF READING INSTRUCTION .. (3)
EDC 621 LINGUISTIC AND COGNITIVE FOUNDATIONS OF READING IN EARLY CHILDHOOD ..... (3)
EDC 631 MATHEMATICS PEDAGOGY IN THE SECONDARY SCHOOL .... (0-3)
EDC 632 SOCIAL STUDIES PEDAGOGY IN THE SECONDARY SCHOOL . (0-3)
EDC 633 BUSINESS PEDAGOGY IN THE SECONDARY SCHOOL ..... (0-3)
EDC 634 SCIENCE PEDAGOGY IN THE SECONDARY SCHOOL ..... (0-3)
EDC 635 ENGLISH PEDAGOGY IN THE SECONDARY SCHOOL ..... (0-3)
EDC 636 METHODS OF TEACHING FOREIGN LANGUAGE, K-12 ..... (3)
EDC 641 RESEARCH AND THEORY IN TEACHING READING IN THE ELEMENTARY SCHOOL ..... (3)
EDC 642 RESEARCH AND THEORY IN TEACHING LANGUAGE ARTS ..... (3)
EDC 670 ADVANCED STUDY IN THE TEACHING OF ELEMENTARY SCHOOL MATHEMATICS ..... (3)
EDC 676 PRACTICUM IN GIFTED EDUCATION (SAME AS EDP 676) ..... (3)
EDC 710 ADVANCED TOPICS IN INSTRUCTIONAL DESIGN ..... (3)
EDC 712 THE ELEMENTARY SCHOOL ..... (3)
EDC 714 THE SECONDARY SCHOOL ..... (3)
EDC 724 GUIDING AND ANALYZING EFFECTIVE TEACHING ..... (3)
EDC 730 PROBLEMS OF THE SCHOOL CURRICULUM ..... (3)
EDC 732 PRINCIPLES OF CURRICULUM CONSTRUCTION ..... (3)
EDC 740 PRACTICUM IN TEACHING READING AND RELATED LANGUAGE ARTS ..... (3)
EDC 746 SUBJECT AREA INSTRUCTION IN THE SECONDARY SCHOOL (0-9)
EDC 748 MASTER'S THESIS RESEARCH ..... (0)
EDC 749 DISSERTATION RESEARCH ..... (0)
EDC 750 INTERNSHIP IN INSTRUCTIONAL SYSTEMS DESIGN ..... (3)
EDC 755 INSTRUCTIONAL SYSTEMS DESIGN RESEARCH COLLOQUIUM (1)
EDC 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE. ..... (1-6)
EDC 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
EDC 777 SEMINAR IN CURRICULUM AND INSTRUCTION (SUBTITLE REQUIRED) ..... (1-3)
EDC 781 INDEPENDENT STUDY IN CURRICULUM AND INSTRUCTION (1-3)
EDC 791 RESEARCH PROBLEMS IN CURRICULUM AND INSTRUCTION (1-3)

Dentistry

GRADUATE FACULTY

Full Members

Professors

Leon A. Assael, Charles Carlson, Jeffrey B. Dembo, James F. Drummond, Jeffrey Ebersole, Gerald A. Ferretti, J. David Hardison, Richard H. Haug, Harold R. Laswell, Thomas T. Lillich, Craig S. Miller, David A. Nash, M. John Novak, Jeffrey P. Okeson, Timothy A. Smith, Joseph E. VanSickels.

Associate Professors

Cynthia S. Beeman, John T. Dominici, E. Preston Hicks, Samuel J. Jasper Jr., Richard J. Mitchell.

Associate Members

Associate Professors

Robert E. Kovarik, Karen F. Novak.

Assistant Professors

Reny deLeeuw, G. Thomas Kluemper, Moises C. Langub, Judith Skelton, Mark V. Thomas.

Research Assistant Professors

Lakshmyya Kesavalu.

Emeritus Professors

Herbert Abrams, Albert T. Brown, Robert B. Calmes Jr., Emmett R. Costich, Raymond A. Kopczyk, Gerald I. Roth, Stanley R. Saxe.

The goal of the Master of Science degree program is to produce graduates who are clinically adept, well-grounded in research and the biological basis of their specialties, and prepared to function at a high level of accomplishment in specialty practice and academic dentistry.

The program is interdisciplinary. Faculty are drawn from the College of Dentistry clinical and graduate faculty, and from departments throughout the Medical Center and the Lexington Campus.

Only dental graduates of high academic standing will be accepted into this program, which requires three years of didactic, clinical, and research training. All of these elements are integrated throughout the program. All students receive teaching experience in anticipation of full- or part-time academic involvement after graduation.

Admission Requirements

Students pursuing specialty training in orthodontics, periodontics, and orofacial pain are eligible for the Master of Science degree. Successful completion of the degree is prerequisite to the awarding of a specialty certificate.

Applicants must have a D.M.D./D.D.S. degree from an accredited United States or Canadian dental school or equivalent. Admission to the Master of Science Program is very competitive and is based on academic performance in dental school, professional recommendations, performance on the National Board Dental Examination Parts I and II, Graduate Record Examination (GRE), and a personal interview. Applicants who are not native English speakers must score at least 560 (paper) or 220 (computer) on the Test of English as a Foreign Language (TOEFL).

Degree Requirements

Requirements for the Master of Science degree in Dentistry are: 1) satisfactory completion of program requirements; 2) 24 hours graduate credit, at least half of which must be from a "core" curriculum; 3) submission of an acceptable thesis based on an individual research project (Plan A); and 4) passage of a comprehensive oral examination and thesis defense. Foreign language credit is not required.

GRADUATE COURSES

CDS 611 CHILD GROWTH AND DEVELOPMENT, PART I ..... (2)
CDS 612 CHILD GROWTH AND DEVELOPMENT, PART II ..... (2)
CDS 631 PRINCIPLES OF DENTAL OCCLUSION ..... (2)
CDS 748 MASTER'S THESIS RESEARCH ..... (0)
CDS 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
OBI 650 ORAL BIOLOGY FOR POSTGRADUATE DENTAL STUDENTS I ... (2)
OBI 651 ORAL BIOLOGY FOR POSTGRADUATE DENTAL STUDENTS II .. (2)
OBI 720 MICROBIAL STRUCTURE AND FUNCTION (SAME AS MI/BIO 720) ..... (4)
OFP 634 CURRENT CONCEPTS IN TEMPOROMANDIBULAR DISORDERS (3)
OFP 636 CLINICAL MANAGEMENT OF TEMPOROMANDIBULAR DISORDERS ..... (3)
OFP 700 OROFACIAL PAIN TREATMENT PLANNING SEMINAR ..... (2)
OFP 734 CURRENT CONCEPTS IN OROFACIAL PAIN ..... (3)
OFP 736 CLINICAL MANAGEMENT OF OROFACIAL PAIN ..... (3)
OPT 650 GRADUATE ORAL PATHOLOGY I ..... (2)
OPT 651 GRADUATE ORAL PATHOLOGY II ..... (2)
ORT 610 CRANIO-FACIAL FORM ..... (2)
ORT 620 ORAL-PHARYNGEAL FUNCTION, PART I ..... (2)
ORT 621 ORAL-PHARYNGEAL FUNCTION, PART II ..... (2)
ORT 660 ORHTODONTIC DIAGNOSIS ..... (2)
ORT 661 ORTHODONTIC SEMINAR-CLINIC ..... (3)
ORT 662 ORTHODONTIC TECHNIQUE ..... (2)
ORT 664 BIOMECHANICS ..... (1)
ORT 710 MANAGEMENT OF COMPLEX OROFACIAL DEFORMITIES ..... (1)
ORT 748 MASTER'S THESIS RESEARCH ..... (0)
ORT 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
ORT 770 ORTHODONTIC SEMINAR ..... (1)
ORT 790 RESEARCH IN ORTHODONTICS ..... (1-5)
OSG 651 ANATOMICAL RELATIONSHIPS IN SURGERY ..... (1)
PER 626 ADVANCED CONCEPTS IN GENERAL DENTISTRY ..... (1)
PER 661 MODERN CONCEPTS IN PERIODONTICS ..... (2)
PER 748 MASTER'S THESIS RESEARCH ..... (0)
PER 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
PER 770 TREATMENT PLANNING SEMINAR ..... (2)
PER 772 PERIODONTAL BIOLOGY AND PATHOLOGY ..... (2)
PER 774 PERIODONTICS SURGICAL SEMINAR ..... (1)
PER 776 PERIODONTAL THERAPY SEMINAR ..... (1)
PER 790 RESEARCH IN PERIODONTICS ..... (1-3)

Diplomacy and International Commerce

GRADUATE FACULTY
Full Members
Professors
Michael Desch, John D. Stempel.
Associate Members
Adjunct Professors
Robert W. Pringle Jr.
Assistant Professors
Eugene Gholz.
Visiting Professors
Dag Ryen.
Emeritus Professors
Vincent Davis.

The Patterson School of Diplomacy and International Commerce offers an interdisciplinary master's degree and serves in an advisory capacity with respect to the Ph.D. programs in international studies within the several departments historically associated with the Patterson School. These include most of the social science departments in the College of Arts and Sciences (especially History and Political Science), and most of the departments in the College of Business and Economics (especially Economics, Finance, Management, and Marketing), plus a few others elsewhere on campus such as Agricultural (Development) Economics, and Communications.

The M.A. degree program can be tailored with considerable flexibility to meet the career needs of any particular student. Plan A (thesis) and Plan B (non-thesis) options are available. This program is especially useful for the student desiring a career in any of the non-academic fields in foreign affairs, such as international banking, international commerce, international journalism (foreign correspondent), or service with governmental agencies (such as the U.S. Department of State) or international organizations (such as the United Nations) in foreign affairs.

At least half of the 30-hour minimum for the M.A. degree must ordinarily be in one of the departments historically associated with the Patterson School. Each student is expected, in the absence of special circumstances, to take a methodology course such as accounting, statistics, or computer science at the graduate level. Most students will need three semesters to complete the 30 minimum hours for the M.A. degree. However, some students elect to remain for four semesters, going well beyond the 30-hour minimum, in order to obtain more breadth and/or depth in their desired fields of professional preparation. Students are encouraged to serve a career-related internship obtained with the Patterson School's assistance. This internship will typically be scheduled in the summer between the first and second academic years in residence, but there is enough flexibility for it to occur at other times and in some cases to extend beyond the normal ten-week limit.

To assure the interdisciplinary character of the degree, the M.A. candidate is expected to take 12 to 15 hours distributed in at least two departments outside the major departmental concentration. Courses acceptable to the program include those dealing with interstate and cultural relations, foreign policy, national and regional development processes, and others related to the student's career goals as approved by the School. Course work may be concentrated in a specific geographical area such as Latin America, Asia, or Europe, or more broadly focused in certain topical or functional aspects of international affairs.

The student must pass a written and an oral examination covering work in three subfields of study, with these subfields to be defined for the student in consultation with the Patterson School's Director of Graduate Studies.

The M.A. degree offered by the Patterson School matches up well with other graduate and professional programs such as law, for those students who might desire extended postgraduate career preparation. However, the Patterson School M.A. degree does not match up well with a doctoral degree. Students who contemplate obtaining a Ph.D. are advised to proceed directly toward that goal.

A number of non-service Patterson School fellowships are available from the bequest of James K. Patterson, the first President of the University.

Admission Requirements

Application forms for admission and for fellowship assistance should be requested from the Patterson School. GRE scores and official transcripts from each college or university attended are required by the Graduate School as part of the application procedure. In addition, each applicant is required to submit a brief statement (two or three pages, at most) explaining their special interest in the Patterson School program in terms of career goals, along with three academic letters of reference and three letters of character or employment reference to be mailed directly to the Director of the Patterson School. In addition, the Patterson School M.A. candidate must meet the Graduate School requirement for a reading knowledge of a modern foreign language.

GRADUATE COURSES

DIP 700 DYNAMICS OF DIPLOMACY ..... (3)
DIP 720 ECONOMIC STATECRAFT ..... (3)
DIP 730 CROSS-CULTURAL NEGOTIATION AND BARGAINING ..... (3)
DIP 748 MASTER'S THESIS RESEARCH ..... (0)
DIP 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
DIP 777 RESEARCH PROBLEMS IN INTERNATIONAL RELATIONS ..... (3)
DIP 780 INTERNATIONAL SCIENCE AND TECHNOLOGY POLICY ..... (3)
DIP 795 SPECIAL PROBLEMS IN DIPLOMACY AND INTERNATIONAL COMMERCE ..... (3)

Economics

GRADUATE FACULTY
Full Members
Professors
Mukhtar M. Ali, Mark Berger, Glenn C. Blomquist, James S. Fackler, John E. Garen, Richard E. Gift, William H. Hoyt, Frank Scott Jr., Eugenia Toma, Christopher Waller, David Wildasin.
Associate Professors
Chris Bollinger, Yoonbai Kim, Mark Toma, Aaron Yelowitz.
Associate Members
Assistant Professors
Marco Castenada, Elizabeth Newlon, Robert R. Reed III, Kathleen A. Trask.
Research Assistant Professors
Eric C. Thompson.
Emeritus Professors
Curtis Harvey, Charles Hultman, Joseph Krislov, John L. Madden, Randolph McGee, Don Soule, Bob Stroup.

Admission Requirements

Any student who is a graduate of a fully accredited institution of higher learning is eligible to apply for admission to the graduate program in economics. The final decision on matters of admission is made by the Graduate Studies Committee of the Department of Economics and is based on the student's academic profile and prospects for successful completion of the curriculum.

Minimum admission requirements are an undergraduate grade point average of 2.75, a graduate grade point average of 3.0, if applicable, and a minimum combined score of 1500 on the verbal, quantitative, and analytical sections of the GRE general test. However, meeting the minimum requirements does not guarantee admission.

After completing the application requirements for the Graduate School, prospective graduate students should also submit the following materials directly to the Director of Graduate Studies of the Economics Department:

1. A resume
2. A one-to-two page personal essay about why you want to attend graduate school in economics
3. Two or three confidential letters of recommendation

Along with the other application materials, the information in these items will be considered by the Economics Department in its admission and financial aid decisions.

Master of Science

Objectives

The M.S. in Economics is primarily for students who wish to have flexibility in a program of advanced study in economics. This degree program provides preparation for employment as an undergraduate teacher of economics in community colleges and as a researcher for government, business, and other organizations. The program can be structured to prepare a student for further graduate work in economics and related fields, but it is also suitable for students with strong interdisciplinary interests.

Degree Requirements

The recommended minimum prerequisite undergraduate preparation includes 6 hours of intermediate theory, 6 hours of statistics, and 6 hours of calculus. These can be taken in the program as additional work.

Requirements for the M.S. in economics are:

1. A minimum of 30 hours of graduate credit courses.
   a. The student must satisfactorily complete the following courses:
      ECO 590 Introduction to Quantitative Economics I
      ECO 601 Advanced Microeconomic Theory
      ECO 602 Macroeconomic Theory
      ECO 603 Research Methods and Procedures
      ECO 703 Introduction to Econometrics I
      The student must also satisfactorily complete either:
      ECO 701 Neoclassical Microeconomic Theory
      or
      ECO 702 Advanced Macroeconomic Theory
      and one course in an elective area of the Ph.D. program.
   b. courses taken outside of the Department of Economics must be approved by the Director of Graduate Studies to count toward the 30 hour requirement.
2. Successful completion of a final examination.
3. Minimum average of grade B (a GPA of 3.0) in all courses attempted for graduate credit after being admitted to Graduate School. Students obtaining six quality points below a B average will be dropped by the department.

Doctor of Philosophy

Objectives

The Ph.D. program is designed to enable the graduate to contribute to the advancement of economics. The program is also aimed at producing graduates who are qualified to teach, as well as engage in private sector and governmental research and consulting.

To attain these objectives, the program is designed to provide the student with the appropriate knowledge, understanding, skills and abilities, including:

1. An understanding of economic theory.

2. Skill in the use of quantitative techniques, specifically mathematics and statistics.
3. Specialization in a limited number of areas.
4. A knowledge of the broad social and political background of the economic environment.
5. Experience in the development of research projects throughout their entire program.
6. Research and writing skills that would lead to the publication of original research.
7. Competence in communicating economic knowledge to broad and diverse audiences.

Degree Requirements

The recommended minimum undergraduate preparation includes 6 hours of intermediate economic theory, 6 hours of statistics, and 6 hours of calculus.

Work for the degree of Doctor of Philosophy in Economics must conform to the general requirements of the Graduate School. The requirements for the degree are:

1. Economic Theory. The student must demonstrate competence in economic theory as demonstrated by passing a departmental written examination in economic theory. This examination will be given twice a year, at the beginning of the spring semester and the eight-week summer session. Students failing the examination will be given a second attempt; those failing on the second attempt will be dropped from the program.
   Minimum preparation for the written examination in economic theory can be achieved by taking the following core courses:

   ECO 601 Advanced Microeconomic Theory
   ECO 602 Macroeconomic Theory
   ECO 701 Neoclassical Microeconomic Theory
   ECO 702 Advanced Macroeconomic Theory

   In addition the student must satisfactorily complete ECO 704.
2. Statistics/Econometrics. The student must demonstrate competence in the area of statistics and econometrics. This competence may be demonstrated by satisfactory performance in the following courses:

   STA 424G Probability and Distribution Theory
   or
   ECO 603 Research Methods and Procedures
   ECO 703 Introduction to Econometrics I
   ECO 706 Introduction to Econometrics II
   or by passing a special examination.

3. Elective Areas. All Ph.D. students must choose two fields of study approved by the student's Advisory Committee. The two fields may be chosen from the following:

   Environmental and Resource Economics
   Industrial Organization
   International Economics
   Labor Economics
   Monetary Economics
   Public Economics

   Minimum course preparation for each field shall consist of at least two courses as determined by the student's Advisory Committee. In addition to the two chosen fields, the student is encouraged to take elective courses in other areas of economics, such as econometrics or economic theory, or in other disciplines such as Agricultural Economics, Finance, Marketing, Management, Mathematics, or Public Administration.
4. Supporting Work. At least nine hours of supporting course work must be selected. These courses must be approved by the student's Advisory Committee. This supporting work will allow the student to pursue more intensive study of one or both of the two chosen fields, or to pursue courses in other fields of economics. The supporting work cannot consist of 400 or 500 level courses, ECO 610 or ECO 611, ECO 652, or any of the core courses in economic theory (ECO 601, ECO 602, ECO 701, ECO 702, ECO 704, ECO 705) or econometrics (ECO 703, ECO 706).
5. Grades. Minimum average of grade B in all courses attempted for graduate credit after being admitted to the Graduate School. Students obtaining six quality points below a B average will automatically be dropped by the department.
6. Qualifying Examinations.
   a. Written Examination:
      The written examination must be taken in the student's two elective fields as part of the requirements for candidacy for the Ph.D. degree. This examination is given twice a year, at the beginning of the spring semester and at the beginning of the eight-week summer session. The written examination is prepared and graded by specialists in the respective fields. In the event that the student fails one or both parts of the examination, the student's Advisory Committee determines the conditions which must be met before another examination is given. The minimum time between examinations is four months. Two failures to pass the written examination constitute failure of the qualifying examination.
   b. Oral Examination:
      After passing the written qualifying examination, the Director of Graduate Studies will, on the advice of the Advisory Committee, schedule through the Graduate School an oral examination which will be administered by the Advisory Committee. The examination will ordinarily consist of the presentation and defense of a dissertation proposal.
7. The Ph.D. Dissertation. The dissertation will be based on original research on a significant topic. The dissertation will be defended in an oral examination

GRADUATE COURSES

ECO 450G THE ECONOMICS OF POVERTY AND WELFARE PROGRAMS .. (3)
ECO 465G COMPARATIVE ECONOMIC SYSTEMS ..... (3)
ECO 473G ECONOMIC DEVELOPMENT ..... (3)
ECO 491G APPLIED ECONOMETRICS ..... (3)
ECO 590 INTRODUCTION TO QUANTITATIVE ECONOMICS I (SAME AS AEC 590) ..... (3)
ECO 601 ADVANCED MICROECONOMIC THEORY ..... (3)
ECO 602 MACROECONOMIC THEORY ..... (3)
ECO 603 RESEARCH METHODS AND PROCEDURES IN ECONOMICS ..... (3)
ECO 610 MANAGERIAL ECONOMICS ..... (3)
ECO 611 MONEY, FINANCIAL MARKETS, AND THE ECONOMY ..... (3)
ECO 652 PUBLIC POLICY ECONOMICS (SAME AS PA/HA 652) ..... (3)
ECO 653 HEALTH ECONOMICS (SAME AS PA/HA 636) ..... (3)
ECO 654 BENEFIT-COST ANALYSIS (SAME AS PA 680) ..... (3)
ECO 670 ECONOMICS OF INTERNATIONAL FINANCIAL INSTITUTIONS . (3)
ECO 672 WORLD TRADE AND COMMERCIAL POLICY ..... (3)
ECO 674 AGRICULTURE AND ECONOMIC DEVELOPMENT (SAME AS AEC 626) ..... (3)
ECO 700 TEACHING METHODS IN BUSINESS (SAME AS BA 700) ..... (1)
ECO 701 NEOCLASSICAL MICROECONOMIC THEORY ..... (3)
ECO 702 ADVANCED MACROECONOMIC THEORY ..... (3)
ECO 703 INTRODUCTION TO ECONOMETRICS I ..... (3)
ECO 704 GENERAL EQUILIBRIUM ANALYSIS AND WELFARE ECONOMICS ..... (3)
ECO 705 MACROECONOMIC DYNAMICS ..... (3)
ECO 706 INTRODUCTION TO ECONOMETRICS II ..... (3)
ECO 707 RESEARCH SEMINAR IN ECONOMICS ..... (3)
ECO 710 ECONOMICS OF ORGANIZATION ..... (3)
ECO 711 ECONOMICS OF FIRM STRATEGY ..... (3)
ECO 715 HISTORY OF ECONOMIC THOUGHT ..... (3)

ECO 721 ENVIRONMENTAL ECONOMICS, REGULATION AND POLICY (SAME AS PA 727) ..... (3)
ECO 731 LABOR ECONOMICS I ..... (3)
ECO 732 LABOR ECONOMICS II ..... (3)
ECO 741 THEORY OF THE FIRM AND MARKET STRUCTURE ..... (3)
ECO 742 INDUSTRIAL ORGANIZATION ..... (3)
ECO 749 DISSERTATION RESEARCH ..... (0)
ECO 751 PUBLIC ECONOMICS ..... (3)
ECO 752 THE ECONOMICS OF POLICY ANALYSIS (SAME AS PA 752) ..... (3)
ECO 753 URBAN AND REGIONAL ECONOMICS ..... (3)
ECO 766 MONETARY ECONOMICS: THEORY ..... (3)
ECO 767 MONETARY ECONOMICS: POLICY ..... (3)
ECO 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
ECO 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
ECO 771 INTERNATIONAL ECONOMICS:INTERNATIONAL MONEY AND FINANCE ..... (3)
ECO 772 INTERNATIONAL ECONOMICS: TRADE THEORY AND POLICY (3)
ECO 773 OPEN ECONOMY MACROECONOMICS ..... (3)
ECO 781 OPTIMIZATION AND ECONOMIC THEORY I ..... (3)
ECO 782 OPTIMIZATION AND ECONOMIC THEORY II ..... (3)
ECO 790 TIME SERIES ANALYSIS (SAME AS STA 626) ..... (3)
ECO 792 ECONOMETRICS I ..... (3)
ECO 793 ECONOMETRICS II ..... (3)
ECO 796 SEMINAR ..... (1-6)
ECO 797 RESEARCH PROBLEMS IN ECONOMICS ..... (1-9)

Educational and Counseling Psychology

GRADUATE FACULTY

Full Members

Professors

Henry Cole, Ralph M. Crystal, Fred Danner, Stephen DeMers, H. Thompson Prout, Rory Remer, Timothy A. Smith, William Stilwell.

Associate Professors

Eric M. Anderman, Kathleen M. Chard, Phyllis Nash, Pamela Remer, Lynda Brown Wright.

Associate Members

Assistant Professors

Lynley Anderman, Lisa DeShea, Gregg M. Macmann, Leah Nellis, Sharon Rostosky.

Emeritus Professors

Dwight Auvenshine, James Barclay, Gordon Liddle, Judith Worell.

The Department of Educational and Counseling Psychology offers programs leading to the following degrees: Master of Science in Education (Plans A and B available), the Specialist in Education (Ed.S.), and the Doctor of Philosophy (Ph.D.). Applications to the Master of Arts in Education and the Doctor of Education (Ed.D.) degrees are no longer accepted. Students must apply for admission to both the Graduate School and to the Department. Doctoral applications must be completed by January 15 for summer/fall admission. All other degree applications are considered shortly after March 1.

Within the degree programs offered, there are three specializations possible: counseling psychology, educational psychology, and school psychology. Specializations are designed to provide students with both a background in behavioral and humanistic components of human learning and behavior, and the competencies to practice the skills designated for these programs. Admission to candidacy in any of these programs includes not only demonstrated skills in the academic area, but a judgment by the faculty of the program that the candidate demonstrates the personal and social characteristics as well as the professional commitment and ethical standards requisite for providing the services and demonstrating the skills associated with the program and the advanced degree.

For further information on specific program guidelines, contact the Director of Graduate Studies in the Department of Educational and Counseling Psychology.

Master of Science in Education

The Master of Science in Education degree is offered by the Department for individuals who will not meet state certification requirements in counseling or school psychology immediately upon completion. Individuals who are interested in specializing in educational psychology, human development, measurement, or research in education may obtain this degree. The educational psychology program, planned in consultation with an adviser, is flexible and tailored to individual needs. It consists of 36 hours of course work (including a 3-hour paper) or 30 hours of course work plus a 6-hour thesis. The work completed for this degree with an emphasis in either counseling or school psychology is applicable toward certification in either counseling or school psychology, respectively, but does not fulfill state certification requirements. The counseling program prerequisites include psychological testing and abnormal psychology.

Admission Requirements

Applicants to the M.S. Ed. Degree program leading to certification in school psychology must possess an undergraduate degree in psychology, education, or a closely allied field (e.g., rehabilitation counseling or pediatric nursing). Students are selected for this program based on their undergraduate grade point average, Graduate Record Examination scores, letters of recommendation, a personal statement describing their selection of a career in school psychology, a writing sample, and a personal interview. These data provide information regarding student diversity, interests, and prior academic accomplishments in relation to program goals. The program faculty use the Graduate School minimum requirements for undergraduate grade point average and Graduate Record Examination scores for admissions eligibility.

Specialist in Education

The Educational Specialist degree is offered in the areas of educational psychology, counseling psychology, and school psychology. Programs follow the general guidelines of the College of Education as specified earlier (see *Advanced Degrees* on page 20). The program includes the Master of Science in Education degree program plus a full-time one-semester internship and additional course work. This program leads to permission to sit for the State Board of Psychology Certification Examination in Counseling Psychology. The requirements for the State Board of Education certification in School Psychology include the work for the Master of Science in Education degree plus the additional Educational Specialist degree requirements.

Admission Requirements

Applicants to the Ed. S. degree program leading to certification in school psychology must possess a masters degree in psychology, education or a closely allied field (e.g., rehabilitation counseling or pediatric nursing). Students who did not complete the M.S. Ed. program in school psychology will likely need to complete additional requirements to replace required course work from the M.S. Ed. program. Students are selected for the Ed.S. program based on their undergraduate and prior graduate grade point average, Graduate Record Examination scores, letters of recommendation, a personal statement describing their selection of a career in school psychology, a writing sample, and a personal interview. These data provide information regarding student diversity, interests, and prior academic accomplishments in relation to program goals. The program faculty use the Graduate School minimum requirements for undergraduate and graduate grade point average, and Graduate Record Examination scores for admissions eligibility.

Doctor of Philosophy

The Ph.D. program is offered in the specialty areas of counseling psychology, educational psychology and school psychology under one departmental program. Both the Counseling Psychology and School Psychology Ph.D. programs are fully accredited by the American Psychological Association. A full-time, supervised one-year internship is required for both areas.

Various concentrations are possible within the Ph.D. program. Representative of these are: 1) learning, cognition, and curriculum design; 2) human development and social processes; 3) counseling psychology; 4) measurement, evaluation and research design; and 5) school psychology.

Admission Requirements

Applicants to the Ph.D. Degree program in school psychology must possess an undergraduate degree in psychology, education or a closely allied field (e.g., rehabilitation counseling or pediatric nursing). Students with prior graduate work at the masters or specialist degree will also be considered for admission to advanced graduate status. Students are selected for this program based on their undergraduate and prior graduate grade point average, Graduate Record Examination scores, letters of recommendation, a personal statement describing their selection of a career in school psychology, a writing sample, and a personal interview. These data provide information regarding student diversity, interests, and prior academic accomplishments in relation to program goals. The program faculty use the Graduate School minimum requirements for undergraduate grade point average, and Graduate Record Examination scores for admissions eligibility.

GRADUATE COURSES

EDP 518 MENTAL HYGIENE ..... (3)
EDP 522 EDUCATIONAL TESTS AND MEASUREMENTS ..... (3)
EDP 548 EDUCATIONAL PSYCHOLOGY ..... (3)
EDP 557 EDUCATIONAL STATISTICS ..... (3)
EDP 570 INTRODUCTION TO PSYCHOLOGICAL SERVICES IN SCHOOLS (3)
EDP 580 INTRODUCTION TO GIFTED EDUCATION (SAME AS EDC 580) .. (3)
EDP 600 LIFE SPAN HUMAN DEVELOPMENT AND BEHAVIOR (SAME AS FAM 654) ..... (3)
EDP 601 HUMAN SOCIAL DEVELOPMENT ..... (3)
EDP 603 HUMAN COGNITIVE DEVELOPMENT ..... (3)
EDP 604 LIFESPAN GENDER DEVELOPMENT ..... (3)
EDP 605 INTRODUCTION TO COUNSELING: TECHNIQUES I ..... (3)
EDP 606 PROFESSIONAL ISSUES IN COUNSELING PSYCHOLOGY ..... (3)
EDP 610 THEORIES OF LEARNING IN EDUCATION ..... (3)
EDP 611 HUMAN COGNITIVE LEARNING ..... (3)
EDP 612 DEVELOPMENT OF CREATIVITY AND CRITICAL THINKING ..... (3)
EDP 613 SOCIAL PSYCHOLOGICAL ISSUES IN EDUCATION ..... (3)
EDP 614 MOTIVATION AND LEARNING ..... (3)
EDP 615 PROSEMINAR IN HISTORY AND SYSTEMS OF PSYCHOLOGY (SAME AS PSY 620) ..... (3)
EDP 616 MULTICULTURAL PSYCHOLOGY (SAME AS AAS 616) ..... (3)
EDP 620 TOPICS AND METHODS OF EVALUATION (SAME AS ANT/EPE 620/SOC 622) ..... (3)
EDP 621 ADVANCED TOPICS AND METHODS OF EVALUATION (SAME AS ANT/EPE 621) ..... (3)
EDP 630 PRINCIPLES OF PSYCHOLOGICAL ASSESSMENT ..... (3)
EDP 640 INDIVIDUAL ASSESSMENT OF COGNITIVE FUNCTIONING ..... (3)
EDP 642 INDIVIDUAL ASSESSMENT OF PERSONALITY FUNCTIONING ... (3)
EDP 649 GROUP COUNSELING ..... (3)
EDP 650 DIAGNOSIS AND PSYCHOPATHOLOGY IN COUNSELING PSYCHOLOGY ..... (3)
EDP 652 THEORIES OF COUNSELING ..... (3)
EDP 656 METHODOLOGY OF EDUCATIONAL RESEARCH ..... (3)
EDP 658 PROBLEMS IN EDUCATIONAL PSYCHOLOGY ..... (1-3)
EDP 659 ADVANCED EDUCATIONAL MEASUREMENT ..... (3)
EDP 660 RESEARCH DESIGN AND ANALYSIS IN EDUCATION ..... (3)
EDP 661 TECHNIQUES OF COUNSELING II ..... (3)
EDP 664 PRE-MASTERS PRACTICUM IN COUNSELING PSYCHOLOGY .. (1-6)
EDP 665 POST-MASTERS PRACTICUM IN COUNSELING PSYCHOLOGY (1-6)
EDP 666 PSYCHOLOGY OF CAREER COUNSELING ..... (3)
EDP 669 DIAGNOSTIC CLASSIFICATION IN SCHOOL PSYCHOLOGY ..... (3)
EDP 670 PSYCHOEDUCATIONAL STRATEGIES OF INTERVENTION ..... (3)
EDP 671 SEMINAR IN PSYCHOEDUCATIONAL CONSULTATION IN SCHOOLS ..... (3)
EDP 675 PRACTICUM IN SCHOOL PSYCHOLOGY ..... (1-6)
EDP 676 PRACTICUM IN GIFTED EDUCATION (SAME AS EDC 676) ..... (3)
EDP 680 PARENT AND CHILD COUNSELING ..... (3)
EDP 683 TOPICS IN COUNSELING PSYCHOLOGY ..... (1-3)
EDP 685 ISSUES AND TECHNIQUES IN THE COUNSELING OF WOMEN ... (3)
EDP 686 THEORY AND METHODS IN MARRIAGE AND FAMILY THERAPY (3)
EDP 701 COGNITIVE-BEHAVIORAL COUNSELING ..... (3)
EDP 702 CAREER DEVELOPMENT: RESEARCH, THEORIES AND PRACTICES (SAME AS EDV 702) ..... (2-3)
EDP 703 SEMINAR IN CLINICAL SUPERVISION ..... (1-3)
EDP 707 MULTIVARIATE ANALYSIS IN EDUCATIONAL RESEARCH ..... (3)
EDP 708 INTERNSHIP IN EDUCATIONAL AND COUNSELING PSYCHOLOGY ..... (0-9)
EDP 748 MASTER'S THESIS RESEARCH ..... (0)
EDP 749 DISSERTATION RESEARCH ..... (0)
EDP 765 INDEPENDENT STUDY IN COUNSELING PSYCHOLOGY ..... (1-4)
EDP 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE. ..... (1-6)
EDP 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE. ..... (0-12)
EDP 776 SEMINAR IN SCHOOL PSYCHOLOGY (SUBTITLE REQUIRED) ... (3)
EDP 777 SEMINAR IN COUNSELING PSYCHOLOGY ..... (1-3)
EDP 778 SEMINAR IN EDUCATIONAL PSYCHOLOGY (SUBTITLE REQUIRED) ..... (3)
EDP 782 INDEPENDENT STUDY IN EDUCATIONAL PSYCHOLOGY ..... (1-3)

Educational Policy Studies and Evaluation

GRADUATE FACULTY

Full Members

Professors

Alan J. DeYoung, Thomas R. Guskey, Edward W. Kifer, John R. Thelin.

Associate Professors

Richard Angelo, Jeffery P. Bieber, Clinton Collins, Virginia Davis-Nordin, Beth Leah Goldstein, Susan J. Scollay, Karen W. Tice.

Adjunct Associate Professors

Terry Birdwhistell.

Associate Members

Adjunct Professors

Mac Warford.

Adjunct Associate Professors

Anthony Newberry.

Assistant Professors

Steve Clements, Jane Jensen.

Emeritus Professors

Juanita Fleming, Richard T. LaBrecque, Edgar Sagan.

The Department of Educational Policy Studies and Evaluation provides a unique opportunity for students who wish to develop the knowledge, judgment, and research skill required to address educational issues with flexibility and imagination. Although methodological finesse is prized within the department, degree programs do not emphasize 'methods' per se. The premium is placed on understanding questions of policy within the broader, often overlapping contexts in which they arise. Every effort is made to face the issues in ways which credit rather than ignore those contexts and their subtlety.

There are four broad areas of concentration. Higher Education focuses upon research concerning higher education policies, programs, and services. History and Philosophy of Education treats educational issues, problems, ideas, and institutions, using the tools of historical inquiry and philosophical analysis. The Socio-Cultural Study of Education provides sociological, anthropological, and comparative international perspectives. Evaluation focuses upon the relationships among ethics and education, policy analysis, and the development of evaluation systems for educational policies and programs.

The Department's faculty represents a wide spectrum of intellectual orientations, professional commitments, and experience. No less importantly, an uncommon degree of respect for both the difficulties and the necessities of interdisciplinary conversation prevails. These factors, together with flexibility in program planning at the course work stage (which includes opportunities for independent study, affiliations with faculty from other departments in the College and the University, as well as extramural internships), help to create an environment congenial to students with a variety of backgrounds and future goals. Some of the Department's graduates pursue traditional academic careers as faculty members or administrators. Others serve as policy analysts or evaluation specialists in school systems, state departments of education, or in other arenas outside the university.

Degree Programs

Master of Science in Education (M.S. in Education)

The master's degree is available for those who wish to explore topics in educational policy and evaluation for the first time, or to enhance what understanding they may already possess through direct experience a a teachers or as members of an administrative staff. For some it serves as a terminal degree; others use it to lay the foundation for doctoral study.

Admission Requirements

Admission requires a minimum grade point average of 2.75 in all undergraduate course work, a 3.0 GPA for any previous graduate work, as well as satisfactory completion of the Graduate Record Examination (GRE). A minimum total of 31 credit hours including the Proseminar (EPE 601) are required to complete the degree. No less than 19 hours of the total required must be taken within Educational Policy Studies. Planning in conjunction with an advisory committee, students choose a suitable array of courses from among the department's four areas of concentration, and then round out their programs with some appropriate support work from other departments within the College or the University.

Doctor of Education (Ed.D.)

The Ed.D. program in Educational Policy Studies and Evaluation provides advanced study for those who seek careers in the administration or evaluation of educational programs in schools, colleges, or other institutional settings. The program is also ideally suited for those who wish to develop the scholarly competence needed to serve as faculty members in colleges of education.

Admission Requirements

Admission to the program requires a master's degree (or thirty graduate credits applicable to an appropriate master's degree) and satisfactory completion of the Graduate Record Examination (GRE). Course work is planned by the student's advisory committee based on their assessment of his or her background and goals. All programs include the Proseminar (EPE 601) and course work chosen from the department's four general areas of concentration as well as support work in related fields within or outside the College of Education. Although some students' programs may require competency in a foreign language, there is no general foreign language requirement.

Doctor of Philosophy (Ph.D.) Studies in Higher Education

The degree of Doctor of Philosophy represents the same level of attainment as the Doctor of Education. Graduate students are held to a uniformly high standard of intellectual accomplishment at both the course work and dissertation stages, no matter what degree option they may pursue. Unlike the Ed.D. program, however, where students are free to choose the topic of research, the department's Ph.D. requires intensive research on some aspect of higher education. After taking the Proseminar, the student selects an area of concentration in either the history and philosophy of higher education, the socio-cultural study of higher education, or research and evaluation in higher education.

Admission Requirements

The requirements for admission are a minimum of 24 hours of graduate work (a master's degree in a discipline outside of Education is preferred) and satisfactory scores on the Graduate Record Examination (GRE).

Cooperative Doctoral Program

The department participates in the Cooperative Ed.D. program with regional universities. These programs permit qualified applicants to complete one year of graduate study beyond the master's degree at the regional institution. The remainder of the academic program must be completed at the University of Kentucky. The work of each student is directed by a committee composed of faculty from the two institutions.

GRADUATE COURSES

EPE 525 SPECIAL TOPICS SEMINAR IN EDUCATIONAL POLICY STUDIES AND EVALUATION (SUBTITLE REQUIRED) ..... (3)
EPE 554 CULTURE, EDUCATION AND TEACHING ABROAD (SAME AS EDC 554) ..... (3)
EPE 555 COMPARATIVE EDUCATION ..... (3)
EPE 570 GATHERING, ANALYZING, AND USING EDUCATIONAL DATA ... (3)
EPE 601 PROSEMINAR ..... (1)
EPE 602 SOCIAL POLICY ISSUES AND EDUCATION ..... (3)
EPE 603 EDUCATIONAL POLICY ANALYSIS: AN INTRODUCTION ..... (3)
EPE 612 INTRODUCTION TO HIGHER EDUCATION ..... (3)
EPE 620 TOPICS AND METHODS OF EVALUATION (SAME AS EDP/ANT 620/SOC 622) ..... (3)
EPE 621 ADVANCED TOPICS AND METHODS OF EVALUATION (SAME AS EDP/ANT 621) ..... (3)
EPE 622 COLLEGE AND UNIVERSITY FACULTY ..... (3)
EPE 628 ETHICS AND EDUCATIONAL DECISION MAKING ..... (3)
EPE 632 STUDENT SERVICES ..... (3)
EPE 640 PHILOSOPHY OF EDUCATION ..... (3)
EPE 651 HISTORY OF EDUCATION IN THE UNITED STATES ..... (3)
EPE 652 HISTORY OF EDUCATIONAL THOUGHT ..... (3)
EPE 653 HISTORY OF HIGHER EDUCATION ..... (3)
EPE 661 SOCIOLOGY OF EDUCATION (SAME AS SOC 661) ..... (3)
EPE 663 FIELD STUDIES IN EDUCATIONAL INSTITUTIONS ..... (3)
EPE 665 EDUCATION AND CULTURE ..... (3)
EPE 667 EDUCATION AND GENDER ..... (3)
EPE 670 POLICY ISSUES IN HIGHER EDUCATION ..... (3)
EPE 672 COLLEGE TEACHING AND LEARNING ..... (3)
EPE 674 THEORIES OF STUDENT DEVELOPMENT ..... (3)
EPE 676 ORGANIZATION AND ADMINISTRATION OF HIGHER EDUCATION ..... (3)
EPE 678 ECONOMICS OF HIGHER EDUCATION ..... (3)
EPE 679 MULTIPLE MEASURES IN EDUCATION AND EVALUATION ..... (3)
EPE 680 POLITICS OF HIGHER EDUCATION ..... (3)
EPE 681 HISTORY OF THE UNIVERSITY: GOVERNANCE AND ITS LEGAL CONTEXT ..... (3)
EPE 682 HIGHER EDUCATION AND THE LAW ..... (3)
EPE 683 AFFIRMATIVE ACTION AND FEDERAL REGULATION OF HIGHER EDUCATION ..... (3)
EPE 684 HIGHER EDUCATION AND ATHLETICS: A HISTORICAL ANALYSIS ..... (3)
EPE 685 THE RESEARCH UNIVERSITY ..... (3)
EPE 686 PHILANTHROPY AND HIGHER EDUCATION ..... (3)
EPE 690 THE COMMUNITY COLLEGE ..... (3)
EPE 748 MASTER'S THESIS RESEARCH ..... (0)
EPE 749 DISSERTATION RESEARCH ..... (0)
EPE 763 ADVANCED FIELD STUDIES ..... (3)
EPE 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
EPE 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)

EPE 773 SEMINAR IN EDUCATIONAL POLICY STUDIES AND EVALUATION ..... (1-3)
EPE 778 SEMINAR IN HISTORY OF EDUCATION IN KENTUCKY ..... (3)
EPE 785 INDEPENDENT STUDIES IN EDUCATIONAL POLICY STUDIES AND EVALUATION ..... (1-3)
EPE 790 INTERNSHIP IN EDUCATIONAL POLICY STUDIES AND EVALUATION ..... (1-6)
EPE 798 SEMINAR IN HIGHER EDUCATION ..... (3)

Electrical Engineering

GRADUATE FACULTY
Full Members
Professors
Jimmie J. Cathey, Henry Dietz, Stephen D. Gedney, Syed A. Nasar, Vijay P. Singh, Frederick C. Trutt, Bruce L. Walcott.
Associate Professors
Kevin D. Donohue, Laurence G. Hassebrook, J. Robert Heath, Lawrence E. Holloway, Ratnesh Kumar, James E. Lumpp, Janet Lumpp, Arthur V. Radun, William T. Smith, Keith W. Whites.
Associate Members
Associate Professors
Yu-Ming Zhang.
Assistant Professors
Robert J. Adams, Zhi Chen, Marty Emmert, Chaicheng Lu, Andrew Mason, Nader Mir.
Emeritus Professors
Eugene B. Bradley, Raymond J. Distler.

The Department of Electrical and Computer Engineering offers advanced studies leading to either a Master of Science in Electrical Engineering or a Doctor of Philosophy in Electrical Engineering.

Admission Requirements

A minimum grade point average of 3.0/4.0 on all undergraduate work is required for admission to the graduate program. A minimum GRE general test score of 1100 (combination of verbal and quantitative sections) must be obtained. Meeting the minimum requirements does not guarantee admission will be granted. Acceptance is based upon a competitive evaluation and on a space-available basis. An undergraduate degree in electrical engineering is preferred. Those applicants without a B.S.E.E. degree from an ABET accredited EE program should develop competence and demonstrate ability in the fundamentals of electrical engineering. Such students, before being admitted to full graduate standing within the department, must take (or have taken an equivalent of) a set of prescribed electrical engineering remedial courses. A minimum grade of C must be made in these courses.

Degree Requirements

For the M.S.E.E. degree, both the thesis and non-thesis options are available. The thesis option requires 24 hours of acceptable graduate level work plus the satisfying of the usual requirements for the thesis. The non-thesis option, Plan B, requires 30 hours of acceptable graduate work plus an additional three hours of EE 784, the special problems project. All students in their first semester of regular graduate work must select an academic adviser who will assist the student in formulating a graduate plan of study leading to their particular degree. This plan, which must receive the approval of the Director of Graduate Studies, must contain specific courses and a proposed thesis area or specialized project topic.

In order to assure a minimum breadth and level of understanding at the graduate level, all EE graduate students must take three of five specified courses from the major areas of electrical engineering. These courses are: EE 611 Deterministic Systems, EE 621 Electromagnetic Systems, EE 640 Stochastic Systems, EE 661 Solid State Electronics, EE 685 Digital Computer Structure. Although no formal course requirements exist for the Ph.D. program, students must satisfy the above mentioned core course requirements as well as the selection of an adviser and the formulation of the graduate plan of study.

The Department of Electrical and Computer Engineering has active research programs in the following areas: electric machines and drives, power electronics, computer engineering, power systems, control systems, electromagnetic compatibility, electromagnetic field theory, signal processing, communication systems, circuit theory, and solid state electronics. Departmental laboratories are well-equipped for students' research. In addition, the Center for Robotics and Manufacturing Systems at the University of Kentucky provides additional research opportunities in the area of robotics and manufacturing systems.

GRADUATE COURSES

EE 402G ELECTRONIC INSTRUMENTATION AND MEASUREMENTS (SAME AS PHY 402G) ..... (3)
EE 415G ELECTROMECHANICS ..... (3)
EE 416G ENERGY CONVERSION LABORATORY ..... (2)
EE 421G SIGNALS AND SYSTEMS I ..... (3)
EE 422G SIGNALS AND SYSTEMS II ..... (3)
EE 461G INTRODUCTION TO ELECTRONICS ..... (3)
EE 462G ELECTRONIC CIRCUITS LABORATORY ..... (2)
EE 468G INTRODUCTION TO ENGINEERING ELECTROMAGNETICS ..... (4)
EE 511 INTRODUCTION TO COMMUNICATION SYSTEMS ..... (3)
EE 512 DIGITAL COMMUNICATION SYSTEMS ..... (3)
EE 516 POWER SEMICONDUCTOR MODELS ..... (3)
EE 517 ADVANCED ELECTROMECHANICS ..... (3)
EE 518 ELECTRIC DRIVES ..... (3)
EE 522 ANTENNA DESIGN ..... (3)
EE 523 MICROWAVE CIRCUIT DESIGN ..... (3)
EE 524 SOLID STATE PHYSICS (SAME AS PHY 524) ..... (3)
EE 525 NUMERICAL METHODS AND ELECTROMAGNETICS ..... (3)
EE 527 ELECTROMAGNETIC COMPATIBILITY ..... (3)
EE 530 ROBOTICS ..... (3)
EE 537 ELECTRIC POWER SYSTEMS I ..... (3)
EE 538 ELECTRIC POWER SYSTEMS II ..... (3)
EE 560 SEMICONDUCTOR DEVICE DESIGN ..... (3)
EE 561 ELECTRIC AND MAGNETIC PROPERTIES OF MATERIALS (SAME AS MSE 561) ..... (3)
EE 562 ANALOG ELECTRONIC CIRCUITS ..... (3)
EE 564 DIGITAL ELECTRONIC CIRCUITS ..... (3)
EE 566 HYBRID MICROELECTRONICS (SAME AS MSE 566) ..... (3)
EE 567 INTRODUCTION TO LASERS AND MASERS (SAME AS PHY 567) .... (3)
EE 568 FIBER OPTICS (SAME AS MSE 568) ..... (3)
EE 569 ELECTRONIC PACKAGING SYSTEMS AND MANUFACTURING PROCESSES (SAME AS MSE 569) ..... (3)
EE 571 FEEDBACK CONTROL DESIGN ..... (3)
EE 572 DIGITAL CONTROL OF DYNAMIC SYSTEMS ..... (3)
EE 579 NEURAL ENGINEERING: MERGING ENGINEERING WITH NEUROSCIENCE (SAME AS BME 579) ..... (3)
EE 581 ADVANCED LOGICAL DESIGN ..... (3)
EE 582 HARDWARE DESCRIPTION LANGUAGES AND PROGRAMMABLE LOGIC ..... (3)
EE 583 MICROPROCESSORS ..... (3)
EE 584 INTRODUCTION TO VLSI DESIGN AND TESTING ..... (3)
EE 585 FAULT TOLERANT COMPUTING ..... (3)
EE 586 COMMUNICATION AND SWITCHING NETWORKS ..... (3)
EE 587 MICROCOMPUTER SYSTEMS DESIGN (SAME AS CS 587) ..... (3)
EE 595 INDEPENDENT PROBLEMS ..... (1-3)
EE 599 TOPICS IN ELECTRICAL ENGINEERING (SUBTITLE REQUIRED) (2-3)
EE 601 ELECTROMAGNETIC ENERGY CONVERSION I ..... (3)
EE 603 POWER ELECTRONICS ..... (3)
EE 604 SWITCH MODE CONVERTERS ..... (3)
EE 605 SYSTEMS FOR FACTORY INFORMATION AND CONTROL (SAME AS MFS 605) ..... (3)
EE 606 SEMINAR AND PROJECT IN MANUFACTURING SYSTEMS ENGINEERING (SAME AS MFS/ME 606) ..... (3)
EE 608 ADVANCED TOPICS IN POWER ELECTRONICS (SUBTITLE REQUIRED) ..... (3)
EE 611 DETERMINISTIC SYSTEMS ..... (3)
EE 613 OPTIMAL CONTROL THEORY ..... (3)
EE 619 PROBLEMS SEMINAR IN OPERATIONS RESEARCH (SAME AS STA 619/MA 613) ..... (3)
EE 621 ELECTROMAGNETIC FIELDS ..... (3)

EE 622 ADVANCED ELECTRODYNAMICS ..... (3)
EE 625 COMPUTATIONAL ELECTROMAGNETICS ..... (3)
EE 627 MULTICONDUCTOR TRANSMISSION LINES ..... (3)
EE 630 DIGITAL SIGNAL PROCESSING ..... (3)
EE 635 IMAGE PROCESSING (SAME AS CS 635) ..... (3)
EE 639 ADVANCED TOPICS IN SIGNAL PROCESSING AND COMMUNICATIONS ..... (3)
EE 640 STOCHASTIC SYSTEMS ..... (3)
EE 642 DISCRETE EVENT SYSTEMS (SAME AS CS 642) ..... (3)
EE 661 SOLID-STATE ELECTRONICS ..... (3)
EE 672 MOLECULAR PROPERTIES IN ELECTRONIC DEVICES ..... (3)
EE 682 SWITCHING THEORY (SAME AS CS 682) ..... (3)
EE 683 FINITE-STATE MACHINES (SAME AS CS 683) ..... (3)
EE 684 INTRODUCTION TO COMPUTER AIDED DESIGN OF VLSI CIRCUITS ..... (3)
EE 685 DIGITAL COMPUTER STRUCTURE ..... (3)
EE 686 ADVANCED COMPUTER ARCHITECTURE DESIGN ..... (3)
EE 688 NEURAL NETWORKS (SAME AS CS 688) ..... (3)
EE 699 TOPICS IN ELECTRICAL ENGINEERING (SUBTITLE REQUIRED) .. (3)
EE 748 MASTER'S THESIS RESEARCH ..... (0)
EE 749 DISSERTATION RESEARCH ..... (0)
EE 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
EE 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (12)
EE 783 SPECIAL PROBLEMS IN ELECTRICAL ENGINEERING ..... (1-3)
EE 784 RESEARCH PROJECT IN ELECTRICAL ENGINEERING ..... (3)

EGR 537 NUMERICAL ANALYSIS (SAME AS CS/MA 537) ..... (3)
EGR 599 TOPICS IN ENGINEERING (SUBTITLE REQUIRED) ..... (1-3)
EGR 611 BOUNDARY ELEMENT METHODS IN ENGINEERING (SAME AS ME 611) ..... (3)
EGR 621 FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)
EGR 622 ADVANCED FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)

Engineering

Director of Graduate Studies
G. T. Lineberry

The College of Engineering offers a multidisciplinary Master of Engineering degree. This graduate program is intended to serve the educational needs of engineers from accredited baccalaureate programs employed by Kentucky industries, consulting firms, and government agencies. The degree is offered in its entirety through off-campus modes of delivery, predominantly via Interactive Television (ITV), to sites at cooperating comprehensive universities, community colleges, independent colleges, and other institutions throughout the Commonwealth. *The program is not offered outside Kentucky and is not suitable for on-campus, degree-seeking students.*

The courses are also available to students in post-baccalaureate status who wish to enhance their knowledge and skills in a specific area, but who are not pursuing an advanced degree.

The five program areas of concentration are: 1) environmental engineering, 2) manufacturing systems design, 3) advanced processing systems, 4) electronics and process control, and 5) mining engineering.

Admission Requirements

Before enrolling in an extended-campus engineering course, applicants must gain admission (regular, provisional, or post-baccalaureate) to the University of Kentucky Graduate School. United States citizens or U.S. permanent residents must complete the following admission requirements:

- Submit a completed application for admission to the UK Graduate School. Distance Learning Programs will coordinate the process for Distance Learning students.
- Obtain a bachelor's degree in an engineering discipline from an ABET- accredited institution
- Present a minimum undergraduate grade point average on all undergraduate course work of 2.75 based on a 4.0 scale.
- Send two official transcripts from each college or university previously attended.
- Submit a minimum score of 1000 on the combined verbal and quantitative sections of the Graduate Record Examination (must be satisfied before completing nine credit hours of graduate work).
- Pay the required Graduate School applicants fee of $30 for domestic applicants.

Degree Requirements

The Master of Engineering degree requires 30 credit hours of course work. Students who enroll in the program will develop an individualized program which has an 18 credit hour area of concentration. The area of concentration will be multidisciplinary and will correspond to the student's career objectives. The remaining 12 credit hours will be in supporting electives, drawn from Engineering, Business and Economics, Mathematics, or other areas. At least one-half of the courses must be at the 600 level or above. Each student will have a major professor who, with two or more additional faculty, will constitute the student's advisory committee. This Committee will review and approve the student's proposed individualized plan of study and will administer the student's final exam (on campus).

Students may utilize any graduate course offered by UK or by other recognized graduate degree-granting institutions, providing these graduate courses meet the program requirements, are approved by the student's committee, and are taken in graduate status. Transfer of credit for courses taken from other institutions or for courses taken in another degree program or as a post-baccalaureate student is limited to 9 credit hours.

For copies of sample individualized curricula in the program's five areas of concentration or for current information on course offerings and sequencing, contact:

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E-mail: gtli@engr.uky.edu
www.engr.uky.edu/extended_campus/

English

GRADUATE FACULTY
Full Members
Professors
Dale Bauer, Susan Bordo, Oscar Ronald Dathorne, James Baker Hall, Gordon Hutner, Kevin Kiernan, Jerome Meckier, David L. Miller, Dana D. Nelson, Gregory T. Stump, Gregory A. Waller, Steven Weisenburger.
Associate Professors
Jonathan Allison, Virginia L. Blum, Anna Bosch, David Durant, Janet C. Eldred, Walter Foreman, Joyce M. MacDonald, Armando Prats, Randall Roorda, Ellen B. Rosenman, Arthur Wrobel.
Associate Members
Associate Professors
Thomas Clayton.
Assistant Professors
Aime Ellis, Jennifer B. Lewin, Yolanda Pierce, Michael Uebel.
Emeritus Professors
R. Gerald Alvey, Thomas Blues, William R. Campbell, John Cawelti, John L. Clubbe, Guy Davenport, Lee Elioseff, Joseph Gardner, John L. Greenway, Joan Hartwig, Stephen Manning, Donald Ringe, John Shawcross, Larry Swingle.

The Department of English offers programs leading to the M.A. and to the Ph.D. degrees. The master's degree may be obtained either by Plan A or Plan B, as defined in this Bulletin. Special areas of concentration for Plan A are Linguistics, Film, and Teaching English as a Second Language (TESL), but require half their programs to be in literature. M.A. courses are to be chosen from both British and American literature. A reading knowledge of one foreign language is required, as is a final oral examination based on a reading list.

The Ph.D. course requirements include a minimum of 24 hours, four seminars taken at the University of Kentucky, and coverage of the periods of British and American literature. The qualifying examination is both written and oral. The written examinations are based on reading lists drawn up by the student in consultation with the Advisory Committee; one will address a broadly defined historical period, the other, a genre, mode, or topic explored through a range of cultural and historical settings. The oral examination focuses on the dissertation prospectus, topic, and context. Ph.D. candidates are required to have a reading knowledge of at least one foreign language. Specific language(s) required and degree of proficiency expected, if beyond Graduate School requirements, will be established by the student's Advisory Committee. There is no specific requirement in a minor area, but such work may be required by a student's Advisory Committee if it appears essential to the major research or concentration interest.

Admission Requirements

Admission to both programs is based on course grades, GRE scores, three letters of recommendation, a brief (1-2 pages) statement of purpose and an analytical writing sample, preferably a critical essay. While each applicant is judged on his or her merits, normal expections are an undergraduate GPA of 3.0 or above, a graduate GPA of 3.5 or above, and scores of at least 70-80% on two of the three sections of the GRE Aptitude test. (We do not require the subject test.) Students who receive their master's degree from the University of Kentucky will be evaluated by their examining committee, so they need not submit letters of recommendation or a writing sample. Applicants for the master's program who do not have the equivalent of a University of Kentucky major in English may be asked to complete some advanced undergraduate work in English in addition to the courses normally required for the M.A. Applicants to the doctoral program who do not have an M.A. in English may be asked to complete additional courses beyond the minimum of 24 hours for the PhD. Applicants with teaching experience must submit a teaching portfolio. The deadline for applications for assistantships and fellowships is January 15th.

All applicants must also fulfill the admission requirements of the Graduate School.

A detailed and current statement of requirements for both the M.A. and Ph.D. is available on request from the Director of Graduate Studies in English.

GRADUATE COURSES

ENG 414G INTRODUCTION TO MODERN ENGLISH LINGUISTICS ..... (3)
ENG 420G STUDIES IN MEDIEVAL ENGLISH LITERATURE ..... (3)
ENG 421G CHAUCER ..... (3)
ENG 422G ENGLISH RENAISSANCE: 1500-1600 ..... (3)
ENG 423G ENGLISH RENAISSANCE: 1600-1660 ..... (3)
ENG 425G SHAKESPEARE SURVEY ..... (3)
ENG 426G SHAKESPEARE STUDIES (SUBTITLE REQUIRED) ..... (3)
ENG 428G MILTON ..... (3)
ENG 430G THE RESTORATION AND EARLY 18TH CENTURY: 1660-1730 .. (3)
ENG 431G THE LATER 18TH CENTURY: 1730-1780 ..... (3)
ENG 435G THE ROMANTIC MOVEMENT: 1780-1815 ..... (3)
ENG 436G THE ROMANTIC MOVEMENT: 1815-1830 ..... (3)
ENG 439G VICTORIAN PERIOD: 1860-1900 ..... (3)
ENG 440G THE EIGHTEENTH CENTURY ENGLISH NOVEL ..... (3)
ENG 441G THE NINETEENTH CENTURY ENGLISH NOVEL ..... (3)
ENG 442G THE TWENTIETH CENTURY ENGLISH NOVEL ..... (3)
ENG 446G TWENTIETH CENTURY BRITISH LITERATURE ..... (3)
ENG 448G ENGLISH DRAMA: (SUBTITLE REQUIRED) ..... (3)
ENG 451G STUDIES IN AMERICAN LITERATURE BEFORE 1860: (SUBTITLE REQUIRED) ..... (3)
ENG 452G STUDIES IN AMERICAN LITERATURE: 1860-1920 ..... (3)
ENG 453G STUDIES IN AMERICAN LITERATURE SINCE 1900 ..... (3)
ENG 454G AMERICAN NOVEL BEFORE 1900 ..... (3)
ENG 455G MODERN AMERICAN NOVEL ..... (3)
ENG 465G STUDIES IN AN AUTHOR (SUBTITLE REQUIRED) ..... (3)
ENG 466G MODERN DRAMA ..... (3)
ENG 473G SURVEY OF WORLD FOLKLORE ..... (3)
ENG 478G APPALACHIAN FOLKLORE ..... (3)
ENG 480G SPECIAL STUDIES IN FILM (SUBTITLE REQUIRED) ..... (3)
ENG 490G TOPICS OF GENDER IN LITERARY STUDIES (SUBTITLE REQUIRED) ..... (3)
ENG 507 ADVANCED WORKSHOP IN IMAGINATIVE WRITING (SUBTITLE REQUIRED) ..... (3)
ENG 509 COMPOSITION FOR TEACHERS ..... (3)
ENG 510 AMERICAN ENGLISH (SAME AS LIN 510) ..... (3)
ENG 512 MODERN ENGLISH GRAMMAR (SAME AS LIN 512) ..... (3)
ENG 513 TEACHING ENGLISH AS A SECOND LANGUAGE (SAME AS EDC/LIN 513) ..... (3)
ENG 514 TESL MATERIALS AND METHODS (SAME AS EDC/LIN 514) ..... (3)
ENG 515 PHONOLOGICAL ANALYSIS (SAME AS ANT/LIN 515) ..... (3)
ENG 516 GRAMMATICAL ANALYSIS (SAME AS ANT/LIN 516) ..... (3)
ENG 519 INTRODUCTION TO OLD ENGLISH ..... (3)
ENG 562 COMPARATIVE LITERATURE: SEVENTEENTH THROUGH NINETEENTH CENTURY ..... (3)
ENG 563 COMPARATIVE LITERATURE: TWENTIETH CENTURY ..... (3)
ENG 569 HISTORY OF LITERARY CRITICISM II ..... (3)
ENG 570 SELECTED TOPICS FOR ADVANCED STUDIES IN LITERATURE (SUBTITLE REQUIRED) ..... (3)
ENG 572 STUDIES IN ENGLISH FOR TEACHERS (SUBTITLE REQUIRED) .. (3)
ENG 581 AESTHETICS OF FILM ..... (3)
ENG 600 BIBLIOGRAPHY AND METHODS OF RESEARCH ..... (3)
ENG 607 GRADUATE WRITING WORKSHOP (SUBTITLE REQUIRED) ..... (3)
ENG 609 COMPOSITION FOR TEACHERS ..... (3)
ENG 610 STUDIES IN RHETORIC ..... (3)
ENG 617 STUDIES IN LINGUISTICS (SUBTITLE REQUIRED) (SAME AS LIN 617) ..... (3)
ENG 618 HISTORY OF THE ENGLISH LANGUAGE ..... (3)
ENG 619 BEOWULF ..... (3)
ENG 620 STUDIES IN MIDDLE ENGLISH LITERATURE ..... (3)
ENG 621 STUDIES IN CHAUCER ..... (3)
ENG 622 STUDIES IN RENAISSANCE LITERATURE: 1500-1660 ..... (3)
ENG 625 STUDIES IN RENAISSANCE DRAMA EXCLUSIVE OF SHAKESPEARE ..... 3)
ENG 626 STUDIES IN SPENSER, SHAKESPEARE, MILTON ..... (3)
ENG 630 STUDIES IN ENGLISH LITERATURE: 1660-1720 ..... (3)
ENG 631 STUDIES IN ENGLISH LITERATURE: 1720-1780 ..... (3)
ENG 635 STUDIES IN LITERATURE: 1780-1815 ..... (3)
ENG 636 STUDIES IN LITERATURE: 1815-1830 ..... (3)
ENG 638 STUDIES IN ENGLISH LITERATURE: 1830-1860 ..... (3)
ENG 639 STUDIES IN ENGLISH LITERATURE: 1860-1900 ..... (3)
ENG 640 STUDIES IN THE 19TH CENTURY BRITISH NOVEL ..... (3)
ENG 642 STUDIES IN MODERN BRITISH LITERATURE ..... (3)
ENG 643 STUDIES IN MODERN BRITISH AND AMERICAN POETRY ..... (3)
ENG 651 STUDIES IN AMERICAN LITERATURE BEFORE 1860 ..... (3)
ENG 652 STUDIES IN AMERICAN LITERATURE: 1860-1900 ..... (3)
ENG 653 STUDIES IN AMERICAN LITERATURE SINCE 1900 ..... (3)
ENG 656 BLACK AMERICAN LITERATURE (SAME AS AAS 656) ..... (3)
ENG 660 MODERN CRITICAL THEORY ..... (3)
ENG 681 STUDIES IN FILM ..... (3)
ENG 682 STUDIES IN FICTION ..... (3)
ENG 683 STUDIES IN DRAMA ..... (3)
ENG 684 STUDIES IN POETRY ..... (3)
ENG 690 STUDIES IN LITERATURE AND GENDER (SUBTITLE REQUIRED) (3)
ENG 691 READINGS IN RHETORIC (SUBTITLE REQUIRED) ..... (1)
ENG 700 TUTORIAL FOR PH.D. CANDIDATES ..... (3)
ENG 720 SEMINAR IN MEDIEVAL LITERATURE ..... (3)
ENG 722 SEMINAR IN RENAISSANCE STUDIES (SUBTITLE REQUIRED) .... (3)
ENG 730 SEMINAR IN 18TH CENTURY LITERATURE ..... (3)
ENG 735 SEMINAR IN ROMANTIC LITERATURE ..... (3)
ENG 738 SEMINAR IN VICTORIAN LITERATURE ..... (3)
ENG 740 SEMINAR IN 20TH CENTURY BRITISH LITERATURE ..... (3)
ENG 748 MASTER'S THESIS RESEARCH ..... (0)
ENG 749 DISSERTATION RESEARCH ..... (0)

ENG 750 SEMINAR IN COLONIAL LITERATURE ..... (3)
ENG 751 SEMINAR IN AMERICAN LITERATURE: 1800-1860 ..... (3)
ENG 752 SEMINAR IN AMERICAN LITERATURE: 1860-1900 ..... (3)
ENG 753 SEMINAR IN AMERICAN LITERATURE SINCE 1900 ..... (3)
ENG 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
ENG 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
ENG 771 SEMINAR IN SPECIAL TOPICS ..... (3)
ENG 780 DIRECTED STUDIES ..... (1-6)
ENG 781 SEMINAR IN FILM (SUBTITLE REQUIRED) ..... (3)

Entomology

GRADUATE FACULTY
Full Members
Professors
Grayson C. Brown, Kenneth F. Haynes, Daniel A. Potter, Bruce A. Webb, David H. Wise, Kenneth V. Yeargan.
Associate Professors
Charles W. Fox, Michael J. Sharkey.
Associate Members
Extension Professors
Ricardo T. Bessin, Douglas W. Johnson, Michael F. Potter, Lee H. Townsend.
Assistant Professors
Stephen L. Dobson, S. R. Palli, Lynne K. Rieske-Kinney.
Adjunct Assistant Professors
John D. Sedlacek.
Emeritus Professors
Douglas L. Dahlman, Paul H. Freytag, Fred W. Knapp, Juan G. Rodriguez.

The Department of Entomology offers graduate work leading to the Master of Science and the Doctor of Philosophy degrees. Individual graduate programs are planned by students in consultation with their adviser and the Director of Graduate Studies. Study and research are available in various areas of entomology including applied entomology, behavior, biological control, host plant resistance, insect biology, ecology, genetics, molecular biology, immature insects, medical and veterinary entomology, biochemistry, physiology, taxonomy, araneology, and acarology. Plans A and B are offered for the master's degree.

Admission Requirements

Admission to the Graduate program in Entomology is based on the recommendation of the Entomology Graduate Program Committee. Minimum admission requirements include an overall undergraduate grade point average of 3.0 and an overall graduate grade point average of 3.25. Applicants whose native language is English must score at least 1600 on the combined verbal, quantitative and analytical portions of the Graduate Record Examination (GRE) general test. Those whose native language is not English must have a Test of English as a Foreign Language (TOEFL) with a minimum paper score of 550 or a computer score of 213 (the computer score will be converted to a paper score). They must also have a combined score of 1650 on the TOEFL plus the quantitative and analytical portions of the GRE. The Program requires three letters of recommendation. Meeting the minimum requirements does not guarantee admission. These minimal requirements may be waived in exceptional cases if sufficient additional evidence is presented regarding the ability of the students to do graduate work. Admission to the Graduate Program in Entomology does NOT automatically guarantee financial assistance to the student.

Degree Requirements

During their first year of graduate studies, M.S. (Plan A) and Ph.D. students are required to prepare a formal written research proposal encompassing a thorough literature review, clear statement of objectives, and materials and methods of the project. A research proposal seminar will be presented to the Department upon completion of the written research proposal. An exit seminar, usually presented during the last semester of the student's tenure, is required for M.S. and Ph.D. students. August graduates will present their seminar in the spring. M.S. students using the Plan B option will be required to provide a detailed outline of their practicum to their Advisory Committee. The practicum must be a minimum of 3 credit hours (maximum of 6 credit hours) and may consist of library research, special problems, internships, etc., as agreed upon by the student and major professor, and approved by the Advisory Committee.

M.S. and Ph.D. students will be required to post a formal notification of scheduled examinations on the notice board in the main departmental office two weeks prior to the examination date.

All M.S. and Ph.D. students must satisfy the following core course requirements:

1. An undergraduate course in general entomology. Students who have not had such a course must take ENT 300.
2. ENT 564 Insect Taxonomy
3. STA 570 Basic Statistical Analysis

M.S. candidates using the Plan A option must take a minimum of one course from two of the following categories. M.S. candidates using the Plan B option and Ph.D. candidates must take a minimum of one course from all three groups.

1. ENT 568 Insect Behavior
   or
   ENT 665 Insect Ecology
   or
   ENT 625 Insect-Plant Relationships
2. ENT 567 Applications of Genetics
   or
   ENT 635 Insect Physiology and Internal Morphology
3. ENT 530 Integrated Pest Management
   or
   ENT 680 Biological Control of Insects
   or
   ENT 574 Advanced Applied Entomology

In all cases, an equivalent graduate level course from another institution is acceptable upon approval of the Advisory Committee. Such approval will not decrease the minimum number of credits required, but simply will permit the student to take other courses. In addition, each M.S. candidate must take two semesters of ENT 770, Entomological Seminar, (or approved equivalent seminars) and Ph.D. candidates must take four semesters of approved seminars.

GRADUATE COURSES

ENT 530 INTEGRATED PEST MANAGEMENT ..... (3)
ENT 561 MEDICAL ENTOMOLOGY (SAME AS BIO 561) ..... (4)
ENT 564 INSECT TAXONOMY (SAME AS BIO 564) ..... (4)
ENT 567 APPLICATIONS OF GENETICS (SAME AS BIO 567) ..... (4)
ENT 568 INSECT BEHAVIOR (SAME AS BIO 568) ..... (3)
ENT 574 ADVANCED APPLIED ENTOMOLOGY ..... (4)
ENT 605 EMPIRICAL METHODS IN ECOLOGY AND EVOLUTION (SAME AS BIO/FOR 605) ..... (2)
ENT 606 CONCEPTUAL METHODS IN ECOLOGY AND EVOLUTION (SAME AS BIO/FOR 606) ..... (3)
ENT 607 ADVANCED EVOLUTION (SAME AS BIO/FOR 607) ..... (2)
ENT 608 BEHAVIORAL ECOLOGY AND LIFE HISTORIES (SAME AS BIO/FOR 608) ..... (2)
ENT 609 POPULATION AND COMMUNITY ECOLOGY (SAME AS BIO/FOR 609) ..... (2)
ENT 613 BEHAVIORAL ECOLOGY AND COMPARATIVE NEUROBIOLOGY (SAME AS BIO/PSY/PGY/ANA 613) ..... (2)
ENT 614 TECHNIQUES IN BEHAVIORAL ECOLOGY AND COMPARATIVE NEUROBIOLOGY (SAME AS BIO/PSY/PGY/ANA 614) ..... (2)
ENT 625 INSECT-PLANT RELATIONSHIPS (SAME AS BIO 625) ..... (3)

ENT 635 INSECT PHYSIOLOGY AND INTERNAL MORPHOLOGY (SAME AS BIO 635) ..... (4)
ENT 660 IMMATURE INSECTS ..... (3)
ENT 665 INSECT ECOLOGY (SAME AS BIO 665) ..... (3)
ENT 680 BIOLOGICAL CONTROL ..... (3)
ENT 684 PHYLOGENETIC SYSTEMATICS (SAME AS BIO 684) ..... (3)
ENT 695 SPECIAL TOPICS IN ENTOMOLOGY (SUBTITLE REQUIRED) ..... (3)
ENT 748 MASTER'S THESIS RESEARCH ..... (0)
ENT 749 DISSERTATION RESEARCH ..... (0)
ENT 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
ENT 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
ENT 770 ENTOMOLOGICAL SEMINAR ..... (1)
ENT 780 SPECIAL PROBLEMS IN ENTOMOLOGY AND ACAROLOGY ... (2-3)
ENT 790 RESEARCH IN ENTOMOLOGY AND ACAROLOGY ..... (1-6)

Family Studies

GRADUATE FACULTY
Full Members
Professors
Gregory Brock, Claudia Peck Heath, Gladys Hildreth, William L. Turner, Retia S. Walker.
Associate Professors
Darla Botkin, Cynthia M. Cole, Raymond E. Forgue, B. Jan McCulloch, Kimberly F. Townley, Stephan Wilson.
Associate Members
Professors
Robert Flashman, Samuel Quick.
Associate Professors
Mary Lou Routt, Donna Smith.
Assistant Professors
Karen Alexander, Jennifer Grisham-Brown, Rena Hallam, Celia Ray Hayhoe, Angeline O'Malley.
Extension Assistant Professors
Carole Gnatuk.
Emeritus Professors
Lisa Barclay, John Crosby, M. O'Neal Weeks.

The Department of Family Studies offers the Master of Science and the Ph.D. in Family Studies.

Master of Science in Family Studies

There are two programs of study from which the student may choose for the Master of Science: Early Childhood Education and Family Studies. Within Family Studies, students also may complete a planned program of study in Marriage and Family Therapy including a one-year practicum experience or may pursue the Family Science option.

Students pursuing Early Childhood Education take four core courses totaling twelve hours: FAM 652, FAM 690, FAM 710, and an advanced development course (FAM 654, 655, or 659). In conjunction with an advisor, they select additional courses to achieve an advanced level of competency in four of six broad areas within the subject matter of Early Childhood Education. The Early Childhood Education program requires 30 credit hours: Plan A requires 24 course credit hours plus a master's thesis; Plan B requires 30 credit hours plus an integrative scholarly project. The program does not qualify the student for a teaching certificate, but may be taken in conjunction with requirements for a teaching certificate. The deadline date for application for the fall semester is January 15 and the deadline for applying for spring admission is August 15.

Students pursuing the Family Studies program take a group of core courses totaling 12 hours: FAM 652, FAM 654, FAM 668 and FAM 690. The Family Studies program requires 36 credit hours. At least two-thirds of the minimum requirements must be in regular courses, and at least three-quarters of the minimum requirements must be in courses numbered on the 600 or 700 level. Plan A requires 36 hours, six of which are thesis credit hours, 12 core course hours, and 18 hours of major electives. Plan B requires 36 credit hours, 12 of which are core courses and 24 of which are major electives. Students are admitted to the Family Studies program for both the fall and spring semesters. The deadline date for application for the fall semester is January 15 and the deadline for applying for spring admission is August 15.

Admission Requirements

Applicants must submit a Family Studies Departmental application including a statement of their academic goals for the M.S. degree. Three letters of recommendation should be sent directly from the writer (not the applicant) to the Director of Graduate Studies. Successful applicants should have a 3.0 GPA on their undergraduate (the Graduate School requires a 2.75 or above) and any previous graduate level work. GRE scores of 1350 total on the verbal, quantitative and analytical portions of the exam are expected. However, the review process will use a combination of GRE times GPA so that several combinations could lead to a total (e.g., 4000 as a total could be achieved as GRE x GPA with 1177 x 3.4 = 4000 or with 1455 x 2.75 = 4000). Previous paid and unpaid professional experience is a plus.

Students pursuing Marriage and Family Therapy complete a 51-hour program of prescribed courses that is accredited by the American Association for Marriage and Family Therapy Commission on Accreditation. This Plan B non-thesis program includes course work in the following areas: a) Theoretical Foundations of Marital and Family Therapy; b) Assessment and Treatment in Marital and Family Therapy; c) Human Development and Family Studies; d) Research; e) Ethics and Professional Issues; and f) Supervised Clinical Practice. Students are admitted to the Marriage and Family Therapy program for the fall term only. The deadline for applying for admission is January 15.

Doctor of Philosophy

The Department of Family Studies offers the Ph.D. in Family Studies. The doctoral program is a research-based curriculum that provides a solid grounding in family science focused upon prevention intervention. Individuals completing the Ph.D. in Family Studies will be qualified for positions at colleges and universities; program evaluation positions in public and private settings focusing on the family; and administrative positions in public and private social service prevention and intervention settings. Financial assistance is available for doctoral students, including teaching and research assistantships.

Admission Requirements

Students who have earned a Master's degree may apply to the Ph.D. program. Applicants must submit a Family Studies Departmental application including a statement of clearly developed academic and research goals for the Ph.D. degree. Three letters of recommendation should be sent directly from the writer (not the applicant) to the Director of Graduate Studies. Successful Ph.D. applicants should have a 3.2 GPA on all previous graduate level work. GRE scores of 1500 total on the verbal, quantitative and analytical portions of the exam are expected. However, the review process will use a combination of GRE times GPA so that several combinations could lead to a total (e.g., 5000 as a total could be achieved as GRE x GPA with 1667 x 3.0 = 5000 or with 3.6 x 1380 = 5000). Previous paid and unpaid research experience is also desired.

For additional information, contact the Director of Graduate Studies, Department of Family Studies, 315 Funkhouser, University of Kentucky, Lexington, KY 40506-0054 or (859) 257-7750.

GRADUATE COURSES

FAM 502 FAMILIES AND CHILDREN UNDER STRESS ..... (3)
FAM 509 THE U.S. FAMILY IN HISTORICAL PERSPECTIVE (SAME AS SOC 509/ HIS 596) ..... (3)
FAM 544 CULTURAL DIVERSITY IN AMERICAN CHILDREN AND FAMILIES (3)
FAM 550 CHILDREN AND FAMILY IN APPALACHIA (SAME AS ANT 527) ..... (3)
FAM 551 WOMAN IN CONTEMPORARY SOCIETY ..... (3)
FAM 552 ADMINISTRATION AND SUPERVISION IN EARLY CHILDHOOD EDUCATION PROGRAMS ..... (3)
FAM 553 PATIENT-CHILD RELATIONSHIPS ACROSS THE LIFECYCLE ..... (3)
FAM 554 WORKING WITH PARENTS ..... (3)
FAM 555 FOSTERING COGNITIVE DEVELOPMENT IN CHILDREN ..... (3)
FAM 557 INFANT DEVELOPMENT ..... (3)
FAM 563 FAMILIES, LEGISLATION AND PUBLIC POLICY ..... (3)
FAM 585 AGING AND ENVIRONMENT (SAME AS GEO 585/GRN 585) ..... (3)
FAM 601 SYSTEMIC FAMILY DEVELOPMENT ..... (3)
FAM 602 CONSUMER ECONOMICS ..... (3)
FAM 603 THEORY AND RESEARCH IN FAMILY ECONOMICS AND MANAGEMENT ..... (3)
FAM 622 THE FAMILY'S ROLE IN EARLY CHILDHOOD EDUCATION (SAME AS EDS 622) ..... (3)
FAM 624 PERSPECTIVES ON HUMAN SEXUALITY (SAME AS SW 624) ..... (3)
FAM 652 READINGS IN FAMILY THEORY AND RESEARCH ..... (3)
FAM 654 LIFE SPAN HUMAN DEVELOPMENT AND BEHAVIOR (SAME AS EDP 600) ..... (3)
FAM 655 THEORY AND DYNAMICS OF HUMAN DEVELOPMENT ..... (3)
FAM 656 ADULT DEVELOPMENT AND AGING IN THE FAMILY ..... (3)
FAM 657 FAMILY SYSTEMS THEORY ..... (3)
FAM 658 ADOLESCENT DEVELOPMENT ..... (3)
FAM 659 ADVANCED CHILD DEVELOPMENT ..... (3)
FAM 660 AGING AND FAMILY VALUES (SAME AS GRN 660) ..... (3)
FAM 668 ALLOCATION OF FAMILY RESOURCES ..... (3)
FAM 685 PROFESSIONAL ISSUES IN MARRIAGE AND FAMILY INTERVENTION ..... (3)
FAM 686 THEORY AND METHODS IN MARRIAGE AND FAMILY THERAPY ..... (3)
FAM 687 TREATMENT MODALITIES IN MARRIAGE AND FAMILY THERAPY ..... (3)
FAM 688 FAMILIES IN CRISIS: INTERVENTION STRATEGIES ..... (3)
FAM 690 FAMILIAL AND DEVELOPMENTAL RESEARCH METHODS ..... (3)
FAM 699 FIELD EXPERIENCES IN FAMILY STUDIES ..... (1-3)
FAM 710 CURRENT TRENDS IN EARLY CHILDHOOD EDUCATION AND CARE ..... (3)
FAM 748 MASTER'S THESIS RESEARCH ..... (0)
FAM 749 DISSERTATION RESEARCH ..... (0)
FAM 752 SEMINAR IN FAMILY THEORY CONSTRUCTION (SAME AS SOC 752) ..... (3)
FAM 759 SPECIAL ADVANCED TOPICS IN FAMILY STUDIES ..... (1-3)
FAM 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
FAM 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
FAM 773 SEMINAR IN FAMILY ECONOMICS AND MANAGEMENT ..... (3)
FAM 775 SEMINAR IN HUMAN DEVELOPMENT AND FAMILY RELATIONS ..... (1-3)
FAM 776 PROSEMINAR IN MARRIAGE AND FAMILY THERAPY: (SUBTITLE REQUIRED) ..... (1-3)
FAM 785 ADVANCED PROBLEMS IN INDIVIDUAL AND FAMILY DEVELOPMENT ..... (1-3)
FAM 786 ADVANCED PROBLEMS IN FAMILY ECONOMICS AND MANAGEMENT ..... (1-3)
FAM 787 SUPERVISED EXPERIENCE IN THE PRACTICE OF MARRIAGE AND FAMILY THERAPY ..... (1-6)
FAM 790 ADVANCED METHODS IN FAMILY STUDIES RESEARCH ..... (3)

HES 596 SPECIAL PROBLEMS IN HUMAN ENVIRONMENTAL SCIENCES (1-3)
HES 600 RESEARCH METHODOLOGY IN HUMAN ENVIRONMENTAL SCIENCES (SAME AS DMT 600) ..... (3)

Forestry

GRADUATE FACULTY
Full Members
Professors
James M. Ringe.
Associate Professors
Mary A. Arthur, Paul J. Kalisz, Michael J. Lacki, David B. Wagner.
Associate Members
Extension Professors
Thomas G. Barnes, Donald Graves, Deborah B. Hill, Jeffrey W. Stringer.
Associate Professors
David Maehr.
Assistant Professors
Charles Rhoades.
Emeritus Professors
Calvin Liu, Robert Muller, Gerald Nordin, Louis Shain, Allan J. Worms.

The department offers graduate work leading to the Master of Science in Forestry. Degrees are awarded under Plan A, which requires a minimum of 24 semester hours of graduate course work plus an acceptable thesis, and under Plan B, which requires a minimum of 30 semester hours of graduate course work. The prospective student must have an undergraduate degree in forestry or take a core of forestry courses as part of the master's program.

The study and research program may be directed to any one of the following areas; wood science, forest soils, forest hydrology and water quality, forest ecology, tree physiology, forest genetics, forest wildlife, forest biometrics, forest economics, silviculture, and conservation biology and forest restoration.

Students interested in pursuing further graduate studies (Ph.D.) in the forestry area may enter one of several interdepartmental programs such as animal science, plant physiology, crop science, soil science and agricultural economics.

Admission Requirements

Applicants must hold an awarded four-year baccalaureate degree from an accredited institution of higher learning, preferably in Forestry or a Natural Resource discipline. Applicants are expected to have an overall undergraduate grade point average of 3.0 and a combined verbal and quantitative score on the Graduate Record Examination of 1000. A résumé, three letters of recommendation, and a statement of purpose must be sent directly to the Forestry Director of Graduate Studies. To be considered for an award of departmental financial aid, all application materials must be submitted prior to February 1. Each applicant must identify a graduate faculty member who agrees to serve as his/her major advisor.

Additional information concerning the graduate program in forestry may be obtained at <forestry2.ca.uky.edu/gradstud.htm>, or by contacting the Director of Graduate Studies at dwagner@uky.edu.

GRADUATE COURSES

FOR 460G FOREST WATERSHED MANAGEMENT ..... (3)
FOR 564 FOREST SOILS (SAME AS PLS 564) ..... (3)
FOR 599 INDEPENDENT WORK IN FORESTRY ..... (1-3)
FOR 601 RESEARCH METHODS IN FORESTRY ..... (3)
FOR 602 RENEWABLE NATURAL RESOURCES IN A GLOBAL PERSPECTIVE ..... (3)
FOR 605 EMPIRICAL METHODS IN ECOLOGY AND EVOLUTION (SAME AS ENT/BIO 605) ..... (2)
FOR 606 CONCEPTUAL METHODS IN ECOLOGY AND EVOLUTION (SAME AS ENT/BIO 606) ..... (3)
FOR 607 ADVANCED EVOLUTION (SAME AS ENT/BIO 607) ..... (2)
FOR 608 BEHAVIORAL ECOLOGY AND LIFE HISTORIES (SAME AS ENT/BIO 608) ..... (2)
FOR 609 POPULATION AND COMMUNITY ECOLOGY (SAME AS BIO/ENT 609) ..... (2)
FOR 612 FOREST ECOSYSTEM DYNAMICS ..... (3)
FOR 620 SPECIAL TOPICS IN FORESTRY (SUBTITLE REQUIRED) ..... (1-3)
FOR 622 PHYSIOLOGY OF PLANTS I (SAME AS PLS/BIO 622) ..... (3)
FOR 623 PHYSIOLOGY OF PLANTS II (SAME AS PLS/BIO 623) ..... (3)
FOR 630 WILDLIFE HABITAT ANALYSIS ..... (3)
FOR 662 QUANTITATIVE METHODS IN RENEWABLE RESOURCE MANAGEMENT (SAME AS AEC 662) ..... (3)
FOR 748 MASTER'S THESIS RESEARCH ..... (0)
FOR 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
FOR 770 FORESTRY SEMINAR (SUBTITLE REQUIRED) ..... (1)
FOR 781 SPECIAL PROBLEMS IN FORESTRY ..... (1-3)
FOR 791 RESEARCH IN FORESTRY ..... (1-3)

French

GRADUATE FACULTY

Full Members

Professors

John D. Erickson, Rupert T. Pickens.

Associate Professors

Jeffrey N. Peters, Suzanne R. Pucci.

Associate Members

Assistant Professors

Elisabeth Arnould-Bloomfield, Daniel Desormeaux.

Emeritus Professors

Jean D. Charron, Phillip A. Duncan, Raymond C. La Charité, Virginia La Charité, John A. Rea.

The Department of Modern and Classical Languages, Literatures and Cultures offers a graduate program leading to the M.A. degree in French according to Plan B only.

Admission Requirements

Applicants for admission must first be approved by the Graduate School. They are then reviewed by the Director of Graduate Studies in Modern and Classical Languages, Literatures and Cultures, who consults with the French graduate faculty before returning recommendations to the Graduate School.

An applicant may be provisionally admitted without meeting all of the minimum standards if other factors, including letters of recommendation, the writing sample, and the tape-recorded reading, indicate an ability to perform satisfactorily in graduate-level work. Presentation of a minimum Graduate Record Examination score (GRE) or a minimum Grade Point Average (GPA) does not, however, automatically guarantee admission to the program, as the final decision depends on an evaluation of all materials submitted and the faculty's assessment of the applicant's potential for successful graduate study.

In addition to assuring that the applicant has met the admission requirements of the Graduate School, the Department carefully evaluates the following materials:

1. Evidence of completion of the equivalent of the University of Kentucky's undergraduate major in French. Applicants who fail to meet this standard may be admitted provisionally to the Master's program, but may be required to take additional undergraduate work in French. Graduate credit will not be awarded for undergraduate courses, but graduate courses taken simultaneously count in the degree program.
2. A minimum 3.25 undergraduate GPA in French on a four-point scale.
3. A combined score of 1700-1800 or better on the three sections of the GRE. In special cases, a student without the GRE may be accepted provisionally for the first semester, during which the examination must be taken.
4. Three letters of recommendation addressing the applicant's qualifications for graduate work in French.
5. A writing sample in French by the applicant (analytical prose, typically a graded term paper; not a creative work).
6. Non-native speakers of French must submit a cassette recording (3-4 minutes) of themselves reading a contemporary prose passage in French (a newspaper or magazine article, not a literary work).
7. Non-native speakers of English must submit a cassette recording of themselves reading a similar passage in English. In addition, they must fulfill the Graduate School's Test of English as a Foreign Language (TOEFL) requirement.
8. A statement of purpose in seeking the M.A. in French.
9. Students in post-baccalaureate programs in French or other areas at the University of Kentucky who wish to transfer to the French Master's program will be evaluated also on their post-bacc course work and on recommendations from their instructors, even though admission may be delayed until the end of the semester in which they are enrolled. A maximum of six hours in post-bac course work may be transferred to the Master's program.

Letters of recommendation, writing samples, cassette recordings, and statements of purpose should be sent to the Director of Graduate Studies, Department of Modern and Classical Languages, Literatures and Cultures, 1055 Patterson Office Tower, University of Kentucky, Lexington KY 40506-0027. For admission in the fall semester with a Teaching Assistantship award, all materials should be received by the Department no later than March 15.

Degree Requirements

Students select a program from a variety of courses listed below in French literature, language, civilization, and literature and the arts. They are then examined over their program. The master's examination for each candidate is prepared and evaluated by a committee of three members of the French graduate faculty which will consider the candidate's course program in preparing the examination.

Candidates must also demonstrate a reading knowledge of another foreign language. The M.A. examination is administered in November, April and July. Applications for the examination should be made to the Director of Graduate Studies no later than four months prior to the date of examination.

For further information concerning the M.A. program in French, consult the Director of Graduate Studies.

All courses listed below are offered on a rotating basis and not less frequently than every eighth semester.

GRADUATE COURSES

FR 450G TOPICS IN FRENCH CULTURE (SUBTITLE REQUIRED) ..... (3)
FR 465G TOPICS IN FRENCH LITERATURE AND CULTURE IN TRANSLATION (SUBTITLE REQUIRED) ..... (3)
FR 470G STUDIES IN FRENCH LITERATURE (SUBTITLE REQUIRED) ..... (3)
FR 502 FRENCH LITERATURE AND THE ARTS: LA BELLE EPOQUE ..... (3)
FR 504 TOPICS IN FRENCH LITERATURE AND CULTURE (SUBTITLE REQUIRED) ..... (3)
FR 507 INTERPRETATION AND STYLE ..... (3)
FR 510 LINGUISTIC STRUCTURE OF MODERN FRENCH ..... (3)
FR 516 INTRODUCTION TO EARLY FRENCH ..... (3)
FR 550 FRANCE TODAY ..... (3)
FR 553 TEACHING OF FRENCH ..... (3)
FR 570 SEMINAR IN FRENCH LANGUAGE PEDAGOGY ..... (1)
FR 601 POETIC VISION (SUBTITLE REQUIRED) ..... (3)
FR 602 NARRATIVE TRADITION (SUBTITLE REQUIRED) ..... (3)
FR 604 THE TRAGIC MODE (SUBTITLE REQUIRED) ..... (3)
FR 605 COMIC FICTION (SUBTITLE REQUIRED) ..... (3)
FR 606 LITERATURE OF THE MIDDLE AGES (SUBTITLE REQUIRED) ..... (3)
FR 607 STUDIES IN RENAISSANCE LITERATURE (SUBTITLE REQUIRED) . (3)
FR 609 SEVENTEENTH-CENTURY STUDIES (SUBTITLE REQUIRED) ..... (3)
FR 617 EIGHTEENTH-CENTURY STUDIES (SUBTITLE REQUIRED) ..... (3)
FR 619 NINETEENTH-CENTURY STUDIES (SUBTITLE REQUIRED) ..... (3)
FR 621 TWENTIETH-CENTURY STUDIES (SUBTITLE REQUIRED) ..... (3)
FR 630 FRENCH LANGUAGE, LITERATURE AND CULTURE OUTSIDE FRANCE (SUBTITLE REQUIRED) ..... (3)
FR 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
FR 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
FR 780 SPECIAL STUDIES IN FRENCH ..... (3)

Geography

GRADUATE FACULTY
Full Members
Professors
Stanley Brunn, John Paul Jones, P.P. Karan, Thomas Leinbach, Jonathan Phillips, Karl Raitz, Graham Rowles, Gary Shannon, Richard Ulack.
Associate Professors
Paola Bacchetta, Wolfgang Natter, Susan M. Roberts, Richard H. Schein, John F. Watkins.
Associate Members
Professors
Brian Rich.
Associate Professors
Michael Kennedy.
Assistant Professors
Anna Secor, Doug Slaymaker, Alice Turkington.
Emeritus Professors
Wilford.A. Bladen.

The Department of Geography offers both M.A. (Plan A and Plan B) and Ph.D. programs. Emphasis is placed on theoretical and conceptual training in the student's chosen field of interest. A variety of philosophical and methodological approaches are encouraged. The strength of the program lies in its focus upon close faculty-student interaction, flexibility in designing an appropriate plan of study, and research training in small seminar environments.

The primary objective of the graduate program is to prepare students for research-oriented careers in government, industry, and universities. Emphasis in graduate seminars is on developing the background and skills necessary for original contributions to geographic knowledge.

Faculty have regional expertise in South and South-East Asia, Japan, the Himalayas, southern Africa, the Caribbean, Central and Eastern Europe, the states of the former Soviet Union, Western Europe, and North America (particularly Appalachia). Research clusters of the faculty include:

Cultural Studies: Interpretation and analysis of the built environment; space and representation; the political economy of landscape production; regional imagery; media studies; popular culture; the social construction of community; historic preservation; recreation, tourism and society.

Development Studies: Policies and practices of development; political economy perspectives on development; postcolonial theory; economic restructuring and transition economies; household survival strategies; the relations between migration, transportation, tourism, and economic development; environmental management and sustainable development.

Political Geography: Electoral systems; state theory; post-Cold War democratization; the geography of revolutionary change; critical geopolitics; political economy of environmental movements; political economy of globalization discourses and practices.

Social Geography: Health care, disease, and society; the geography of AIDS; the geography of aging and the life course; poverty and social policy; race and gender; human behavior in space and time; population and migration studies; spatial structure of social networks; transportation of disadvantaged groups.

Social Theory: Theories of human spatiality; Marxist, neo-Marxist, and post-Marxist theory; regulation theory; postmodernism and post-structuralism; feminist theory; space, landscape, and identity; geographic thought and society; technology and social change.

Urban and Economic: The local state urban change; urban social conflict; neighborhood change; economic impacts of transportation systems; urban historical geography; regional economic restructuring; global financial systems; urban morphology; space-time convergence; information and communications; geography of multinational corporations; impacts of foreign direct investment and trade.

In addition, students have access to faculty with expertise in a variety of methodological areas, including: quantitative, especially multivariate statistics and modeling; mathematical demography; automated and production cartography; GIS; remote sensing applied to human geography; air photo interpretation; qualitative research methodologies, including experiential methods and realism; field techniques.

Admission Requirements

In addition to the basic graduate school requirements, the following materials should be sent to the Department of Geography:

- Three letters of reference from persons who can evaluate your potential for success in our graduate program
- Statement of your goals and objectives in which you discuss your areas of scholarly interest, any research directions you may wish to pursue, and how your interests and goals fit with the University of Kentucky's graduate program in Geography (about two pages, double-spaced)
- Letter requesting consideration for assistantships and fellowships (if desired)
- Curriculum vitae (if available)

It is recommended that copies of the materials (if available) sent to the Graduate School also be sent to the DGS. Once all these materials have arrived in the Department of Geography, the application is reviewed by the faculty members on the Department's Graduate Committee. The committee's evaluation does not place emphasis on any one element of the application, rather the combination of elements must convince the Graduate Committee members that the applicant has great potential for success in our program.

The Department welcomes students with undergraduate concentrations in related fields. In some cases students without an academic background in Geography may be required to complete additional course work so as to gain appropriate foundational knowledge.

There is no official deadline for applications. However, applicants are encouraged to submit all application material before February 1st to ensure consideration for admission for the following fall semester. Admission decisions are made on a rolling basis, but decisions about financial aid usually take place in March and April.

Degree Requirements

Applicants for the Ph.D. in geography must conform to the general requirements of the Graduate School as set forth in the first part of this Bulletin. Requirements in the Ph.D. program consist of 1) core courses (GEO 700 or other advanced methods course, 702, 707) in the theory and methodology of geography; 2) seminars, independent study and directed research in one of the research foci noted above or in cognate disciplines; 3) successful examination in one modern foreign language; 4) a written and oral qualifying examination in theory, methodology, and the student's selected topical focus; and 5) a dissertation based on original research. A program designed to meet the professional academic goals of each doctoral candidate is outlined in consultation with the Director of Graduate Studies and the candidate's Advisory Committee.

Applicants for the M.A. degree in geography follow a broadly based program which consists of: 1) required courses (GEO 600, 702, and 710); 2) elective courses in geography and cognate disciplines according to the student's academic goals and career objectives; and 3) the completion of a master's thesis (Plan A). The non-thesis Ph.D.-preparatory program (Plan B) consists of: 1) required courses (GEO 600, 700 or other advanced methods course, 702, 707, 710); 2) elective courses in geography and cognate disciplines according to the student's academic goals and career objectives; 3) a written examination; 4) a publication-quality research paper; and 5) an oral examination. The Plan A option requires 24 credit hours, the Plan B, 30 credit hours.

GRADUATE COURSES

GEO 405G CARTOGRAPHIC PRODUCTION AND DESIGN ..... (3)
GEO 406G FIELD STUDIES (SUBTITLE REQUIRED) ..... (1-9)
GEO 409G GEOGRAPHIC INFORMATION SYSTEMS AND SCIENCE: FUNDAMENTALS ..... (3)
GEO 420G URBAN AND REGIONAL PLANNING ..... (3)
GEO 430G PHYSICAL GEOGRAPHY FOR TEACHERS ..... (3)
GEO 452G WORLD GEOGRAPHY FOR TEACHERS ..... (3)
GEO 475G MEDICAL GEOGRAPHY ..... (3)
GEO 490G AMERICAN LANDSCAPES ..... (3)
GEO 505 PRACTICUM IN CARTOGRAPHY ..... (3)
GEO 506 INTRODUCTION TO COMPUTER CARTOGRAPHY ..... (3)
GEO 512 GI SYSTEMS & SCIENCE: ANALYTICAL ISSUES ..... (3)
GEO 514 GI SYSTEMS & SCIENCE: TECHNICAL ISSUES ..... (3)
GEO 516 GI SYSTEMS & SCIENCE: MANAGEMENT ISSUES ..... (3)
GEO 530 BIOGEOGRAPHY AND CONSERVATION (SAME AS BIO 530) ..... (3)
GEO 542 POLITICAL GEOGRAPHY ..... (3)
GEO 544 HUMAN POPULATION DYNAMICS ..... (3)
GEO 545 TRANSPORTATION GEOGRAPHY ..... (3)
GEO 546 TOURISM AND RECREATION GEOGRAPHY ..... (3)
GEO 547 GEOGRAPHY OF INFORMATION AND COMMUNICATIONS ..... (3)
GEO 551 JAPANESE MULTINATIONAL CORPORATIONS (SAME AS JPN 551) ..... (3)
GEO 560 INDEPENDENT WORK IN GEOGRAPHY ..... (3)
GEO 565 TOPICS IN GEOGRAPHY ..... (3)
GEO 585 AGING AND ENVIRONMENT (SAME AS FAM 585/GRN 585) ..... (3)
GEO 600 ANALYTIC METHODS IN GEOGRAPHY ..... (3)
GEO 643 URBAN TRANSPORTATION PLANNING (SAME AS CE 631) ..... (3)
GEO 655 SPECIAL STUDY OF SYSTEMATIC GEOGRAPHY ..... (3)
GEO 700 ADVANCED ANALYTICAL METHODS IN GEOGRAPHY ..... (3)
GEO 702 CONCEPTS IN GEOGRAPHY ..... (3)
GEO 705 ADVANCED GEOGRAPHIC METHODS (SUBTITLE REQUIRED) .. (3)
GEO 706 ADVANCED FIELD STUDIES (SUBTITLE REQUIRED) ..... (1-9)
GEO 707 DEVELOPMENT OF GEOGRAPHIC THOUGHT ..... (3)
GEO 708 GEOGRAPHIC INFORMATION SYSTEMS RESEARCH METHODOLOGIES ..... (3)
GEO 710 RESEARCH METHODOLOGY AND DESIGN ..... (3)
GEO 711 CULTURAL STUDIES AND GEOGRAPHY (SUBTITLE REQUIRED) ..... (3)
GEO 712 DEVELOPMENT STUDIES AND GEOGRAPHY (SUBTITLE REQUIRED) ..... (3)
GEO 713 ECONOMIC GEOGRAPHY: (SUBTITLE REQUIRED) ..... (3)
GEO 714 POLITICAL GEOGRAPHY: (SUBTITLE REQUIRED) ..... (3)
GEO 715 GEOGRAPHY AND SOCIAL THEORY (SUBTITLE REQUIRED) .... (3)
GEO 717 URBAN GEOGRAPHY (SUBTITLE REQUIRED) ..... (3)
GEO 720 REGIONAL STUDIES (SUBTITLE REQUIRED) ..... (3)
GEO 721 TOPICAL SEMINAR IN PHYSICAL GEOGRAPHY (SUBTITLE REQUIRED) ..... (3)
GEO 722 SOCIAL GEOGRAPHY: (SUBTITLE REQUIRED) ..... (3)
GEO 731 EARTH SURFACE SYSTEMS ..... (3)
GEO 740 RESEARCH INTERNSHIP (SUBTITLE REQUIRED) ..... (1-6)
GEO 741 TEACHING PRACTICUM ..... (1)
GEO 742 PREPARING FUTURE FACULTY IN GEOGRAPHY ..... (1)
GEO 748 MASTER'S THESIS RESEARCH ..... (0)
GEO 749 DISSERTATION RESEARCH ..... (0)
GEO 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
GEO 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
GEO 772 SPECIAL RESEARCH PROBLEMS IN GEOGRAPHY ..... (1-6)

Geology

GRADUATE FACULTY
Full Members
Professors
R. I. Barnhisel, Frank R. Ettensohn, Frank Huggins, William A. Thomas.
Associate Professors
Alan Fryar, David Moecher, Kieran O'Hara, Susan M. Rimmer.
Associate Members
Professors
Ralph Ewers.
Adjunct Professors
James C. Hower.
Assistant Professors
Shelley Kenner, Slawek Tulaczyk, Edward W. Woolery.
Adjunct Assistant Professors
James Drahovzal.
Emeritus Professors
Donald Haney, Nicholas Rast, Lyle V.A. Sendlein, Ronald Street, John Thrailkill.

The Department of Geological Sciences offers graduate work leading to the M.S. degree (thesis option) and to the Ph.D. degree in disciplines represented by Departmental faculty. The focus of the program is to prepare students for careers in industry, government and academia.

Admission Requirements

The credentials of each applicant are considered individually and applicants, from other scientific disciplines are encouraged to apply. Applicants should, have a minimum grade point average of 2.75 at the undergraduate level and, knowledge in the basic sciences equivalent to that of B.S. graduates of this department. Deficiencies in geosciences, allied sciences and mathematics must be removed by such course work as the departmental committee on graduate studies may specify.

Degree Requirements

Candidates for the M.S. degree must complete 24 credit hours and submit a thesis that demonstrates ability to conduct sound research. Candidates for the Ph.D. must pass a written and oral Qualifying Examination, submit and defend a dissertation based on original and significant research, and satisfy the Graduate School requirements. Students are encouraged to tailor their course curriculum to their academic interests and career goals both within, and in allied fields outside the Department.

The principal areas of study include shallow seismic geophysics, hydrogeology, coal geology, stratigraphy, structural geology, and petrology. Resources for the conduct of graduate research include: the Pirtle geology library, a state-of-the-art microcomputer laboratory, petrographic microscopes, field vehicles and a staffed thin section laboratory. Analytical facilities include electron microprobe, X-ray diffraction, fluid inclusion analysis and organic petrography. Geophysical facilities include the Kentucky Digital Seismic network, a 48-channel digital seismic reflection/refraction unit with energy source, a resistivity unit, and magnetometers.

GRADUATE COURSES

GLY 401G INVERTEBRATE PALEOBIOLOGY AND EVOLUTION ..... (3)
GLY 420G STRUCTURAL GEOLOGY ..... (4)
GLY 450G SEDIMENTARY GEOLOGY ..... (4)
GLY 513 REMOTE SENSING AND AERIAL PHOTOGRAPHY ..... (3)
GLY 530 LOW TEMPERATURE GEOCHEMISTRY ..... (3)
GLY 552 SEDIMENTARY PETROLOGY ..... (3)
GLY 555 STRATIGRAPHY ..... (3)
GLY 570 SEMINAR IN GEOLOGICAL SCIENCES (SUBTITLE REQUIRED) .. (1)
GLY 575 GEODYNAMICS ..... (3)
GLY 579 GROUNDWATER GEOPHYSICS ..... (3)
GLY 585 HYDROGEOLOGY ..... (3)
GLY 610 TOPICS IN HYDROGEOLOGY AND SURFICIAL PROCESSES (SUBTITLE REQUIRED) ..... (3)
GLY 620 TECTONICS ..... (3)

GLY 624 ADVANCED STRUCTURAL GEOLOGY ..... (3)
GLY 625 TOPICS IN APPLIED GEOPHYSICS AND ENGINEERING GEOLOGY (SUBTITLE REQUIRED) ..... (3)
GLY 645 TOPICS IN PETROLOGY AND GEOCHEMISTRY (SUBTITLE REQUIRED) ..... (3)
GLY 652 TECTONICS AND STRATIGRAPHY ..... (3)
GLY 703 PALEOECOLOGY/PALEONTOLOGY SEMINAR (SUBTITLE REQUIRED) ..... (1-3)
GLY 715 COAL GEOLOGY SEMINAR ..... (2)
GLY 730 SEMINAR IN TECTONICS AND STRATIGRAPHY (SUBTITLE REQUIRED) ..... (3)
GLY 741 CLAY MINERALOGY (SAME AS PLS 741) ..... (3)
GLY 745 SEMINAR IN PETROLOGY AND GEOCHEMISTRY (SUBTITLE REQUIRED) ..... (3)
GLY 748 MASTER'S THESIS RESEARCH ..... (0)
GLY 749 DISSERTATION RESEARCH ..... (0)
GLY 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
GLY 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
GLY 782 INDIVIDUAL WORK IN GEOLOGY ..... (1-3)
GLY 790 RESEARCH IN GEOLOGICAL SCIENCES ..... (0-6)

German

GRADUATE FACULTY
Full Members
Professors
Jeannine Blackwell, Theodore Fiedler, Gerald J. Janecek.
Associate Professors
Michael T. Jones, Wolfgang Natter, Linda Kraus Worley.
Associate Members
Assistant Professors
Harald W. Hoebusch.
Emeritus Professors
Bernd Kratz.

The general goal of graduate work in German is to provide students with a critical understanding of German culture, its language and literature and its relationship to western civilization as a whole. Specific courses are designed to acquaint students with the aims and methods of research in the fields of language pedagogy, literary and cultural history, literary theory, and historical linguistics. Students working as teaching assistants under faculty supervision have ample opportunity to develop effective teaching skills in a controlled setting.

The Department of Modern and Classical Languages, Literatures and Cultures offers a graduate program leading to the M.A. (Plan A or B) degree in German. Competence in another foreign language, normally French, in addition to German is required for graduate degrees.

Admission Requirements

Admission requirements include an acceptable undergraduate major in German, a satisfactory score on the Graduate Record Examination (GRE), and three letters of recommendation. Applicants lacking more comprehensive knowledge of German language and literature may be admitted with the understanding that their program must include some advanced undergraduate work in addition to those courses normally required for the M.A.

Individual programs of study are planned with consideration of the student's competencies and interests. The Department endeavors to be flexible and to accommodate career goals in teaching, government service, or research.

Areas of specialization of the graduate faculty of the department afford flexible coverage in breadth and depth, with particular strength in medieval studies, the Age of Goethe, Wilhelmine and Weimar culture, contemporary literature and culture, literary theory, intellectual history, gender studies, and foreign language pedagogy. The Department serves as the editorial center for the international journal, *Colloquia Germanica*. The University Library has substantial holdings in all areas of German language, linguistics and literature and in supporting fields.

GRADUATE COURSES

GER 415G MAJOR GERMAN AUTHORS (SUBTITLE REQUIRED) ..... (3)
GER 416G GENRES OF GERMAN LITERATURE ..... (3)
GER 420G SPECIAL STUDIES IN GERMAN LITERARY AND CULTURAL HISTORY (SUBTITLE REQUIRED) ..... (3)
GER 507 ADVANCED GERMAN COMPOSITION AND CONVERSATION ..... (3)
GER 520 SPECIAL TOPICS SEMINAR ..... (3)
GER 532 HISTORY OF THE GERMAN LANGUAGE ..... (3)
GER 553 THE TEACHING OF GERMAN ..... (3)
GER 612 STUDIES IN LITERARY THEORY ..... (3)
GER 615 STUDIES IN MAJOR AUTHORS ..... (3)
GER 616 STUDIES IN GENRE ..... (3)
GER 620 STUDIES IN THE MIDDLE AGES ..... (3)
GER 624 STUDIES IN THE EARLY MODERN ERA ..... (3)
GER 625 STUDIES IN THE 18TH CENTURY ..... (3)
GER 629 STUDIES IN THE 19TH CENTURY ..... (3)
GER 630 STUDIES IN THE 20TH CENTURY ..... (3)
GER 650 MULTIDISCIPLINARY GERMAN STUDIES SEMINAR (SUBTITLE REQUIRED) ..... (3)
GER 653 RESEARCH AND ISSUES IN TEACHING GERMAN ..... (1)
GER 721 SPECIAL TOPICS IN GERMAN LITERARY AND CULTURAL HISTORY ..... (3)
GER 748 MASTER'S THESIS RESEARCH ..... (0)
GER 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
GER 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
GER 781 INDEPENDENT STUDIES IN GERMAN ..... (3)

Gerontology

GRADUATE FACULTY
Full Members
Professors
David T. Berry, Subbarao Bondada, Linda H. Chen, Surjit S. Dhooper, Thomas F. Garrity, James W. Geddes, William R. Markesbery, Daniel R. Richardson, Graham D. Rowles, Stephen W. Scheff, Frederick A. Schmitt, Nancy Schoenberg, Charles D. Smith, David A. Snowdon, John Van Willigen, David R. Wekstein, Phyllis M. Wise.
Associate Professors
J. Wesson Ashford, Lee X. Blonder, Laurie R. Hatch, Robert G. Henry, Mitzi S. Johnson, B. Jan McCulloch, L. Craig Pettigrew, Sharon L. Sheahan, Nikiforos Stamatiadis, Nancy Stiles, Glenn Telling, John F. Watkins.
Associate Members
Associate Professors
Nancy Schoenberg.
Adjunct Associate Professors
Linda B. Kuder.
Assistant Professors
Kim R. Emmett, Joseph Gaugler, Brian Gran, Jeffrey Keller, Christine Tully, Suzanne Tyas, Sarah Wackerbarth.
Adjunct Assistant Professors
Michael D. Smith.
Emeritus Professors
Dallas High, Linda B. Kuder, Stanley Saxe.

The Ph.D. program in Gerontology is a multidisciplinary and interdisciplinary research-oriented degree specifically focused on aging and health. The program, based in the Sanders-Brown Center on Aging, is organized in a way that combines expertise, methodologies and facilities from more than 20 departments ranging from the biomedical sciences, through the social and behavioral sciences, to the humanities.

Admission Requirements

The Ph.D. Program in Gerontology encourages applications from individuals having expressed interests in advanced theoretical and research-based studies of aging processes or aged individuals and populations. Complete applications that will be considered for admission to the Gerontology Program must include:

Required Elements Sent to the Graduate School

- Application Form and fee payment,
- Official transcripts of all colleges and universities attended,
- Official report of the Graduate Record Examination (GRE).
- (International Students) Official TOEFL report

Additional Elements Sent to the Gerontology Program

- At least three (3) letters of reference,
- Personal statement of interests, doctoral study plans, and career goals.

Students are encouraged to submit samples of scholarly writing, and are strongly encouraged to visit the program before admission decisions are made.

All complete applications will be evaluated not only for evidence of strong academic accomplishment and high professional standards, but for evidence of a strong potential for success in advanced graduate studies and careers in gerontology-related fields.

Degree Requirements

The goal of the Ph.D. program is to provide advanced multidisciplinary and interdisciplinary research training in gerontology with an emphasis on aging and health. Students will develop an understanding of the full spectrum of topics that concern both the process of aging and the health and well-being of the elderly population. In addition, students will develop in-depth knowledge in related disciplines or areas of specialization. The course of study is flexible, stressing a multidisciplinary approach to the selection of course work and research activities. Emphasis is placed on tailoring each student's program to meet the specific needs of the individual's background and career goals.

To fulfill these objectives, the program integrates formal course work in gerontology, specialized training in a related domain, opportunities for research, experiential learning modules and a problem focused research seminar. Graduates of the program will be able to conduct aging-related research, teach gerontology at the university level, direct gerontology educational programs, work in the aging services field, and consult with other professionals on various issues pertaining to aging and health.

Approximately 40 faculty from departments throughout the University are involved in the program's instruction and research activities. Departments represented include: Anatomy and Neurobiology, Anthropology, Behavioral Science, Civil Engineering, Dentistry, Family Studies, Geography, Internal Medicine and Geriatrics, Management, Neurology, Nursing, Nutrition and Food Science, Philosophy, Physiology and Biophysics, Preventive Medicine, Psychology, Social Work, and Sociology. The diversity of the faculty facilitates the comprehensive study of aging and the aged. At the same time it allows for concentration in several areas of particular expertise and program specialization, including: rural aging, long-term care, cognitive and sensory change, public policy, ethical issues, and the etiology and treatment of Alzheimer's disease, strokes, and other diseases prevalent among the elderly.

The Sanders-Brown Center on Aging, a Commonwealth Center of Excellence, offers a broad base of programmatic support for the program as well as serving as the home of a Geriatric Education Center, an Alzheimer's Disease Research Center, and a Stroke Center. Numerous sites for clinical/experiential training are available at various clinics, agencies and organizations, including but not limited to: The Kentucky Division of Aging Services, the University of Kentucky Hospital, Christian Health Center (a University-affiliated nursing home), Helping Hand Alzheimer's Day Care Program, University of Kentucky Geriatric Support Services, University of Kentucky Memory Disorders Clinic, University of Kentucky Center for Rural Health, the Center for Creative Living, Cardinal Hill Hospital, St. Claire Medical Center, Northeast Area Health Education Center and the Veterans Affairs Medical Center.

Further information may be obtained by writing to:

Graham D. Rowles, Ph.D., Director of Graduate Studies
Ph.D. Program in Gerontology
101 Sanders-Brown Center on Aging
University of Kentucky
Lexington, KY 40536-0230

Ph.D. Requirements

Students are required to complete the core curriculum in gerontology and 18 hours in an area of specialization. Elective courses to be taken will be recommended by each student's Advisory Committee.

Core Curriculum

GRN 600 A Study of the Older Person	(3)
GRN 620 Human Aging and Adjustment	(6)
GRN 650 Research Methods in Gerontology	(3)
GRN 780 Applied Research Practicum I	(1)
GRN 781 Applied Research Practicum II	(1)
GRN 782 Women's Health and Aging	(3)
GRN 785 Independent Research in Gerontology	(3)
GRN 790 Integrative Research Seminar I	(3)
GRN 791 Integrative Research Seminar II	(3)
Six hours to be selected from:	
GRN 612 Biology of Aging	(3)
GRN 710 Aging of the Nervous System	(3)
BSC 770 Psychosocial Issues in Health and Aging	(3)
GRN 610 Aging and Biomedical Ethics	(3)
ANT 539 Aging in Cross-Cultural Perspective	(3)
GRN 585 Aging and Environment	(3)
GRN 715 Health Policy and Aging	(3)

It is assumed that students entering with M.S. or M.A. degrees will have taken some of the required courses or their equivalent. The student's Advisory Committee, in conjunction with the Program Steering Committee, will determine the amount of prior course work to be credited toward specific requirements.

Possible elective courses that may be selected by the student or required by the student's Advisory Committee include but are not limited to those listed below:

Gerontology Electives

GRN 513 Geriatric Pharmacy	(3)
BSC 779 Behavioral Factors in Death and Dying	(3)
NFS 680 Nutrition and Aging	(2)
AHE 510 Older Women and their Health	(3)
HA 510 Organization of the Long-term Care Sector	(3)
SOC 735 Special Topics in Work, Gender and Inequality: Gender and Aging	(3)
SW 604 Social Work Practice with the Aging	(2)
SW 613 Uban Ecology and Aging	(2-3)
SW 642 Psychological Aspects of Human Aging	(3)

GRADUATE COURSES

GRN 513 GERIATRIC PHARMACY (SAME AS PHR 813) ..... (3)
GRN 585 AGING AND ENVIRONMENT (SAME AS FAM 585/GEO 585) ..... (3)
GRN 600 A STUDY OF THE OLDER PERSON ..... (3)
GRN 610 AGING AND BIOMEDICAL ETHICS ..... (3)
GRN 612 BIOLOGY OF AGING (SAME AS BIO/ANA/PGY 612) ..... (3)
GRN 615 SEMINAR IN TEACHING MEDICAL SCIENCE (MED SCIENCE TEACHING I) (SAME AS PGY 615) ..... (2)
GRN 620 HUMAN AGING AND ADJUSTMENT ..... (6)
GRN 643 BIOMEDICAL ASPECTS OF AGING (SAME AS SW 643) ..... (3)
GRN 650 RESEARCH METHODS IN GERONTOLOGY ..... (3)

GRN 660 AGING AND FAMILY VALUES (SAME AS FAM 660) ..... (3)
GRN 710 AGING OF THE NERVOUS SYSTEM (SAME AS PHA/PGY/ANA 710) ..... (3)
GRN 715 HEALTH POLICY AND AGING (SAME AS HA 715) ..... (3)
GRN 720 GERONTOLOGY/GERIATRIC DENTISTRY (SAME AS CDS 822) ... (1)
GRN 749 DISSERTATION RESEARCH ..... (0)
GRN 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
GRN 770 SPECIAL TOPICS IN GERONTOLOGY ..... (1-3)
GRN 780 APPLIED RESEARCH PRACTICUM I ..... (1)
GRN 781 APPLIED RESEARCH PRACTICUM II ..... (1)
GRN 782 WOMEN'S HEALTH AND AGING (SAME AS BSC 782) ..... (3)
GRN 785 INDEPENDENT RESEARCH IN GERONTOLOGY ..... (3)
GRN 790 INTEGRATIVE RESEARCH SEMINAR I ..... (1)
GRN 791 INTEGRATIVE RESEARCH SEMINAR II ..... (1)

Health Administration

GRADUATE FACULTY
Full Members
Professors
Glen Blomquist, Joe Fink III, Richard W. Furst, Joel Lee, Thomas C. Robinson, Robert Rodgers, Phillip W. Roeder, Douglas Scutchfield, Eugenia Toma, David Wildasin.
Associate Professors
Steven Fleming, Jeffery C. Talbert.
Associate Members
Associate Professors
Thomas W. Samuel.
Adjunct Professors
Leonard Heller.
Emeritus Professors
Phillip Berger, Peter Bosomworth, Joseph Hamburg, Donald L. Hochstrasser.

The Master of Health Administration is offered in the Martin School of Public Policy and Administration, a research, academic and service unit of the Graduate School. The M.H.A. is a 44-credit-hour program for those seeking careers in the management of a variety of health institutions, organizations and agencies.

The interdisciplinary faculty have appointments in the Martin School, in academic units within the Medical Center, and in the Colleges of Business and Economics, and Arts and Sciences.

Admission Requirements

Master of Health Administration Students must meet the admission standards of both the Graduate School and the Martin School. Applicants must submit the following items to be considered for admission to the Master of Health Administration program.

- A Graduate School application form and application fee
- Official GRE or GMAT scores of at least 1000 (GRE) or 500 (GMAT)
- Two official transcripts from all universities attended, showing an undergraduate g.p.a. of at least 2.75 on a 4.0 scale on undergraduate work and at least a 3.0 grade paint average on previous graduate work
- International Students only: Official TOEFL scores.
- Three letters of recommendation addressing the student's capacity for Master's level graduate work.
- The Martin School Applicant Information Form
- A biographical statement

The final selection of students for admission will be subject to the discretion of the admissions committee of the MHA program.

Deadlines for the program are the same as the Graduate School admission deadlines. Students are admitted only in the fall semester. Applications completed by March 1 will have priority for financial aid.

Students are admitted from various academic disciplines. If not previously exposed to business disciplines, students should develop an understanding of the concepts of financial accounting and macroeconomics.

The M.H.A. curriculum has an administrative core, a health service core, and electives totaling 44 credit hours. Degree requirements include the successful completion of all course work with a 3.0 or better GPA and passing oral and written comprehensive examinations.

The M.H.A. program is accredited by the Accrediting Commission on Education for Health Services Administration (ACEHSA).

For more information about the program, write:

MHA Director of Graduate Studies
University of Kentucky
415 Patterson Office Tower
Lexington, KY 40506-0027

Course Requirements

Completion of 44 credit hours of course work is required (see below).

MHA Curriculum

Administrative Core (12 hours)
HA 621 Quantitative Methods of Research 3
HA 623 Decision Analysis 3
HA 624 Quality Management and Information Systems in Health Care 3
HA 642 Public Organization Theory and Behavior 3
Health Services Core (26 hours)
HA 601 Overview of the Health Care Delivery System 3
HA 602 Strategic Planning and Management of Health Care Organizations 3
HA 603 Legal Aspects of Health Administration 2
HA 604 Managerial Ethics 1
HA 635 Management Accounting for Health Care Organizations 3
HA 636 Health Economics 3
HA 637 Health Finance 3
HA 656 Health Program Evaluation 3
HA 660 Decision Making in Health Care Organizations 3
HA 673 Health Policy Development 2
Electives (6 hours)
May be taken as internship (HA 711) plus one course, or two courses.

GRADUATE COURSES

HA 601 OVERVIEW OF THE HEALTH CARE DELIVERY SYSTEM (SAME AS HSM 601/PA671/SPH 602) ..... (3)
HA 602 ORGANIZATIONAL CHANGE AND STRATEGIC PLANNING (SAME AS HSM 602) ..... (3)
HA 603 LEGAL ASPECTS OF HEALTH ADMINISTRATION (SAME AS HSM 603) ..... (2)
HA 604 MANAGERIAL ETHICS ..... (1)
HA 621 QUANITITATIVE METHODS OF RESEARCH (SAME AS PA 621) ..... (3)
HA 622 MENTAL HEALTH ADMINISTRATION (SAME AS HSM 622) ..... (3)
HA 623 DECISION ANALYSIS AND SUPPORT SYSTEMS (SAME AS PA 623) (3)
HA 624 INFORMATION SYSTEMS IN HEALTH CARE (SAME AS HSM 624) ... (3)
HA 632 PUBLIC FUNDS MANAGEMENT (SAME AS PA 632) ..... (3)
HA 635 MANAGEMENT ACCOUNTING FOR HEALTH CARE ORGANIZATIONS (SAME AS HSM 635) ..... (3)
HA 636 HEALTH ECONOMICS (SAME AS PA 636, ECO 653) ..... (3)
HA 637 HEALTH FINANCE (SAME AS FIN/PA/HSM 637) ..... (3)
HA 642 PUBLIC ORGANIZATION THEORY AND BEHAVIOR (SAME AS PA 642) ..... (3)
HA 652 PUBLIC POLICY ECONOMICS (SAME AS PA/ECO 652) ..... (3)
HA 656 MANAGERIAL EPIDEMIOLOGY (SAME AS PA 656) ..... (3)
HA 660 DECISION MAKING IN HEALTH CARE ORGANIZATIONS (SAME AS HSM 660) ..... (3)
HA 673 HEALTH POLICY DEVELOPMENT (SAME AS PA 673) ..... (2)
HA 711 PRACTICUM IN HEALTH ADMINISTRATION (SAME AS HSM 711) .. (3)
HA 715 HEALTH POLICY AND AGING (SAME AS GRN 715) ..... (3)
HA 775 SPECIAL TOPICS IN HEALTH ADMINISTRATION (SAME AS PA/HSM 775) ..... (1-3)
HA 785 INDEPENDENT STUDY IN HEALTH ADMINISTRATION (SAME AS PA/HSM 785) ..... (1-3)

Historic Preservation

GRADUATE FACULTY
Full Members
Professors
John R. Groves Jr., Dennis Domer, David Mohney.
Associate Members
Associate Professors
Ned M. Crankshaw, Henri deHahn, Wallis Miller.
Assistant Professors
Sandy Isenstadt, Gregory A. Luhan, Krista L. Schneider.

Preservation is a field involved with the interpretation and conservation of historic sites, as well as with their renovation and adaptive use. An interdisciplinary approach to the investigation of buildings and landscapes, which addresses the complexity of material culture, has been adopted by the faculty of this program.

The College of Architecture offers a Master of Historic Preservation degree, whose curriculum provides opportunities for students to explore a variety of interests. Applications are invited not only from those with degrees in design—architects, interior designers, and landscape architects—but also from those who hold degrees in other disciplines and wish to pursue studies in historic preservation.

Admission Requirements

Requirements for admission include 1) a baccalaureate degree from an accredited college or university, 2) completion of two semesters of American history and two semesters of surveys in the history of architecture or art, 3) demonstration of ability in drawing, drafting, and photography, 4) three letters of recommendation and a personal essay, 5) a minimum score of 1000 on the verbal and quantitative sections and an acceptable score on the analytical section of the Graduate Record Examination (GRE), and 6) an interview with the faculty in the program, if possible.

Requirements for the degree include the completion of core courses, advanced electives, an internship, and a final project—a total of 48 hours of credit. For additional information on admission and requirements, contact the Director, Graduate Program in Historic Preservation, College of Architecture, University of Kentucky, Lexington, KY 40506-0041.

GRADUATE COURSES

ARC 501 SELECTED TOPICS IN HISTORIC PRESERVATION (SUBTITLE REQUIRED) ..... (3)
ARC 602 DYNAMICS OF HISTORIC PRESERVATION: LAW, LAND USE PLANNING, AND ECONOMICS ..... (3)
ARC 610 AMERICAN ARCHITECTURE I ..... (3)
ARC 611 AMERICAN ARCHITECTURE II ..... (3)
ARC 612 DOCUMENTATION OF HISTORIC BUILDINGS AND SITES ..... (3)
ARC 613 HISTORICAL STRUCTURAL SYSTEMS AND BUILDING MATERIALS ..... (3)
ARC 616 PRESERVATION DESIGN STUDIO ..... (3-6)
ARC 699 SUMMER INTERNSHIP ..... (1-6)
ARC 720 CASE STUDIES IN PRESERVATION ..... (3)
ARC 723 KENTUCKY ARCHITECTURE AND CULTURAL LANDSCAPES ..... (3)
ARC 724 ADVANCED HISTORICAL STRUCTURAL SYSTEMS AND BUILDING MATERIALS CONSERVATION ..... (3)
ARC 725 PRESERVATION PRACTICUM ..... (3)
ARC 726 AMERICAN MATERIAL CULTURE (SAME AS ANT 726) ..... (3)
ARC 798 MASTER'S PROJECT I ..... (3)
ARC 799 MASTER'S PROJECT II ..... (3)
GEO 490G AMERICAN LANDSCAPES ..... (3)
DMT 589 RES/PRES I: INTRODUCTORY CONCEPTS OF RESTORATION AND PRESERVATION ..... (3)

History

GRADUATE FACULTY
Full Members
Professors
James Albisetti, Lance Banning, Bruce Eastwood, Ron Formisano, William W. Freehling, Philip Harling, George Herring, Robert Ireland, Robert Olson, David Olster, Jeremy Popkin, Mark W. Summers.
Associate Professors
Tracy Campbell, Francie Chassen-Lopez, Eric Christianson, Patricia Cooper, Ron Eller, Ellen Furlough, Daniel Gargola, David Hamilton, Kathi Kern, Joanne P. Melish, Karen Petrone, Daniel Rowland, Daniel Smith, Gerald Smith, Kristin Stapleton.
Associate Members
Assistant Professors
Abigail Firey, Gretchen D. Starr-LeBeau.
Emeritus Professors
Raymond F. Betts, E. Randolph Daniel, Humbert S. Nelli, Donald G. Nugent, Gerard E. Silberstein, Robert D. Warth.

The Master's Program

Admission Requirements

Students should submit evidence of strong undergraduate preparation in history, preferably an undergraduate major with a minimum grade-point average of 3.0 on a 4.0 scale. Applicants for admission must submit Graduate Record Examination scores, three letters of recommendation from professors familiar with their work, and a writing sample. Background in at least one modern foreign language is recommended for admission.

Students will not receive the M.A. degree in history unless they demonstrate reading knowledge of a modern foreign language approved by the Department of History and by the Graduate School. Both Plan A and Plan B are offered.

The Ph.D. Program in History

Admission Requirements

Those who seek the doctorate in history should follow carefully the general directions governing the subjects of residence, courses, and foreign language requisites set forth in the first part of the Bulletin.

The applicant does not become a candidate until knowledge of one modern foreign language approved by the Advisory Committee has been demonstrated, and until the Qualifying Examination has been passed and has been approved by the Graduate School. Students specializing in areas other than the history of the United States must demonstrate competence in a second foreign language before the Qualifying Examination. Students specializing in the history of the United States may, upon the decision of the Advisory Committee, be required to demonstrate competence in a second foreign language or in another skill, such as statistics, computer science, or oral history. Those specializing in the history of Early Modern or Modern Britain must demonstrate reading knowledge of a second foreign language only if the student's Advisory Committee considers the requirement necessary and appropriate for the doctoral dissertation. In all cases it is the right of the Advisory Committee, not the student, to determine the appropriateness of a foreign language and to decide whether a student specializing in United States history should be required to demonstrate competence in a second foreign language or other skill.

The student's work for the doctorate in history is directed by an Advisory Committee composed of representatives of the areas and fields under the four preparation requirements. The committee's chair directs the dissertation and students should consult this person at their earliest convenience.

Requisites for the Ph.D. candidacy in history will be met as follows:

Students must be examined in four fields. Two of these will be considered major fields and two will be considered minor fields. One of the two major fields must be a chronologically defined field (i.e., Early Modern Britain, 1485-1750; U.S. since 1865; Modern Europe, 1914-present). The major examinations require a substantial background in the monographic and journal literature of the field. The minor field examinations generally require a survey knowledge of the field and familiarity with major historiographical and thematic issues in the field. Students should consult with the examiners in order to define the fields and determine how to prepare for the exams.

At least one of the minor fields must be a field outside the main concentration of study. Students studying American history must take a non-U.S. field. Students studying continental Europe after 1648 may satisfy the outside minor with a field in British history, a non-European field, or a pre-1648 field in Medieval or Ancient history. Students studying British history may satisfy it with a field in continental Europe, a non-European field, or a pre-1450 field in Medieval or Ancient history. For students concentrating in Ancient or Medieval history, the outside field must either be a post-1450 European field or a non-European field. With the permission of the major adviser, a student may substitute a field of study from outside the History Department.

The fields available for study are listed below. With the approval of the committee, a student may substitute a specially constructed field not on the list.

Non-American Fields

Greece
Rome
Byzantium
Early Middle Ages
Later Middle Ages
Early Modern Europe (1450 - 1648)
Early Modern Europe (1648 - 1815)
Modern Europe (1815 - 1914)
Modern Europe (1914 - present)
Early Modern Britain (1485-1750)
Britain (1750 - present)
Russia and Eastern Europe to 1800
Russia and Eastern Europe (1800 –present)
Latin America
Middle East*
Asia*
European Science and Technology
**Available only as a minor field*

American Fields

U.S. to 1865
U.S. since 1865
American Diplomatic
American South
American Social
Native American
American Women
Afro-American
American Science and Technology
American Medicine
American Legal

GRADUATE COURSES

HIS 500 PRE-CLASSICAL AND CLASSICAL GREECE ..... (3)
HIS 501 FOURTH CENTURY GREECE AND THE HELLENISTIC WORLD .... (3)
HIS 502 A HISTORY OF THE ROMAN REPUBLIC ..... (3)
HIS 503 A HISTORY OF THE ROMAN EMPIRE ..... (3)
HIS 504 GREEK AND ROMAN MEDICINE ..... (3)
HIS 505 ETHNOHISTORY OF THE NATIVE AMERICAN SOUTHEAST ..... (3)
HIS 509 ROMAN LAW (SAME AS CLA 509) ..... (3)
HIS 510 MEDIEVAL CIVILIZATION I ..... (3)
HIS 511 MEDIEVAL CIVILIZATION II ..... (3)
HIS 512 MEDIEVAL INSTITUTIONS TO THE MID TENTH CENTURY ..... (3)
HIS 513 MEDIEVAL INSTITUTIONS SINCE THE MID TENTH CENTURY ..... (3)
HIS 514 SPAIN: FROM RECONQUEST TO EMPIRE, 1200 - 1700 ..... (3)
HIS 519 THE ERA OF THE RENAISSANCE ..... (3)
HIS 520 THE ERA OF THE REFORMATION ..... (3)
HIS 521 EUROPEAN SOCIAL HISTORY, 1400-1800 ..... (3)
HIS 525 EUROPEAN DIPLOMACY SINCE 1918 ..... (3)
HIS 526 EUROPE SINCE WORLD WAR II ..... (3)
HIS 533 MODERN EUROPEAN IMPERIALISM ..... (3)
HIS 534 RUSSIA IN THE NINETEENTH CENTURY ..... (3)
HIS 535 RUSSIA IN THE TWENTIETH CENTURY ..... (3)
HIS 536 INTELLECTUAL AND CULTURAL HISTORY OF RUSSIA TO 1800 . (3)
HIS 537 INTELLECTUAL AND CULTURAL HISTORY OF RUSSIA FROM 1800 TO PRESENT ..... (3)
HIS 540 HISTORY OF MODERN FRANCE TO 1815 ..... (3)
HIS 541 HISTORY OF MODERN FRANCE SINCE 1815 ..... (3)
HIS 542 GERMAN HISTORY 1815-1914 ..... (3)
HIS 543 GERMAN HISTORY SINCE 1914 ..... (3)
HIS 546 THE BYZANTINE EMPIRE ..... (3)
HIS 547 HISTORY OF THE OTTOMAN EMPIRE: 1200-1923 ..... (3)
HIS 548 HISTORY OF THE MIDDLE EAST: 1453-1920 ..... (3)
HIS 549 HISTORY OF THE MIDDLE EAST: 1952 TO PRESENT ..... (3)
HIS 553 EIGHTEENTH CENTURY BRITAIN ..... (3)
HIS 554 BRITISH HISTORY 1815-1901 ..... (3)
HIS 555 BRITISH HISTORY SINCE 1901 ..... (3)
HIS 561 THE INTELLECTUAL AND CULTURAL HISTORY OF LATIN AMERICA ..... (3)
HIS 562 MODERN MEXICO ..... (3)
HIS 563 THE HISTORY OF WOMEN IN LATIN AMERICA ..... (3)
HIS 568 NATIVE AMERICAN HISTORY: THE EAST ..... (3)
HIS 569 NATIVE AMERICAN HISTORY: THE WEST ..... (3)
HIS 572 AMERICAN LEGAL HISTORY ..... (3)
HIS 573 AMERICAN CONSTITUTIONAL HISTORY ..... (3)
HIS 574 THE DIPLOMACY AND FOREIGN POLICY OF THE UNITED STATES TO 1919 ..... (3)
HIS 575 THE DIPLOMACY AND FOREIGN POLICY OF THE UNITED STATES SINCE 1919 ..... (3)
HIS 576 FRONTIER AMERICA, 1400-1869 ..... (3)
HIS 577 FRONTIER AMERICA, 1869-PRESENT ..... (3)
HIS 578 HISTORY OF THE OLD SOUTH ..... (3)
HIS 579 HISTORY OF THE NEW SOUTH ..... (3)
HIS 580 HISTORY OF APPALACHIA ..... (3)
HIS 581 U.S. URBAN HISTORY SINCE 1865 ..... (3)
HIS 582 IMMIGRATION AND AMERICAN HISTORY, 1815 TO THE PRESENT ..... (3)
HIS 584 HEALTH AND DISEASE IN THE U.S. ..... (3)
HIS 585 THE AGE OF JIM CROW, 1880-1930 (SAME AS AAS 585) ..... (3)
HIS 586 THE IMAGES OF BLACKS IN AMERICAN SOCIETY (SAME AS AAS 586) ..... (3)
HIS 587 AFRICAN AMERICAN CIVIL RIGHTS MOVEMENT (SAME AS AAS 587) ..... (3)
HIS 590 JAPANESE HISTORY TO 1800 ..... (3)
HIS 591 JAPANESE HISTORY SINCE 1800 ..... (3)
HIS 593 EAST ASIAN HISTORY SINCE WORLD WAR II ..... (3)
HIS 595 STUDIES IN HISTORY ..... (3)
HIS 596 THE U.S. FAMILY IN HISTORICAL PERSPECTIVE (SAME AS FAM/SOC 509) ..... (3)
HIS 597 WESTERNERS IN EAST ASIA, 1839 TO THE PRESENT ..... (3)
HIS 598 CHINA IN REVOLUTION, 1895-1976 ..... (3)
HIS 600 THE INTELLECTUAL HISTORY OF AFRICAN AMERICANS (SAME AS AAS 600) ..... (3)
HIS 606 HISTORICAL CRITICISM ..... (3)
HIS 613 READINGS IN EARLY MEDIEVAL HISTORY ..... (3)
HIS 614 READINGS IN HIGH AND LATE MEDIEVAL HISTORY ..... (3)
HIS 615 READINGS IN HISTORY OF SCIENCE AND MEDICINE THROUGH THE RENAISSANCE ..... (3)
HIS 621 READINGS IN EARLY MODERN EUROPE, 1450-1648 ..... (3)
HIS 622 READINGS IN EARLY MODERN EUROPE, 1648-1815 ..... (3)
HIS 623 READINGS IN 19TH CENTURY EUROPEAN HISTORY ..... (3)
HIS 624 READINGS IN EUROPEAN HISTORY OF THE TWENTIETH CENTURY ..... (3)
HIS 625 READINGS IN BRITISH AND BRITISH EMPIRE HISTORY ..... (3)
HIS 630 READINGS IN AMERICAN HISTORY: THE COLONIAL ERA ..... (3)
HIS 631 READINGS IN AMERICAN HISTORY: THE AMERICAN REVOLUTION AND THE NEW REPUBLIC ..... (3)
HIS 632 READINGS IN AMERICAN HISTORY: THE AGE OF JACKSON, CIVIL WAR, AND RECONSTRUCTION ..... (3)

HIS 633 READINGS IN AMERICAN HISTORY: THE GILDED AGE AND THE PROGRESSIVE ERA ..... (3)
HIS 634 READINGS IN AMERICAN HISTORY: AMERICA SINCE 1920 ..... (3)
HIS 638 READINGS IN LATIN AMERICAN HISTORY ..... (3)
HIS 650 READINGS IN SPECIAL TOPICS IN HISTORY ..... (3)
HIS 651 READINGS IN U.S. FOREIGN RELATIONS SINCE 1900 ..... (3)
HIS 652 READINGS IN AMERICAN HISTORY OF SCIENCE AND TECHNOLOGY ..... (3)
HIS 653 READINGS IN U.S. WOMEN'S HISTORY ..... (3)
HIS 654 READINGS IN MODERN AFRICAN-AMERICAN HISTORY ..... (3)
HIS 656 READINGS IN NEW SOUTH HISTORY ..... (3)
HIS 657 RACE RELATIONS IN THE UNITED STATES (SAME AS AAS 657) .... (3)
HIS 695 INDEPENDENT WORK ..... (1-3)
HIS 700 SPECIAL PROBLEMS IN HISTORY ..... (3)
HIS 706 SEMINAR IN MEDIEVAL HISTORY ..... (3)
HIS 710 SEMINAR IN AMERICAN HISTORY, 1607-1815 ..... (3)
HIS 711 SEMINAR IN AMERICAN HISTORY, 1815-1865 ..... (3)
HIS 712 SEMINAR IN AMERICAN HISTORY, 1865 TO THE PRESENT ..... (3)
HIS 722 SEMINAR IN MODERN EUROPEAN HISTORY, 1870 TO THE PRESENT ..... (3)
HIS 730 SEMINAR IN MODERN BRITISH HISTORY ..... (3)
HIS 748 MASTER'S THESIS RESEARCH ..... (0)
HIS 749 DISSERTATION RESEARCH ..... (0)
HIS 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
HIS 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)

Horticulture*

The Department of Horticulture participates in the interdisciplinary graduate program leading to the Master of Science in Plant and Soil Science, with an emphasis in Horticultural Science (see the program description for Plant and Soil Science for details). This study and research program relates to innovative cultural practices for vegetables, fruit, nursery or floricultural crops and/or horticultural plant biology.

Students interested in working in horticulture toward a Doctor of Philosophy degree may enter the Plant Physiology program or the Crop Science program (see the program descriptions for Plant Physiology and Crop Science for details).

**Horticulture is not a Degree Program.*

Hospitality and Dietetic Administration

GRADUATE FACULTY
Full Members
Associate Professors
Kwaku Addo, Desmond Brown, Hazel Forsythe, Claire D. Schmelzer.
Associate Members
Assistant Professors
Lisa Gaetke, Soenok Ham.
Extension Assistant Professors
Janet Tietyen.
Research Assistant Professors
Gabrielle Ludewig.

HOSPITALITY ADMINISTRATION

Courses are designed to:

- Build on a background of industry and academic knowledge of hospitality and tourism
- Give technological expertise for functioning in a diverse and changing workplace
- Develop leadership skills
- Enhance interpersonal attributes
- Analyze strategic issues and trends in tourism and hospitality and lodging industry.

Direct involvement in hospitality and health care industries is accomplished through research projects and cooperative activities.

DIETETIC ADMINISTRATION

Courses are designed to:

- Examine leadership and administrative concepts
- Provide instruction on theories and concepts in institutional organization
- Administer a current events approach to the financial decision making and reimbursement process in dietetics
- Build expertise in practice issues in dietetics

Degree Requirements

Core Courses

NFS 610 Hospitality & Dietetics Administration & Assessment	3
NFS 648 Institution Administration	3
NFS 770 Seminar in Hospitality & Dietetics Administration	1
NFS 772 Current Topics in Hospitality & Dietetics Administration	2
STA 570 Basic Statistical Analysis	4
STA 675 Survey Sampling	2

Hospitality Administration

NFS 694 Strategic Planning in Hospitality, Lodging and Tourism	3
NFS 646 Institution Organization & Management	3
NFS 781 Advanced Trends Analysis in Hospitality and Tourism	3

Plan B requires 12 additional hours of electives

Dietetic Administration

NFS 603 Advanced Community Program Development	3
NFS 784 Special Problems in Institution Management	3
NFS 690 Advanced Work in Dietetics	3

Plan B requires 12 additional hours of electives

Each administration specialty has fifteen credits from the core, a base of nine credits of prescribed courses, three or more credits from electives. Plan A requires 24 credit hours of course work plus a thesis. Plan B requires 36 credit hours of course work without a thesis.

Six additional credit hours are allowed for Thesis Research if Option A is chosen.

Admission Requirements

In addition to general admission requirements as stipulated by the Graduate School, the applicant must meet the following criteria:

- A B.S. Degree in Hospitality Management or Dietetics/Nutrition from an accredited institution. Registered Dietitian (R.D.) eligibility preferred for Dietetic Administration option.
- A minimum grade point average of 3.0 on a 4.0 scale, or a total of 1,000 or more on the verbal and quantitative portions of the Graduate Record Examination (GRE).
- Have a Test of English as a Foreign Language (TOEFL) score of 550 or better if an international student.

Official transcripts and GRE/TOEFL scores must be sent directly to the Graduate School (351 Patterson Office Tower, University of Kentucky, Lexington, KY 40506-0027), along with a completed application. Application forms can be found at: <www.rgs.uky.edu/gs/gradhome.html>.

In addition, the applicant must submit a statement of purpose letter and have three letters of recommendation sent to the Director of Graduate Studies for Hospitality and Dietetic Administration.

Application Deadlines

Applications are accepted all year but applicants requesting a graduate assistantship should apply by February 15th for the following fall semester and September 1st for the following spring semester.

Foreign applications should reach the Graduate School at least six (6) months prior to the beginning of the semester the applicant intends to begin graduate study or February 1st for the fall semester and June 15th for the spring semester.

GRADUATE COURSES

NFS 408G SEMINAR IN FOOD AND NUTRITION ..... (1)
NFS 510 ADVANCED NUTRITION ..... (3)
NFS 511 THERAPEUTIC NUTRITION ..... (4)
NFS 513 ADVANCED THERAPEUTIC NUTRITION ..... (2)
NFS 516 MATERNAL AND CHILD NUTRITION ..... (3)
NFS 591 SPECIAL PROBLEMS IN FOODS AND NUTRITION ..... (1-3)
NFS 603 ADVANCED COMMUNITY PROGRAM DEVELOPMENT ..... (3)
NFS 607 FOOD RELATED BEHAVIORS (SAME AS NS/ANT/BSC 607) ..... (3)
NFS 610 HOSPITALITY AND DIETETICS ADMINISTRATION AND ASSESSMENT ..... (3)
NFS 620 NUTRITION AND AGING (SAME AS NS 620) ..... (2)
NFS 630 ADVANCED COMMUNITY NUTRITION (SAME AS NS 630) ..... (3)
NFS 640 HUMAN NUTRITION: ASSESSMENT (SAME AS NS 640) ..... (3)
NFS 646 INSTITUTION ORGANIZATION AND MANAGEMENT ..... (3)
NFS 648 INSTITUTION ADMINISTRATION ..... (3)
NFS 685 MINERAL METABOLISM (SAME AS ASC 685) ..... (2)
NFS 690 ADVANCED WORK IN DIETETICS ..... (3)
NFS 694 STRATEGIC PLANNING IN HOSPITALITY, LODGING AND TOURISM ..... (3)
NFS 704 CURRENT TOPICS IN NUTRITIONAL SCIENCES (SAME AS NS/CNU 704) ..... (1)
NFS 748 MASTER'S THESIS RESEARCH (SAME AS NS 748) ..... (0)
NFS 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE (SAME AS NS 768) ..... (1-6)
NFS 770 SEMINAR IN HOSPITALITY AND DIETETICS ADMINISTRATION .. (1)
NFS 772 CURRENT TOPICS IN HOSPITALITY AND DIETETICS ADMINISTRATION ..... (2)
NFS 781 ADVANCED TRENDS ANALYSIS IN HOSPITALITY AND TOURISM (3)
NFS 782 SPECIAL PROBLEMS (SAME AS NS/CNU 782) ..... (1-6)
NFS 784 SPECIAL PROBLEMS IN INSTITUTION MANAGEMENT ..... (3)
NFS 790 RESEARCH IN NUTRITIONAL SCIENCES (SAME AS NS/CNU 790) (0-6)

HES 596 SPECIAL PROBLEMS IN HUMAN ENVIRONMENTAL SCIENCES (1-3)
HES 600 RESEARCH METHODOLOGY IN HUMAN ENVIRONMENTAL SCIENCES ..... (3)

Integrated Biomedical Sciences*

Graduate students pursuing doctoral degrees in the biomedical sciences at the University of Kentucky College of Medicine are admitted through the Integrated Biomedical Sciences (IBS) Curriculum. This first-year core curriculum provides broad-based exposure to fundamental concepts in the biomedical sciences, development of interdisciplinary approaches essential to innovative research, and flexibility in choosing a research emphasis among 125 faculty in five departments.

On completion of the IBS Curriculum, students select their doctoral degree program based on research interests and mentoring relationships in one of five departments: Anatomy and Neurobiology, Microbiology and Immunology, Molecular and Biomedical Pharmacology, Molecular and Cellular Biochemistry, and Physiology. Refer to these departments for further information about their Ph.D. programs.

Admission Requirements

Successful students in the Integrated Biomedical Sciences Curriculum have typically completed an undergraduate degree in chemistry, biology, biochemistry, engineering, mathematics, neurosciences, physics, pharmacy or psychology. Undergraduate course work in organic chemistry, physical chemistry, calculus, physics, and the biological sciences is highly recommended.

Admission to IBS is based upon academic background, GPA, professional recommendations, performance on the Graduate Record Examination (GRE), and prior experience. Personal interviews are strongly encouraged. Students must meet the admissions requirements set by the Graduate School, including a bachelor's degree from a fully accredited institution of higher learning.

Inquiries regarding admission should be directed to:

Dr. Jane Serumgard Harrison, Director
Integrated Biomedical Sciences Curriculum
University of Kentucky College of Medicine
800 Rose Street, Room MN150
Lexington, KY 40536-0298
1-866-239-0004 (toll free)
E-mail: ibs@lsv.uky.edu
www.mc.uky.edu/ibs

** Integrated Biomedical Sciences is not a degree program.*

GRADUATE COURSES

IBS 601 BIOMOLECULES AND METABOLISM (SAME AS BCH 607) ..... (3)
IBS 602 BIOMOLECULES AND MOLECULAR BIOLOGY (SAME AS BCH 608) ..... (3)
IBS 603 CELL BIOLOGY ..... (3)
IBS 604 CELL SIGNALING ..... (3)
IBS 605 EXPERIMENTAL GENETICS (SAME AS MI 604) ..... (2)
IBS 606 INTEGRATED BIOMEDICAL SCIENCES ..... (4)
IBS 607 SEMINAR IN INTEGRATED BIOMEDICAL SCIENCES ..... (0)
IBS 609 RESEARCH IN INTEGRATED BIOMEDICAL SCIENCES ..... (1)

Interior Design, Merchandising and Textiles

GRADUATE FACULTY
Full Members
Professors
Allison Carll-White, Elizabeth Pratt Easter.
Associate Professors
Kimberly A. Miller-Spillman, Margaret B. Portillo.
Associate Members
Associate Professors
Ann W. Dickson, Terry D. Rothgeb.
Assistant Professors
Lisa Dandeo, Vanessa Wickliffe.

The graduate program in the Department of Interior Design, Merchandising and Textiles is philosophically committed to the well-being of individuals in their immediate environment. Each area of focus is designed to meet individual interests and career objectives.

Interior Design

A concentration in interior design leads to a post-professional Master of Arts or Master of Science in Interior Design, Merchandising and Textiles. A combination of course work, independent study, and research experience is available to provide students with a program of study designed for career goals. Graduate emphasis is individualized to meet each student's career interests.

The student works with an advising committee in the selection of a thesis or non-thesis option and the appropriate courses at the 500, 600, and 700 levels. It is essential that the applicant have an

undergraduate degree in interior design or a related subject matter. Supplementary course work may be required of applicants without professional undergraduate interior design degrees.

Merchandising, Apparel and Textiles

A concentration in merchandising, apparel and textiles leads to a Master of Science or Master of Arts in Interior Design, Merchandising, and Textiles. A combination of course work, independent study and research experience is available to provide students with a program of study designed for career goals. Graduate emphasis is individualized to meet each student's career interests.

The student works with an advisory committee in the selection of a thesis or non-thesis option and the appropriate courses at the 500, 600, and 700 levels. It is expected that the applicant have an undergraduate degree in the major area of interest or a closely related field.

Degree Requirements

The Master of Science in Interior Design, Merchandising, and Textiles and the Master of Arts in Interior Design, Merchandising, and Textiles is available under Plan A and Plan B. The thesis option (Plan A) requires 24 hours of course work, six hours of master's residence credit, and a thesis; Plan B requires completion of 30 credit hours, which is to include six hours of DMT 700. A common core of twelve hours, comprised of DMT 650, DMT 600, DMT 772, and either STA 570 or DMT 655, is required of all students. (The M.S. degree requires STA 570, while the M.A. requires DMT 655.) Students are to complete twelve credits of additional course work in the area of concentration. Successful completion of a final examination is required.

Admission Requirements

Potential graduate students must:

1. apply and be accepted to the Graduate School and to the Department of Interior Design, Merchandising, and Textiles.
2. have been granted a baccalaureate degree by an accredited institution with a minimum 3.0 GPA on a 4.0 scale (2.75-3.0 GPAs will be considered in relation to other credentials).
3. have taken the Graduate Record Examination (GRE). For a non-English speaking student, a TOEFL score of 550 or above is required (or a score of 213 on the computer version of TOEFL).
4. be reviewed by the department.

To be reviewed by the department, send a letter to the Director of Graduate Studies stating the general nature of your desired program and career goals; rationale for selecting this program; and your background in this area of study.

Additionally, three letters of recommendation regarding academic ability must be sent to the Director of Graduate Studies. A portfolio, which is reviewed and evaluated by a faculty committee, is required of all interior design applicants.

GRADUATE COURSES

DMT 515 SPECIFICATION AND EVALUATION OF TEXTILES AND APPAREL ..... (3)
DMT 520 TEXTILES FOR INTERIORS ..... (3)
DMT 522 HISTORY OF TEXTILES ..... (3)
DMT 533 HISTORY OF COSTUME ..... (3)
DMT 547 SOCIAL AND PSYCHOLOGICAL ASPECTS OF APPAREL (SAME AS SOC 547) ..... (3)
DMT 557 INTERIOR DESIGN STUDIO 3 ..... (5)
DMT 558 INTERIOR DESIGN STUDIO 4 ..... (5)
DMT 559 SPECIAL TOPIC IN INTERIOR DESIGN, MERCHANDISING, AND TEXTILES (SUBTITLE REQUIRED) ..... (1-3)
DMT 589 RES/PRES I: INTRODUCTORY CONCEPTS OF RESTORATION AND PRESERVATION ..... (3)
DMT 595 INDEPENDENT STUDY IN INTERIOR DESIGN, MERCHANDISING, AND TEXTILES ..... (1-3)
DMT 600 RESEARCH METHODOLOGY IN HUMAN ENVIRONMENTAL SCIENCES (SAME AS HES 600) ..... (3)
DMT 622 ADVANCED HISTORY OF TEXTILES ..... (3)
DMT 633 ADVANCED HISTORY OF COSTUME ..... (3)
DMT 641 REGIONAL VARIATIONS IN COLONIAL AMERICAN DESIGN ..... (3)
DMT 642 HISTORIC AMERICAN INTERIORS ..... (3)
DMT 646 CURRENT RESEARCH ISSUES IN ENVIRONMENTAL DESIGN ..... (3)
DMT 650 SURVEY OF CURRENT THEORIES AND LITERATURE ..... (3)
DMT 655 ISSUES IN CREATIVITY AND DESIGN ..... (3)
DMT 659 INTERIOR DESIGN STUDIO 5 ..... (3)
DMT 660 INTERIOR DESIGN STUDIO 6 ..... (3)
DMT 665 ENVIRONMENTAL ISSUES RELATED TO INTERIOR DESIGN ..... (3)
DMT 669 ADVANCED COLOR THEORY AND APPLICATION ..... (3)
DMT 700 RESEARCH PROBLEMS IN INTERIOR DESIGN, MERCHANDISING, AND TEXTILES ..... (3)
DMT 748 MASTER'S THESIS RESEARCH ..... (0)
DMT 759 SPECIAL TOPICS IN INTERIOR DESIGN, MERCHANDISING, AND TEXTILES (SUBTITLE REQUIRED) ..... (1-3)
DMT 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
DMT 772 SEMINAR IN INTERIOR DESIGN, MERCHANDISING AND TEXTILES ..... (1-3)
DMT 785 INDEPENDENT STUDY IN INTERIOR DESIGN, MERCHANDISING, AND TEXTILES ..... (1-3)
HES 596 SPECIAL PROBLEMS IN HUMAN ENVIRONMENTAL SCIENCES (1-3)
HES 600 RESEARCH METHODOLOGY IN HUMAN ENVIRONMENTAL SCIENCES (SAME AS DMT 600) ..... (3)

Kinesiology and Health Promotion

GRADUATE FACULTY
Full Members
Professors
Arthur J. Nitz, Melody P. Noland, Robert Shapiro, Chester Tylkowski.
Associate Professors
Richard S. Riggs, Dennis Vinton, Andrew Weiner, James W. Yates.
Assistant Professors
Carl Mattacola Jr., Paul M. Kingery, Jean McCrory, Tim Uhl.
Associate Members
Associate Professors
John Hall, Stanley Labanowich, Steve Parker.
Assistant Professors
Jody Clasey, John L. Lawrence, Kimberly Miller.
Emeritus Professors
Joseph Gruber, Pentti Teraslinna.

The Department of Kinesiology and Health Promotion offers graduate work leading to the Master of Science and Doctor of Education degrees with areas of concentration in kinesiology and health promotion. Within these areas students may specialize in athletic training, biomechanics, exercise physiology, health promotion, physical education teaching/coaching, or sport management. The Department also offers a Ph.D. degree in Exercise Science in which the student can specialize in biomechanics or exercise physiology.

Doctor of Philosophy

The program offers areas of concentration in Biomechanics, or Exercise Physiology. The goal of the program is to provide education to qualified students so that they will have a broad understanding of exercise science, as well as an in-depth knowledge of one specific area or discipline. Graduates of this program will be able to conduct exercise science research, teach at the university level, direct discipline specific educational programs, and collaborate with other professionals on various issues related to exercise science.

The Exercise Science Core includes 20 hours and provides the student with a broad understanding of the various disciplines

involved in this field. Each student is also required to take a minimum of 7 hours in research/statistic course work and 6 hours of computer programming or demonstrate proficiency in programming. Beyond this minimum, an advisor and committee in consultation with each student set the structure and content of the doctoral program. The number of formal courses within each area of specialization may vary. It is expected that the depth of knowledge in each area of study comes from independent study and research experiences, in addition to the dissertation, which are all under the direction of the faculty. Each student will demonstrate their depth of knowledge by their qualifying exams. Typically, it will take from 3-5 years for the student to complete the degree requirements including the dissertation.

Core Courses (Required 20 credits)

KHP 610 Muscles in Motor Control	3
KHP 615 Biomechanics of Fundamental Movements	3
KHP 620 Advanced Exercise Physiology	3
KHP 640 Laboratory Methods in Exercise Science	3
KHP 782 Independent Research	3
PGY 615 Teaching Credits or equivalent	1
Seminar (1 credit/sem for 4 sem)	4

Doctor of Education

The Ed.D. program in Kinesiology and Health Promotion provides advanced study for those who seek careers in educational, industrial or other appropriate settings. Admission to the program requires a master's degree and satisfactory completion of the Graduate Record Examination. Course work is planned by the student's advisory committee based on their assessment of the student's background and goals. All programs include course work within and outside the department. Additional information about the Ed.D. can be obtained from the Director of Graduate Studies.

Master of Science

The master's program is designed to provide a high-quality graduate program for the following two types of students: 1) active, motivated individuals who desire advanced study to enhance their professional adequacy, and 2) discipline-oriented students completing a master's as an intermediate step toward doctoral work. The objective of the program is to prepare the student to:

1) effectively locate, analyze, and use significant elements of the professional literature and research materials,
2) permit an in-depth study of a specialized content area within the field, and
3) acquire a knowledge of sound research procedures.

The program needed to accomplish this objective involves a combination of departmental course offerings, supporting electives, and a required core of statistics and research methods. Inasmuch as the fields of health promotion and kinesiology draw their principles from a variety of disciplines, it is appropriate that certain electives be chosen from the supportive areas of the biological and physical sciences and the behavioral and social sciences. Master's candidates with the approval of the department may select either a thesis (Plan A) or a non-thesis option (Plan B).

Admission Requirements

Applicants must meet the requirements set forth in the first part of this Bulletin. Students are expected to have satisfactorily completed the Graduate Record Examination (GRE). In addition, applicants are expected to have a minimum of 21 undergraduate hours in their respective fields. Specific prerequisites for graduate study at the master's level are determined by a committee of the departmental graduate faculty based upon area of emphasis.

Degree Requirements

Regardless of whether the student concentrates in the kinesiology or health promotion areas, all candidates are required to complete one of the following:

PLAN A
(Thesis Option)

EDP 557 Educational Statistics	3
or	
STA 570 Basic Statistical Analysis	4
KHP 644 Research Techniques Applied to Health, Physical Education and Recreation	3
Supporting Electives	6
KHP Area of Concentration	12
KHP 768 Residence Credit for the Master's Degree	6
	Total 30-31

PLAN B
(Non-Thesis Option)

EDP 557 Educational Statistics	3
or	
STA 570 Basic Statistical Analysis	4
KHP 644 Research Techniques Applied to Health, Physical Education and Recreation	3
Supporting Electives	6
KHPArea of Concentration	18
	Total 30-31

For additional information, write to the Director of Graduate Studies, Department of Kinesiology and Health Promotion.

GRADUATE COURSES

KHP 420G PHYSIOLOGY OF EXERCISE ..... (3)
KHP 509 WORKSHOP IN HEALTH AND SAFETY ..... (1-3)
KHP 515 ANATOMICAL AND MECHANICAL KINESIOLOGY ..... (3)
KHP 535 SCHOOL HEALTH DILEMMAS OF SPECIAL POPULATIONS ..... (3)
KHP 546 PHYSICAL EDUCATION WORKSHOP ..... (1-3)
KHP 547 PSYCHOLOGY OF SPORT AND PHYSICAL ACTIVITY ..... (3)
KHP 560 MOTOR DEVELOPMENT IN INFANTS AND YOUNG CHILDREN . (3)
KHP 570 DESIGN AND MANAGEMENT OF FACILITIES FOR SPORT ..... (3)
KHP 573 MANAGEMENT OF SPORT ..... (3)
KHP 576 INTRAMURAL AND SPORTS CLUB ADMINISTRATION ..... (3)
KHP 577 PRACTICUM IN RECREATION ..... (3-9)
KHP 579 ADAPTED PHYSICAL EDUCATION ..... (3)
KHP 580 INTRODUCTION TO TEAM DEVELOPMENT ..... (3)
KHP 585 FOUNDATIONS OF SPORT MANAGEMENT ..... (3)
KHP 592 CHOREOGRAPHY ..... (2)
KHP 600 EXERCISE STRESS TESTING AND PRESCRIPTION ..... (3)
KHP 609 SEMINAR IN HEALTH AND SAFETY EDUCATION ..... (3)
KHP 610 MOTOR CONTROL I: MUSCLES, STRENGTH AND MOVEMENT . (3)
KHP 615 BIOMECHANICS OF FUNDAMENTAL MOVEMENTS ..... (3)
KHP 617 GAIT ANALYSIS ..... (3)
KHP 618 WORK HARDENING AND ERGONOMICS ..... (3)
KHP 620 ADVANCED EXERCISE PHYSIOLOGY ..... (3)
KHP 621 EXERCISE AND CORONARY HEART DISEASE ..... (3)
KHP 640 LAB METHODS IN EXERCISE SCIENCE ..... (3)
KHP 644 RESEARCH TECHNIQUES APPLIED TO HEALTH, PHYSICAL EDUCATION AND RECREATION ..... (3)
KHP 650 MOTOR CONTROL II: REFLEXES, COGNITION AND MOVEMENT ..... (3)
KHP 676 CURRENT ISSUES AND PROBLEMS IN SPORT MANAGEMENT ... (3)
KHP 680 SPORT MARKETING ..... (3)
KHP 681 FINANCIAL ASPECTS OF SPORT ..... (3)
KHP 685 SUPERVISION OF SPORT AND FITNESS PERSONNEL ..... (3)
KHP 686 SPORT MANAGER'S LABORATORY ..... (3)
KHP 687 PRACTICUM IN SPORT MANAGEMENT ..... (3-9)
KHP 694 INDEPENDENT STUDY IN HEALTH EDUCATION ..... (1-3)
KHP 695 INDEPENDENT STUDY IN PHYSICAL EDUCATION ..... (1-3)
KHP 696 INDEPENDENT STUDY IN RECREATION ..... (1-3)
KHP 720 SPORTS MEDICINE ..... (3)
KHP 748 MASTER'S THESIS RESEARCH ..... (0)
KHP 749 DISSERTATION RESEARCH ..... (0)
KHP 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
KHP 769 RESIDENCE CREDIT FOR THE DOCTORAL DEGREE ..... (0-12)

KHP 770 SEMINAR IN PHYSICAL EDUCATION ..... (3)
KHP 780 SEMINAR IN RECREATION ..... (3)
KHP 781 PROSEMINAR IN HPR (SUBTITLE REQUIRED) ..... (1-3)
KHP 782 INDEPENDENT RESEARCH ..... (3)

Library Science

GRADUATE FACULTY
Full Members
Professors
Donald O. Case, Lois Chan, JoAnn V. Rogers, Timothy W. Sineath, Thomas J. Waldhart.
Associate Professors
Ling H. Jeng.
Associate Members
Assistant Professors
Gerald Benoit.
Emeritus Professors
Lawrence A. Allen, Robert E. Cazden, Michael H. Harris.

Master's Program

The School of Library and Information Science ("School") conforms to the University of Kentucky Graduate School in offering three forms of the master's degree: the Master of Science in Library Science (M.S.L.S.) and the Master of Arts (M.A.), plans A and B. Most students elect the M S L S degree, which requires satisfactory completion of 36 credit hours and of the final written examination. The 36 credit hours are distributed in this way: 12 hours of core courses, a qualifying technology course, 21 hours of additional electives. The required core courses are LIS600 Information in Society, LIS 601 Information Sources and Services, LIS 602 Information Storage and Retrieval, and LIS 603 Management in Library and Information Science. Qualifying technology courses are LIS 636 Microcomputers in Libraries and Information Centers, LIS 637 Information Technology, LIS 638 Internet Technologies and Information Services, and LIS 668 Information Systems Design. As many as 6 elective hours may be taken in a cognate area of study. Transfer credit is limited to 6 credit hours, except that as many as 9 credit hours of the School's courses, taken while in post-baccalaureate status, may be transferred into the program.

The M.A. degree, plan A, requires essentially the above plus (i) satisfactory demonstration of a language competency and (ii) a thesis, which substitutes for six elective hours. Six hours must be in a cognate area. The M.A., plan B, is the same as plan A except 6 hours of advanced bibliography or technical services course work substitute for the thesis.

Degree requirements allow a student considerable freedom to design her/his program to suit individual needs and interests. The curriculum is sufficiently varied to permit opportunities to build both breadth and depth into the course of study. The student is assisted in this endeavor by a faculty advisor who provides guidance and counsel. Advisor assignment is based, when possible, on student interests and preferences. Ultimately, however, it is the student's responsibility to see that all School and Graduate School requirements are met prior to taking the final written examination.

Admission Requirements

The School's budget and number of faculty limit enrollment in the master's program, and meeting the GPA and GRE criteria (see below) does not guarantee admission. Admission decisions are competitive, based on (i) analysis of a variety of relevant factors regarding the applicant and (ii) enrollment in the master's program, which determines the number of applicants who can be admitted. The goal of the admission criteria is to enable the School to estimate the applicant's potential as a graduate student and information professional.

Three primary factors are considered in the admission decision: a bachelor's degree from an accredited institution; an undergraduate grade point average of 2.75 or higher (on scale with A = 4.0); and a score of 450 or higher on the verbal test and a score of 400 or higher on the quantitative test or on the analytical test of the Graduate Record Examination. Other factors which are also considered in the admission decision include personal references (3 are required), personal interviews (optional), work experience, academic background, other graduate work, progressive academic improvement, and the cultural and geographic origin of the applicant. Applicants for whom English is not the native language must achieve a minimum TOEFL score of 550 (paper-based test) or 213 (computer-based test).

A grade point average of 3.00 (B) must be maintained. Failure to do so results in academic probation, and will result in dismissal, if, in the prescribed time, the grade point average is not raised to 3.00 or higher. A student who earns a third C (or lower) grade is dismissed from the program, even though the student may have earned the required minimum 3.00 grade point average and exercised the repeat option to remove one of the C (or lower) grades.

GRADUATE COURSES

LIS 510 CHILDRENS LITERATURE AND RELATED MATERIALS ..... (3)
LIS 514 LITERATURE AND RELATED MEDIA FOR YOUNG ADULTS ..... (3)
LIS 600 INFORMATION IN SOCIETY ..... (3)
LIS 601 INFORMATION SOURCES AND SERVICES ..... (3)
LIS 602 INFORMATION STORAGE AND RETRIEVAL ..... (3)
LIS 603 MANAGEMENT IN LIBRARY AND INFORMATION SCIENCE ..... (3)
LIS 604 LIBRARY AND BOOK HISTORY ..... (3)
LIS 607 INFORMATION NEEDS AND USES ..... (3)
LIS 608 METHODS OF RESEARCH IN LIBRARY AND INFORMATION SCIENCE ..... (3)
LIS 609 CURRENT PROBLEMS IN LIBRARY AND INFORMATION SCIENCE ..... (3)
LIS 610 CREATIVE LIBRARY PROGRAMS FOR CHILDREN ..... (3)
LIS 611 CRITICAL ANALYSIS OF CHILDREN'S LITERATURE ..... (3)
LIS 613 INFORMATION RESOURCES AND SERVICES FOR CHILDREN ..... (3)
LIS 618 ADULT INFORMATION NEEDS AND SERVICES ..... (3)
LIS 622 SOCIAL SCIENCE INFORMATION ..... (3)
LIS 623 INFORMATION IN THE HUMANITIES ..... (3)
LIS 624 INFORMATION IN SCIENCE AND TECHNOLOGY ..... (3)
LIS 626 GOVERNMENT PUBLICATIONS ..... (3)
LIS 630 ONLINE INFORMATION SYSTEMS AND SERVICES ..... (3)
LIS 636 MICROCOMPUTERS IN LIBRARIES AND INFORMATION CENTERS ..... (3)
LIS 637 INFORMATION TECHNOLOGY ..... (3)
LIS 638 INTERNET TECHNOLOGIES AND INFORMATION SERVICES ..... (3)
LIS 640 HEALTH SCIENCES LIBRARIES ..... (3)
LIS 641 LAW LIBRARIANSHIP ..... (3)
LIS 643 ARCHIVES AND MANUSCRIPTS MANAGEMENT ..... (3)
LIS 644 ADMINISTRATION OF SCHOOL LIBRARY MEDIA CENTERS ..... (3)
LIS 645 PUBLIC LIBRARIES ..... (3)
LIS 646 ACADEMIC LIBRARIES ..... (3)
LIS 647 CURRENT TRENDS IN SCHOOL MEDIA CENTERS ..... (3)
LIS 650 TECHNICAL PROCESSING SYSTEMS ..... (3)
LIS 651 LIBRARY AND INFORMATION NETWORKS ..... (3)
LIS 655 ORGANIZATION OF KNOWLEDGE I ..... (3)
LIS 656 ORGANIZATION OF KNOWLEDGE II ..... (3)
LIS 659 COLLECTION DEVELOPMENT ..... (3)
LIS 660 ADMINISTRATIVE BEHAVIOR IN LIBRARY MANAGEMENT ..... (3)
LIS 668 INFORMATION SYSTEMS DESIGN ..... (3)
LIS 675 PROFESSIONAL FIELD EXPERIENCE ..... (3)
LIS 676 SCHOOL MEDIA PRACTICUM ..... (1-12)
LIS 690 SPECIAL TOPICS IN LIBRARY AND INFORMATION SCIENCE ..... (1-3)
LIS 695 INDEPENDENT STUDY IN LIBRARY AND INFORMATION SCIENCE ..... (3)
LIS 748 MASTER'S THESIS RESEARCH ..... (0)
LIS 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)

Manufacturing Systems Engineering

GRADUATE FACULTY
Full Members
Professors
I.S. Jawahir, Alan T. Male, Keith Rouch, Kozo Saito.
Associate Professors
Larry Holloway, Douglass S. Kalika, Janet K. Lumpp, Jon C. Yingling.

The College of Engineering offers a master's degree program in Manufacturing Systems Engineering. Because of its highly multidisciplinary nature, the Master of Science in Manufacturing Systems Engineering is housed in the College of Engineering rather than in one of the existing departments. The resources and facilities of the Center for Robotics and Manufacturing Systems are a key component in this degree program.

Graduate degree programs in the field of manufacturing systems engineering are important for enhancing manufacturing productivity and quality in the U.S. The Master of Science in Manufacturing Systems Engineering is designed to equip the student for opportunities in modern manufacturing processes and systems. Some of the possible areas of concentration for research and study are: Manufacturing Processes and Equipment, Design for Manufacturing, Plastic and Polymer Processing, Electronics Design and Manufacturing, Computer-aided Design and Manufacturing, Manufacturing Systems Planning and Control, Automated Assembly, and Lean Manufacturing.

The Center for Robotics and Manufacturing Systems, a part of the College of Engineering, conducts graduate-level academic research of the highest quality and transmits that knowledge to industry and government. This 68,000-square-foot building, completed in the fall of 1989, contains: laboratories and offices, machining lab, metrology lab, rapid prototyping lab, electronics assembly lab, welding lab, automation equipment lab, workstations, CAD/CAE systems, instructional TV classrooms, and TV satellite uplink and downlink equipment.

Admission Requirements

Applicants normally have a bachelor's degree in engineering from an ABET accredited institution (or equivalent). For students with an undergraduate degree other than engineering, completion of a set of identified courses (or their equivalent) in an Engineering discipline will be required prior to admission to the program with full graduate standing.

A minimum grade point average of 2.8 on undergraduate work is expected, along with minimum GRE scores of 700 quantitative and 500 Analytical. If a student does not meet these criteria, an evaluation of the student's overall education and experience may allow admission, subject to evaluation by the Director of Graduate Studies.

Curriculum and Degree Requirements

The Plan A (thesis option) master's degree requires 24 credit hours of course work, a thesis, and the satisfactory completion of a final examination. One-half or more of the course work must be at the 600 level or above. All students are required to complete four specified core courses: Modeling of Manufacturing Processes and Machines; Systems for Factory Information and Control; Seminar and Project in Manufacturing Systems Engineering; and Organizational Behavior. The electives for each student will be developed in conjunction with an advisor to insure that the program provides breadth and depth of content for the student, and meets his or her specific needs and interests. Appropriate electives are drawn from areas of Engineering, Computer Science, Business and Economics, or Mathematics. Two electives are designated as Manufacturing Specialization electives.

The Plan B (non-thesis option) is reserved for students who have significant engineering research or development experience in a manufacturing environment, for which completion of a thesis would be less beneficial than the additional course work involved in Plan B. The program requires 33 credit hours of course work and the satisfactory completion of a final examination. Students must complete the four core courses specified above, as well as MFS 784 Research Project in Manufacturing Systems Engineering, nine credit hours of Manufacturing Specialization electives, and nine credit hours of other appropriate electives. Approval of the student's advisor and of the Director of Graduate Studies is necessary for a student to pursue Plan B.

GRADUATE COURSES

MFS 503 LEAN MANUFACTURING PRINCIPLES AND PRACTICES (SAME AS ME 503) ..... (3)
MFS 505 MODELING OF MANUFACTURING PROCESSES AND MACHINES (SAME AS ME 505) ..... (3)
MFS 507 DESIGN FOR MANUFACTURING (SAME AS ME 507) ..... (3)
MFS 512 MANUFACTURING SYSTEMS (SAME AS ME 512) ..... (3)
MFS 525 ORGANIZATIONAL LEARNING FOR LEAN MANUFACTURING ... (3)
MFS 526 OPERATIONS MANAGEMENT IN LEAN MANUFACTURING ..... (3)
MFS 554 CHEMICAL AND PHYSICAL PROCESSING OF POLYMER SYSTEMS (SAME AS MSE/CME/ME 554) ..... (3)
MFS 563 SIMULATION OF INDUSTRIAL PRODUCTION SYSTEMS (SAME AS MNG 563) ..... (3)
MFS 581 QUALITY CONTROL (SAME AS MSE 581) ..... (3)
MFS 599 TOPICS IN MANUFACTURING SYSTEMS ENGINEERING (SUBTITLE REQUIRED) ..... (3)
MFS 605 SYSTEMS FOR FACTORY INFORMATION AND CONTROL (SAME AS EE 605) ..... (3)
MFS 606 SEMINAR AND PROJECT IN MANUFACTURING SYSTEMS ENGINEERING (SAME AS ME/EE 606) ..... (3)
MFS 607 ANALYSIS OF METAL CUTTING PROCESSES (SAME AS ME/MSE 607) ..... (3)
MFS 608 NONTRADITIONAL MANUFACTURING PROCESSES (SAME AS ME 608) ..... (3)
MFS 611 ORGANIZATIONAL BEHAVIOR (SAME AS MGT 611) ..... (3)
MFS 699 TOPICS IN MANUFACTURING SYSTEMS ENGINEERING (SUBTITLE REQUIRED) ..... (1-3)
MFS 748 MASTER'S THESIS RESEARCH ..... (0)
MFS 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
MFS 780 SPECIAL PROBLEMS IN MANUFACTURING SYSTEMS ENGINEERING ..... (3)
MFS 784 RESEARCH PROJECT IN MANUFACTURING SYSTEMS ENGINEERING ..... (3)
EGR 537 NUMERICAL ANALYSIS (SAME AS CS/MA 537) ..... (3)
EGR 599 TOPICS IN ENGINEERING (SUBTITLE REQUIRED) ..... (1-3)
EGR 611 BOUNDARY ELEMENT METHODS IN ENGINEERING (SAME AS ME 611) ..... (3)
EGR 621 FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)
EGR 622 ADVANCED FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)

Materials Science and Engineering

GRADUATE FACULTY
Full Members
Professors
Gerald P. Huffman, Chi-Sing Man, James G. Morris, Kenji Okazaki, Lynn S. Penn, Philip J. Reucroft, Vijay Singh.
Associate Professors
Douglass S. Kalika.
Associate Members
Assistant Professors
Bruce J. Hinds III, Stephen Rankin, Fuqian Yang, Tongguang Zhai.
Emeritus Professors
Robert J. DeAngelis, Peter P. Gillis.

The department offers programs of study leading to the Master of Science in Materials Science and Engineering, and to the Doctor of Philosophy.

Admission Requirements

Persons with backgrounds in any physical science or engineering discipline are encouraged to apply, and each applicant's qualifications are reviewed individually. Students applying need to have performed competently at the undergraduate level and need a good grounding in the physical sciences or engineering. Deficiencies in mathematics or in specific areas of science or engineering must be corrected by such remedial course work as prescribed by the departmental committee on graduate education.

In addition to the minimum Graduate School admission criteria, an applicant is expected to have a cumulative score of 1100 or more on the Quantitative and Verbal sections of the Graduate Record Examination and letters of recommendation providing convincing evidence that the applicant has ability and potential. However, all aspects of the applicant's record are taken into account, including evidence that academic performance has been improving during previous academic activities.

Degree Requirements

The master's degree is offered under Plan A (thesis option) and Plan B (non-thesis option). Candidates for the degree under Plan A must complete 24 credit hours of course work and submit and defend a thesis that demonstrates ability to conduct sound research. Candidates for the Plan B degree must complete 30 credit hours in the broad area of materials science and engineering. Master's candidates must take at least half of the minimum course requirements at the 600 level or above, and must take two-thirds of their course work within the department.

The Ph.D. program offers broad training in materials science and engineering while providing options to suit the student's particular interest. With the approval of the Advisory Committee, doctoral students complete a program of course work selected to correct deficiencies and to enhance the area of interest. Students must demonstrate, by course work, proficiency in a minor area selected from the fields of mathematics, physical sciences, or engineering. Doctoral students must pass a qualifying examination consisting of both written and oral components. This examination is usually based on a selected area of the scientific literature and is to verify that the student has an understanding of the field of interest sufficient to become a candidate for the degree. Also, as part of the qualifying examination, doctoral students must submit and defend a proposal of dissertation research. After qualifying as a doctoral candidate, the student must conduct original and significant research and must submit and defend a dissertation based on that research. Additional registration requirements pertaining to doctoral students before and after successful completion of qualifying examinations are described under the general requirements for all doctoral degrees earlier in this Bulletin.

Resources for the conduct of advanced studies include polymer synthesis and composites fabrication laboratories, metallurgical processing laboratories, test and analysis facilities for microscopic and macroscopic characterization of polymers, ceramics, and metals.

GRADUATE COURSES

MSE 401G METAL AND ALLOYS ..... (4)
MSE 402G ELECTRONIC MATERIALS AND PROCESSING ..... (3)
MSE 403G CERAMIC ENGINEERING ..... (4)
MSE 404G POLYMERIC MATERIALS (SAME AS CME 404G) ..... (3)
MSE 506 MECHANICS OF COMPOSITE MATERIALS (SAME AS ME 506) ..... (3)
MSE 531 POWDER METALLURGY ..... (3)
MSE 535 MECHANICAL PROPERTIES OF MATERIALS ..... (3)
MSE 538 DEFORMATION PROCESSING ..... (4)
MSE 542 EXTRACTIVE METALLURGY ..... (4)
MSE 554 CHEMICAL AND PHYSICAL PROCESSING OF POLYMER SYSTEMS (SAME AS CME/MFS/ME 554) ..... (3)
MSE 556 INTRODUCTION TO COMPOSITE MATERIALS (SAME AS CME/ME 556) ..... (4)
MSE 558 PRINCIPLES OF POLYMER CHARACTERIZATION AND ANALYSIS (SAME AS CME 558) ..... (3)
MSE 561 ELECTRIC AND MAGNETIC PROPERTIES OF MATERIALS (SAME AS EE 561) ..... (3)
MSE 566 HYBRID MICROELECTRONICS (SAME AS EE 566) ..... (3)
MSE 568 FIBER OPTICS (SAME AS EE 568) ..... (3)
MSE 569 ELECTRONIC PACKAGING SYSTEMS AND MANUFACTURING PROCESSES (SAME AS EE 569) ..... (3)
MSE 580 MATERIAL SELECTION AND FAILURE ANALYSIS ..... (3)
MSE 581 QUALITY CONTROL (SAME AS MFS 581) ..... (3)
MSE 585 MATERIALS CHARACTERIZATION TECHNIQUES ..... (4)
MSE 599 TOPICS IN MATERIALS SCIENCE AND ENGINEERING (SUBTITLE REQUIRED) ..... (1-4)
MSE 607 ANALYSIS OF METAL CUTTING PROCESSES (SAME AS MFS/ME 607) ..... (3)
MSE 620 COMPUTATIONAL MATERIALS SCIENCE ENGINEERING ..... (3)
MSE 622 PHYSICS OF POLYMERS (SAME AS CME 622) ..... (3)
MSE 632 ADVANCED MATERIALS SCIENCE ..... (3)
MSE 635 ADVANCED MECHANICAL METALLURGY ..... (3)
MSE 636 DISLOCATION THEORY ..... (3)
MSE 650 ADVANCED MATERIALS THERMODYNAMICS ..... (3)
MSE 659 ADVANCED PHASE DIAGRAMS ..... (3)
MSE 661 ADVANCED PHYSICAL METALLURGY I ..... (3)
MSE 662 ADVANCED PHYSICAL METALLURGY II ..... (3)
MSE 665 CRYSTALLOGRAPHY AND X-RAY ANALYSIS ..... (4)
MSE 666 DIFFRACTION METHODS IN MATERIALS SCIENCE ..... (4)
MSE 699 ADVANCED TOPICS IN MATERIALS SCIENCE AND ENGINEERING (SUBTITLE REQUIRED) ..... (3)
MSE 748 MASTER'S THESIS RESEARCH ..... (0)
MSE 749 DISSERTATION RESEARCH ..... (0)
MSE 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
MSE 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
MSE 771 SEMINAR ..... (0)
MSE 781 SPECIAL PROBLEMS, LITERATURE AND LABORATORY ..... (1-3)
MSE 782 SPECIAL PROBLEMS, LITERATURE AND LABORATORY ..... (3)
MSE 790 RESEARCH IN MATERIALS SCIENCE ..... (3-9)

EGR 537 NUMERICAL ANALYSIS (SAME AS CS/MA 537) ..... (3)
EGR 599 TOPICS IN ENGINEERING (SUBTITLE REQUIRED) ..... (1-3)
EGR 611 BOUNDARY ELEMENT METHODS IN ENGINEERING (SAME AS ME 611) ..... (3)
EGR 621 FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)
EGR 622 ADVANCED FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)

Mathematics

GRADUATE FACULTY

Full Members

Professors

David Adams, James C. Beidleman, James Brennan, Russell M. Brown, Richard Carey, Thomas Chapman, Craig C. Douglas, Paul Eakin, Carl Eberhart, Edgar Enochs, J.B. Fugate, Ronald Gariepy, Lawrence Harris, Thomas Hayden, Peter D. Hislop, Kenneth Kubota, Carl W. Lee, David B. Leep, John Lewis, Chi-Sing Man, James McDonough, Peter Perry, Avinash M. Sathaye, Ted Suffridge, James H. Wells.

Associate Professors

Raymond Cox, Richard Ehrenborg, Vassily Gorbounov, Robert Molzon, Serge Ochanine, Zhongwei Shen, Qiang Ye.

Associate Members

Associate Professors

Ren-Cang Li.

Assistant Professors

Seongjai Kim, Francois Margot, Margaret Readdy, Changyou Wang.

Emeritus Professors

J.D. Buckholtz, Donald B. Coleman, Michael B. Freeman, Henry C. Howard, David Johnson, Donald Leigh, John Mack, Raymond Rishel, Wimberly Royster.

The Department of Mathematics grants the M.A., M.S., and Ph.D. degrees. There are no specific course prerequisites for admission; however, two semesters of advanced calculus, and at least one semester each of algebra and topology are suggested. Both the M.A. and M.S. degrees are 30-credit-hour programs, offered under either Plan A or Plan B. The department also offers an M.S. in Applied Mathematics which requires 36 hours.

The Master of Arts degree, featuring a core program that

emphasizes mathematical structures, is designed for prospective community college teachers and for students contemplating studies at the Ph.D. level.

The Master of Science degree, through an emphasis on the applications of mathematics and the acquisition of computational skills, focuses on careers in business, industry, and government.

The Master of Science in Applied Mathematics is a more intensive program intended to develop the skills needed to apply mathematics to real world problems. The degree requires 18 hours in mathematics, 12 hours in computer science and a 6 hour minor, for a total of 36 hours.

The doctorate is a research degree granted on the basis of broad mathematical knowledge and exhibited creative ability. Course work leading to the doctorate is available in the areas of algebra, analysis (classical and modern), applied mathematics, optimization, numerical analysis, differential equations, and topology. A comprehensive examination is required of each student.

Admission Requirements

The graduate programs in mathematics do not have formal admission requirements other than those of the Graduate School. Admission, however, is competitive. The admission committee reviews transcripts and letters of recommendation seeking evidence of mastery in proof-based mathematics (such as analysis, topology, and modern algebra), the ability to craft mathematical proofs, and general mathematical maturity.

Degree Requirements

In order to be admitted to candidacy for the Ph.D. degree, a student must pass a proficiency examination in one foreign language chosen from French, German or Russian, complete studies in a minor field (either inside or outside the department) and successfully complete the comprehensive examinations. Subsequent work becomes highly specialized through seminars, independent study, and finally, work on a dissertation which penetrates in depth some field of particular interest. Areas in which members of the faculty have active research projects include algebraic topology, group theory, ring theory, algebraic geometry, number theory, complex variables, rational approximation, operator theory, partial differential equations, continuum mechanics, numerical analysis, algebraic combinatorics and optimization.

The ability to communicate mathematics is an increasingly important professional qualification. The department requires all students to complete a teaching or research assignment during each semester of their enrollment in a graduate mathematics program. Students will be assigned to teach courses at the early undergraduate level. Entering students will normally be assigned three semester hours, and continuing ones will normally teach 6 semester hours. With the approval of the Director of Graduate Studies, a student may substitute an equivalent research effort for the teaching activity.

GRADUATE COURSES

MA 415G GRAPH THEORY (SAME AS CS 415G) ..... (3)
MA 416G PRINCIPLES OF OPERATIONS RESEARCH I (SAME AS CS 416G) . (3)
MA 417G PRINCIPLES OF OPERATIONS RESEARCH II (SAME AS STA 417G) ..... (3)
MA 432G METHODS OF APPLIED MATHEMATICS I ..... (3)
MA 433G INTRODUCTION TO COMPLEX VARIABLES ..... (3)
MA 471G ADVANCED CALCULUS I ..... (3)
MA 472G ADVANCED CALCULUS II ..... (3)
MA 481G DIFFERENTIAL EQUATIONS ..... (3)
MA 483G INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS ..... (3)
MA 485G FOURIER SERIES AND BOUNDARY VALUE PROBLEMS (SAME AS ME 585) ..... (3)
MA 501 SEMINAR IN SELECTED TOPICS ..... (3)
MA 502 SEMINAR IN SELECTED TOPICS ..... (3)
MA 503 COMBINATORICS ..... (3)
MA 506 METHODS OF THEORETICAL PHYSICS I (SAME AS PHY 506) ..... (3)
MA 507 METHODS OF THEORETICAL PHYSICS II (SAME AS PHY 507) ..... (3)
MA 515 MATHEMATICAL PROGRAMMING AND EXTENSIONS (SAME AS STA 515) ..... (3)
MA 522 MATRIX THEORY AND NUMERICAL LINEAR ALGEBRA I (SAME AS CS 522) ..... (3)
MA 527 APPLIED MATHEMATICS IN THE NATURAL SCIENCES I (SAME AS ME 527) ..... (3)
MA 532 ORDINARY DIFFERENTIAL EQUATIONS ..... (3)
MA 533 PARTIAL DIFFERENTIAL EQUATIONS ..... (3)
MA 537 NUMERICAL ANALYSIS (SAME AS CS/EGR 537) ..... (3)
MA 538 NUMERICAL ANALYSIS II (SAME AS CS 538) ..... (3)
MA 551 TOPOLOGY I ..... (3)
MA 561 MODERN ALGEBRA I ..... (3)
MA 565 LINEAR ALGEBRA ..... (3)
MA 570 MULTIVARIATE CALCULUS ..... (3)
MA 575 PRINCIPLES OF ANALYSIS ..... (3)
MA 611 INDEPENDENT WORK IN MATHEMATICS ..... (3-9)
MA 613 PROBLEMS SEMINAR IN OPERATIONS RESEARCH (SAME AS EE/STA 619) ..... (3)
MA 616 NUMERICAL TECHNIQUES FOR NONLINEAR OPTIMIZATION. ... (3)
MA 617 MARKOVIAN DECISION PROBLEMS ..... (3)
MA 618 COMBINATORICS AND NETWORKS ..... (3)
MA 622 MATRIX THEORY AND NUMERICAL LINEAR ALGEBRA II (SAME AS CS 622) ..... (3)
MA 625 NUMERICAL METHODS FOR DIFFERENTIAL EQUATIONS ..... (3)
MA 628 APPLIED MATHEMATICS IN THE NATURAL SCIENCES II ..... (3)
MA 630 MATHEMATICAL FOUNDATIONS OF STOCHASTIC PROCESSES AND CONTROL THEORY I ..... (3)
MA 632 ADVANCED DIFFERENTIAL EQUATIONS ..... (3)
MA 633 THEORY OF PARTIAL DIFFERENTIAL EQUATIONS ..... (3)
MA 641 DIFFERENTIAL GEOMETRY ..... (3)
MA 642 DIFFERENTIAL GEOMETRY ..... (3)
MA 651 TOPOLOGY II ..... (3)
MA 654 ALGEBRAIC TOPOLOGY I ..... (3)
MA 655 ALGEBRAIC TOPOLOGY II ..... (3)
MA 661 MODERN ALGEBRA II ..... (3)
MA 667 GROUP THEORY ..... (3)
MA 671 FUNCTIONS OF A COMPLEX VARIABLE I ..... (3)
MA 672 FUNCTIONS OF A COMPLEX VARIABLE II ..... (3)
MA 673 SEVERAL COMPLEX VARIABLES ..... (3)
MA 676 ANALYSIS I ..... (3)
MA 677 ANALYSIS II ..... (3)
MA 681 FUNCTIONAL ANALYSIS I ..... (3)
MA 682 FUNCTIONAL ANALYSIS II ..... (3)
MA 715 SELECTED TOPICS IN OPTIMIZATION ..... (3)
MA 721 SELECTED TOPICS IN NUMERICAL ANALYSIS ..... (3)
MA 732 SELECTED TOPICS IN DIFFERENTIAL AND INTEGRAL EQUATIONS ..... (3)
MA 748 MASTER'S THESIS RESEARCH ..... (0)
MA 749 DISSERTATION RESEARCH ..... (0)
MA 751 SELECTED TOPICS IN TOPOLOGY ..... (3)
MA 752 SELECTED TOPICS IN TOPOLOGY ..... (3)
MA 761 HOMOLOGICAL ALGEBRA ..... (3)
MA 764 SELECTED TOPICS IN ALGEBRA ..... (3)
MA 765 SELECTED TOPICS IN ALGEBRA ..... (3)
MA 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
MA 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
MA 772 SELECTED TOPICS IN THE THEORY OF COMPLEX VARIABLES .. (3)
MA 773 SELECTED TOPICS IN ANALYSIS ..... (3)
MA 777 MATHEMATICAL SEMINAR ..... (3)
MA 778 MATHEMATICAL SEMINAR ..... (3)

Mechanical Engineering

GRADUATE FACULTY
Full Members
Professors
Louis M. Brock, Clifford J. Cremers, O. J. Hahn, I. S. Jawahir, Thomas W. Lester, Alan T. Male, James M. McDonough, M. Pinar Mengüç, William Murphy, Keith E. Rouch, J. Peter Sadler, Kozo Saito, Andrew F. Seybert, Ramesh K. Shah, Kaveh A. Tagavi, Theodore Tauchert, Horn-Sen Tzou, Ting-Wen Wu.

Associate Professors
Dayong Gao, Mark T. Hanson, George P. Huang, Wei Yang Lu, John Main, Suzanne W. Smith.

Associate Members

Associate Professors
Jamey. D. Jacob.
Assistant Professors
John R. Baker, Vincent Capece, Marwan Khraisheh, Jack Leifer, Johné M. Parker, Lyndon S. Stephens, Ryan Vallance.
Adjunct Assistant Professors
Heng Ban.

Emeritus Professors

Millard F. Beatty, Oscar W. Dillon, James E. Funk, Donald Leigh, David Shippy, Shiva N. Singh.

The Department of Mechanical Engineering provides programs for study and research leading to the Master of Science in Mechanical Engineering and the Doctor of Philosophy.

Graduate curricula within the Department of Mechanical Engineering are concentrated in the following four major areas: 1) Manufacturing; including Manufacturing Processes, Manufacturing Systems, and Robotics; 2) Mechanics; including Acoustics, Composite Materials, Dynamics, Fracture Mechanics, Mechanics of Materials, Solid Mechanics, Tribology, and Vibration; 3) Systems and Design; including Aerospace Structures, Control, Intelligent Structural Systems, and Machine Design; and 4) Thermal-Fluid Sciences; including Combustion and Fire Research, Computational Fluid Dynamics, Fluid Mechanics, Heat and Mass Transfer, Radiative Transfer, Thermal Systems, Thermodynamics, and Two-Phase and Phase-Change Heat Transfer.

Admission Requirements

Admission to the mechanical engineering graduate programs normally requires a bachelor's degree in engineering (not necessarily in mechanical engineering), a GPA of at least 3.0/4.0 on all graduate and undergraduate work, and Graduate Record Examination scores of at least 1100 (Verbal + Quantitative) and 550 (Analytical). An undergraduate degree in chemistry or physics combined with a strong interest in engineering topics may be acceptable when certain required undergraduate courses are also taken. *Satisfying the above requirements does not guarantee admission to the mechanical engineering graduate program.*

The master's degree requires 24 credit hours of course work and a thesis (Plan A). A non-thesis option (Plan B) consisting of 30 credit hours is available with admission and enrollment limited to those students with acceptable previous research or design experience. Enrollment in the non-thesis option requires approval of the Director of Graduate Studies and must be requested within the student's first 9 credit hours of graduate course work.

The Ph.D. degree is a research degree granted on the basis of broad knowledge of mechanical engineering and in-depth study in a specific area leading to a dissertation reflecting original work by the doctoral candidate. To obtain a Ph.D. degree in mechanical engineering, in addition to meeting the general Graduate School requirements, a student must:

1. Earn 48 graduate credit hours taken at the University of Kentucky while in graduate standing. Alternatively, those holding a non-UK M.S. may satisfy this requirement by earning 24 graduate credit hours at UK.
2. Satisfy the mathematics requirement. The mathematics requirement for the Ph.D. degree in mechanical engineering may be satisfied by completing three math-related courses with a grade of B or better in each. A list of acceptable courses is maintained by the Director of Graduate Studies.
3. Pass the Ph.D. Preliminary Examination. The Preliminary Examination is a written examination and shall satisfy the written portion of the Qualifying Examination required by the Graduate School. This examination tests the student's knowledge in the field of mechanical engineering. This is a uniform examination that is required in three subject areas. For the Ph.D. preliminary examination, a doctoral student may select any of the available technical areas as a major field (two of the three subject areas should be from the student's chosen major field). A list of current technical areas, subject areas, and various courses under each subject area is maintained by the Director of Graduate Studies.
4. Pass the Qualifying Examination. This examination evaluates the soundness of the student's proposed doctoral dissertation research. A prospectus prepared by the student and submitted to the student's advisory committee is required. Only those who have passed the preliminary examination and have satisfied the doctoral mathematics requirement may sit for this examination.
5. Present and satisfactorily defend the dissertation.

For a more detailed description of these requirements, contact the Director of Graduate Studies.

The Department, in collaboration with the College of Engineering's Center for Robotics and Manufacturing Systems (CRMS), has several research laboratories: Acoustics Lab, Advanced Structures Lab, CAD/CAM/CAE Lab, Combustion and Fire Research Lab, Computational Fluid Dynamics Systems (CFD) Lab, Engineering Metrology Lab, Fluid Mechanics Lab, Machine Vision Lab, Machining Dynamics Systems Lab, Machining Research Lab, Manufacturing Simulation and Tribiology Research Lab, Nonlinear Dynamics Research Lab, Metal Forming Research Lab, Non-traditional Manufacturing Processes Lab, Phase Change and Microgravity Heat Transfer Lab, Radiative Transfer and Optics Lab, Rapid Prototyping Lab, Robotics Lab, Thermal Sensing Lab, and Welding Research Lab.

GRADUATE COURSES

ME 501 MECHANICAL DESIGN WITH FINITE ELEMENT METHODS ..... (3)
ME 503 LEAN MANUFACTURING PRINCIPLES AND PRACTICES (SAME AS MFS 503) ..... (3)
ME 505 MODELING OF MANUFACTURING PROCESSES AND MACHINES (SAME AS MFS 505) ..... (3)
ME 506 MECHANICS OF COMPOSITE MATERIALS (SAME AS MSE 506) ..... (3)
ME 507 DESIGN FOR MANUFACTURING (SAME AS MFS 507) ..... (3)
ME 512 MANUFACTURING SYSTEMS (SAME AS MFS 512) ..... (3)
ME 513 MECHANICAL VIBRATIONS (SAME AS EM 513) ..... (3)
ME 514 NUCLEAR REACTOR ANALYSIS AND FUEL MANAGEMENT ..... (3)
ME 527 APPLIED MATHEMATICS IN THE NATURAL SCIENCES I (SAME AS MA/EM 527) ..... (3)
ME 530 GAS DYNAMICS ..... (3)
ME 531 FLUID DYNAMICS I ..... (3)
ME 532 ADVANCED STRENGTH OF MATERIALS (SAME AS EM 531) ..... (3)
ME 542 KINEMATIC SYNTHESIS OF MECHANISMS ..... (3)
ME 554 CHEMICAL AND PHYSICAL PROCESSING OF POLYMER SYSTEMS (SAME AS MSE/MFS/CME 554) ..... (3)
ME 556 INTRODUCTION TO COMPOSITE MATERIALS (SAME AS MSE/ME 556) ..... (4)
ME 560 ENGINEERING OPTICS ..... (3)
ME 563 BASIC COMBUSTION PHENOMENA ..... (3)
ME 566 DIRECT ENERGY CONVERSION PROCESSES ..... (3)
ME 583 BIOTECHNOLOGY ..... (3)
ME 585 FOURIER SERIES AND BOUNDARY VALUE PROBLEMS (SAME AS MA 485G) ..... (3)
ME 599 TOPICS IN MECHANICAL ENGINEERING (SUBTITLE REQUIRED) (3)
ME 601 ADVANCED CAE APPLICATIONS ..... (3)
ME 602 DYNAMICS OF DISTRIBUTED MECHANICAL SYSTEMS ..... (3)
ME 603 MECHANICS OF PLASTIC SOLIDS I ..... (3)
ME 604 DYNAMICS OF ROTATING MACHINERY ..... (3)
ME 606 SEMINAR AND PROJECT IN MANUFACTURING SYSTEMS ENGINEERING (SAME AS EE/MFS 606) ..... (3)
ME 607 ANALYSIS OF METAL CUTTING PROCESSES (SAME AS MFS/MSE 607) ..... (3)
ME 608 NONTRADITIONAL MANUFACTURING PROCESSES (SAME AS MFS 608) ..... (3)

ME 610 ENGINEERING ACOUSTICS ..... (3)
ME 611 BOUNDARY ELEMENT METHODS IN ENGINEERING (SAME AS EGR 611) ..... (3)
ME 613 NONLINEAR OSCILLATIONS (SAME AS EM 613) ..... (3)
ME 620 ADVANCED ENGINEERING THERMO-DYNAMICS I ..... (3)
ME 625 ADVANCED HEAT CONDUCTION ..... (3)
ME 626 ADVANCED HEAT CONVECTION ..... (3)
ME 627 RADIATION HEAT TRANSFER ..... (3)
ME 628 BOILING AND CONDENSATION ..... (3)
ME 631 FLUID DYNAMICS II ..... (3)
ME 634 TURBULENT FLOWS ..... (3)
ME 640 ADVANCED ANALYSIS AND SIMULATION OF DYNAMIC SYSTEMS (3)
ME 641 FOUNDATIONS OF SOLID MECHAN ICS ..... (3)
ME 644 ADVANCED DYNAMICS I ..... (3)
ME 645 ADVANCED CONTROL SYSTEM ANALYSIS ..... (3)
ME 647 SYSTEM OPTIMIZATION I (SAME AS AEN 647) ..... (3)
ME 651 MECHANICS OF ELASTIC SOLIDS I ..... (3)
ME 653 METHODS OF APPLIED DIFFERENTIAL EQUATIONS ..... (3)
ME 690 ADVANCED ALGORITHMS FOR COMPUTATIONAL FLUID DYNAMICS ..... (4)
ME 699 TOPICS IN MECHANICAL ENGINEERING (SUBTITLE REQUIRED) (3)
ME 748 MASTER'S THESIS RESEARCH ..... (0)
ME 749 DISSERTATION RESEARCH ..... (0)
ME 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
ME 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
ME 780 SPECIAL PROBLEMS IN MECHANICAL ENGINEERING ..... (3)
ME 790 RESEARCH IN MECHANICAL ENGINEERING ..... (1-9)

EGR 537 NUMERICAL ANALYSIS (SAME AS CS/MA 537) ..... (3)
EGR 599 TOPICS IN ENGINEERING (SUBTITLE REQUIRED) ..... (1-3)
EGR 611 BOUNDARY ELEMENT METHODS IN ENGINEERING (SAME AS ME 611) ..... (3)
EGR 621 FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)
EGR 622 ADVANCED FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)

Medical Sciences

GRADUATE FACULTY
See listings under Anatomy and Neurobiology, Microbiology and Immunology, Molecular and Biomedical Pharmacology, Molecular and Cellular Biochemistry, and Physiology.

Admission Requirements

The M.S. program in Medical Sciences is designed to prepare candidates for research careers in academics, industry and government laboratories. This program may also be used to prepare students for further graduate and professional education. Admission to the graduate program is competitive and is based upon academic background, professional recommendations, performance on the Graduate Record Examination (GRE), experience, and when possible, personal interviews. Students should have completed an undergraduate degree in chemistry, biology, biochemistry, engineering, mathematics, neurosciences, physics, pharmacy or psychology. Although there are no formal course requirements, it is recommended that students have completed undergraduate courses in organic chemistry, physical chemistry, calculus, physics, and the biological sciences.

Degree Requirements

The Medical Sciences program encompasses the disciplines of anatomy and neurobiology; biochemistry; microbiology and immunology; pharmacology; and physiology. Students are required to select one of the five disciplinary areas. The student, in cooperation with the major professor/thesis advisor and the student's Advisory Committee, will determine the elective course work in the area of specialization and in related basis sciences. Each student, regardless of disciplinary specialization, will take the ten-hour core curriculum and will take six or seven hours, depending on the subjects selected, among the courses in molecular and cell biology most relevant to the student's intended disciplinary specialization. Students may elect to take additional courses, beyond these minimum requirements, in their area of specialization.

The degree requirements will vary with the thesis (Plan A) and a non-thesis (Plan B) option selected by the student. The non-thesis option requires a minimum of 30 graduate credit hours, half of which must be at the 600+ level. Plan B is intended for students with no intentions of further graduate work or professional study. The thesis option requires 24 hours, half of which must be at the 600+ level, as well as an approved thesis based on the candidate's research. In addition, the program requires a core curriculum of 16-17 hours in biochemistry and cell and molecular biology. The program does not mandate a language requirement.

Financial support is not provided for students in the M.S. in Medical Sciences program. Inquiries regarding the program should be directed to the Director of Graduate Studies, M.S. in Medical Sciences Program.

Core Curriculum

The core curriculum is designed to provide a broad overview of medical sciences at the molecular level, to emphasize the importance of scientific integrity, and to spark an interest in current scientific developments that will establish a pattern of lifelong learning in the student.

BCH 607 Biochemistry (3 credits)
BCH 608 Biochemistry (3 credits)
TOX 600 Ethics in Scientific Research (2 credits)
Seminar Course (2 credits) chosen from among ANA 600, PHA 770, PGY 774, MI 772, BCH 618, or BCH 619

Course Work: The minimum requirements are as follows -

1. Twenty-four hours of graduate level courses for plan A (50% must be 600+ level) or thirty hours of graduate courses for plan B (50% must be 600+ level)
2. Ten hours of core curriculum (see above)
3. Six or seven hours, depending on the courses selected, from the molecular biology and cellular biology groupings. In the molecular biology grouping, students may select one course from among the following: MI 615 (3 credit hours, Molecular Biology); MI 618 (3 credit hours, Molecular Neurobiology); PHA 649 (3 credit hours, Molecular Pharmacology); PGY 590 (4 credit hours, Cell and Molecular Physiology); BCH 611 (3 credit hours, Nucleic Acids). In the cellular biology grouping, students may select one course from among the following: BIO 632 (3 credit hours, Advanced Cell Biology); PGY 602 (3 credit hours, Readings in Systems, Cellular and Molecular Physiology); ANA 516 (3 credit hours, Basic Neuroscience)
4. The Advisory Committee will determine the remainder of hours in the area of the student's specialization.

Microbiology

GRADUATE FACULTY
Full Members
Professors
Subbarao Bondada, Malaya Chatterjee, Donald A. Cohen, Jeffrey N. Davidson, Frederick C. deBeer, Vincent Gallicchio, Alan M. Kaplan, Heinz Kohler, Judith Lesnaw, Thomas L. Lillich, Craig S. Miller, Avindra Nath, Robert Perry, Vivek M. Rangnekar, Thomas L. Roszman, Charles Snow, Brett Spear, Susan Straley, Jerold G. Woodward, Stephen B. Zimmer.
Associate Professors
Yousef AbuKwaik, J. Scott Bryson, Jimmy Clark, Denny Harris, Robert J. Jacob, Charlotte S. Kaetzel, Joseph McGillis, L. Edward DeMoll, Bin-Tao Pan, Martha Peterson, Carol L. Pickett, Marion R. Steiner, Jiayou Zhang.
Assistant Professors
Brian Stevenson.

Associate Members
Associate Professors
George Luo.
Assistant Professors
Beth A. Garvy, Robert Geraghty, Craig T. Jordan, Anthony Sinai, Glenn Telling.
Emeritus Professors
Hussain H. Aleem, Albert T. Brown, Robert B. Calmes Jr., Lester Goldstein, Norman L. Goodman, Jesse E. Sisken.

The Ph.D. program in Microbiology is designed to prepare candidates for research careers in academics, industry, and government laboratories. The program has at its heart a close student-mentor relationship that allows for the maximum flexibility in the development of independent and creative scientists.

Admission Requirements

Admission to the graduate program is competitive and is based upon academic background, professional recommendations, performance on the Graduate Record Examination (GRE), experience, and when possible, personal interviews. Students should have completed an undergraduate degree in chemistry, biology, biochemistry, engineering, mathematics, neurosciences, physics, pharmacy or psychology. It is recommended that students have completed undergraduate courses in organic chemistry, physical chemistry, calculus, physics, and the biological sciences.

Students will have the opportunity to join faculty research programs across a spectrum of topics including: pathogenic microbiology, virology, cancer cell and molecular biology and cellular and molecular immunology. Specific research areas include microbial physiology, bacterial pathogenicity, cellular and molecular immunology, tumor immunology, lymphocyte differentiation, membrane biology, molecular virology, molecular genetics and gene regulation. Students will utilize the techniques of molecular biology, genetic engineering, genomics, array technology, transgenic technology, hybridoma technology and fluorescence-activated cell sorting. The program of study is tailored to the individual background and career goals of the student and stresses an interdepartmental approach both in the selection of courses and in the pursuit of research. The most important aspect of the doctoral program is an independent research thesis under the direction of the student's mentor. Students are expected to participate in graduate seminars, journal clubs, research seminars; to interact with visiting scholars; and to present the results of their research at local and national meetings. Financial aid is available for qualified students.

All students pursuing degrees in the biomedical sciences at the University of Kentucky College of Medicine are admitted through the Integrated Biomedical Sciences Curriculum (IBS). This first-year core curriculum provides broad-based exposure to biochemistry, cell biology, molecular biology, genetics, cell signaling and integrated physiology and flexibility in selecting a research emphasis among 125 faculty in the Biomedical Sciences. Students select their doctoral degree program at the completion of the first year core curriculum from among the departments of Microbiology and Immunology, Anatomy and Neurobiology, Biochemistry, Physiology and Pharmacology. Inquiries regarding admission should be directed to the Director, Integrated Biomedical Sciences Curriculum, University of Kentucky College of Medicine, Lexington, KY 40536-0298. Information regarding the Microbiology program may be obtained from the Director of Graduate Studies, Department of Microbiology and Immunology, University of Kentucky College of Medicine, Lexington, KY 40536-0298, (800-462-5257) or the Microbiology and Immunology Web site: <www.mc.uky.edu/microbiology/>.

GRADUATE COURSES

MI 494G IMMUNOBIOLOGY (SAME AS BIO 494G) ..... (3)
MI 590 CELLULAR AND MOLECULAR PHYSIOLOGY (SAME AS PGY 590) . (4)
MI 595 IMMUNOBIOLOGY LABORATORY (SAME AS BIO 595) ..... (2)
MI 598 CLINICAL MICROBIOLOGY (SAME AS PAT 598) ..... (3)
MI 601 SPECIAL TOPICS IN MOLECULAR AND CELLULAR GENETICS (SAME AS BIO/BCH/PLS/PPA 601) ..... (1)
MI 604 EXPERIMENTAL GENETICS (SAME AS IBS 605) ..... (2)
MI 611 BIOPATHOLOGY (SAME AS BIO 611) ..... (3)
MI 615 MOLECULAR BIOLOGY (SAME AS BIO/BCH 615) ..... (3)
MI 616 BIOLOGY AND THERAPY OF CANCER (SAME AS MED 616) ..... (3)
MI 618 MOLECULAR NEUROBIOLOGY (SAME AS ANA/PGY/BIO 618) ..... (4)
MI 685 ADVANCED IMMUNOBIOLOGY (SAME AS BIO 685) ..... (3)
MI 707 CONTEMPORARY TOPICS IN IMMUNOLOGY (SAME AS BIO 707) . (2)
MI 710 SPECIAL TOPICS IN MICROBIOLOGY ..... (2-3)
MI 720 MICROBIAL STRUCTURE AND FUNCTION (SAME AS BIO/OBI 720) ..... (4)
MI 748 MASTER'S THESIS RESEARCH ..... (0)
MI 749 DISSERTATION RESEARCH (SAME AS MB 749) ..... (0)
MI 768 RESIDENCE CREDIT FOR MASTER'S DEGREE (SAME AS MB 768) (1-6)
MI 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE (SAME AS MB 769) ..... (0-12)
MI 772 SEMINAR IN MICROBIOLOGY (SAME AS BIO 772) ..... (0-1)
MI 798 RESEARCH IN MICROBIOLOGY (SAME AS BIO 798) ..... (1-9)

Mining Engineering

GRADUATE FACULTY
Full Members
Professors
G.T. Lineberry, Richard J. Sweigard, Konstanty F. Unrug, Andrzej M. Wala.
Associate Professors
Rick Q. Honaker, Joseph Sottile, Jon C. Yingling.
Associate Members
Associate Professors
Daniel Tao.
Adjunct Associate Professors
B. K. Parekh.
Adjunct Assistant Professors
John G. Groppo Jr.

The programs leading to the degrees of Master of Science in Mining Engineering, Master of Mining Engineering, and Doctor of Philosophy are offered through the Department of Mining Engineering. The objectives of these programs are to provide an advanced level of applied science for use in the mining industry and to offer specified topics for research specialization.

The Master of Mining Engineering is a professionally-oriented degree intended for the student who wishes to add topics to a basic baccalaureate degree for use in a working career. It is also appropriate for the returning adult student who needs more subject matter for career betterment. The Master of Science in Mining Engineering is a research-oriented degree appropriate for a career in problem solving, research, or technology development. The Doctor of Philosophy is the terminal degree in the subject and is normally required for a career in teaching and research.

The Master of Mining Engineering requires 30 credits of course work capped by a professional paper that reports on a current topic of scientific or technical interest, quite possibly connected to the student's career interests. For the Master of Science in Mining Engineering, 24 credit hours of course work plus an acceptable thesis (Plan A) or 30 credits of course work and a report on one or more research topics (Plan B) are required to fulfill program requirements. Plan B Master of Science degrees will be reserved normally for students who have already demonstrated their ability to conduct and report on independent research.

Admission Requirements

Enrollment in either master's degree program is open to qualified applicants with an undergraduate degree in mining engineering or other engineering and science fields. A grade point average of 2.8/4.0 is normally required on all undergraduate work. Persons with undergraduate degrees in fields other than mining engineering are required to make up deficiencies in undergraduate mining engineering courses.

Applicants for admission must have a combined score on the verbal and quantitative portions of the Graduate Record Examination (GRE) in excess of 1,000. Scores on the analytical portion are also considered. Foreign applicants whose native language is other than English must take the Test of English as a Foreign Language (TOEFL) and score at least 550 before they can be admitted.

In addition to satisfying general Graduate School and College of Engineering admissions requirements, applicants for admission to the M.Min.E., M.S. in Min.E., and Ph.D. degree programs in mining engineering must have been awarded the Bachelor of Science degree prior to admission to the graduate degree status. Normally, it is expected that applicants will have graduated from an engineering program accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET). For applicants from non-U.S. universities, from related but non-engineering disciplines, and from institutions that do not have accredited engineering programs, an assessment will be made of the comparability of educational background to that prescribed and appropriate remedial course work established as a provision for admission.

The Ph.D. degree has no formal course requirement. Generally, students take a number of courses to prepare for the qualifying examinations and usually need to spend two years to complete a suitable dissertation. Most students find it necessary to take course work beyond the master's degree as necessary preparation for the qualifying examination. There is a language requirement for the Ph.D.

Current research areas include the following: rock mechanics and ground control, operations research, mine ventilation, underground construction, surface mining and reclamation, mine environmental engineering, mine power systems, coal preparation, and mineral economics. In addition to the graduate courses in mining engineering, graduate courses in civil engineering and other disciplines may be used to satisfy degree requirements providing they are appropriate to the student's program of study.

Additional information about the graduate program in mining engineering can be obtained by writing the Director of Graduate Studies, Department of Mining Engineering.

GRADUATE COURSES

MNG 511 MINE POWER SYSTEM DESIGN ..... (3)
MNG 551 ROCK MECHANICS ..... (4)
MNG 561 MINE CONSTRUCTION ENGINEERING I ..... (3)
MNG 563 SIMULATION OF MINE PRODUCTION SYSTEMS (SAME AS MFS 563) ..... (3)
MNG 572 ADVANCED COAL PREPARATION ..... (3)
MNG 575 COAL PREPARATION DESIGN ..... (3)
MNG 581 GEOSTATISTICS ..... (3)
MNG 591 MINE DESIGN PROJECT I ..... (1)
MNG 592 MINE DESIGN PROJECT II ..... (3)
MNG 599 TOPIC IN MINING ENGINEERING ..... (2-3)
MNG 611 MINE POWER SYSTEM PROTECTION ..... (3)
MNG 632 MINE PLANT MACHINERY II ..... (3)
MNG 637 ROCK SLOPE STABILITY AND DESIGN ..... (3)
MNG 661 MINE CONSTRUCTION ENGINEERING II ..... (3)
MNG 681 GEOSTATISTICS II ..... (3)
MNG 690 ADVANCED MINERAL BENEFICIATION ENGINEERING ..... (3)
MNG 691 SIMULATION OF MINERAL PROCESSING CIRCUITS ..... (3)
MNG 699 TOPICS IN MINING ENGINEERING (SUBTITLE REQUIRED) ..... (3)
MNG 748 MASTER'S THESIS RESEARCH ..... (0)
MNG 749 DISSERTATION RESEARCH ..... (0)
MNG 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
MNG 769 RESIDENT CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
MNG 771 SEMINAR IN MINING ENGINEERING ..... (1)
MNG 780 SPECIAL PROBLEMS IN MINING ENGINEERING ..... (1-6)
MNG 790 SPECIAL RESEARCH PROBLEMS IN MINING ENGINEERING .. (1-9)

EGR 537 NUMERICAL ANALYSIS (SAME AS CS/MA 537) ..... (3)
EGR 599 TOPICS IN ENGINEERING (SUBTITLE REQUIRED) ..... (1-3)
EGR 611 BOUNDARY ELEMENT METHODS IN ENGINEERING (SAME AS ME 611) ..... (3)
EGR 621 FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)
EGR 622 ADVANCED FINITE ELEMENT ANALYSIS IN ENGINEERING ..... (3)

Molecular and Biomedical Pharmacology

GRADUATE FACULTY

Full Members

Professors
James W. Flesher, Philip W. Landfield, Michael T. Piascik, John T. Slevin.
Associate Professors
Thomas C. Foster, Robert W. Hadley, David M. Kaetzel, Nicholas J. Koszewski, Edward J. Pavlik, Norman W. Pedigo, Hollie I. Swanson.
Assistant Professors
Michael W. Kilgore, Steven Post.

Associate Members

Professors
John M. Littleton.
Associate Professors
Nada M. Porter.
Assistant Professors
Kuey-Chu Chen, Susan Kraner, Olivier H. Thibault.

Emeritus Professors
Donald F. Diedrich, Edgar T. Iwamoto.

Graduate study in Pharmacology is designed to prepare candidates for research careers in academics, industry or government laboratories and agencies. The Ph.D. program in Pharmacology trains students in the fundamental principles of basic molecular and biochemical science, while also providing training in the principles of drug-receptor interactions, of experimental therapeutics and of drug discovery. Modern pharmacology also emphasizes new directions in gene therapy and pharmacogenetics. Students learn the conceptual and technical basis of research while performing mentored and, subsequently, independent research projects in laboratories equipped with state of the art technology and instrumentation.

Students will have the opportunity to join nationally recognized faculty research programs across a spectrum of topics including Neurobiology of Aging and Alzheimer's Disease, Brain Mechanisms of Memory, Receptor/Signaling Pathways in Cardiovascular Function and Disease, Actions of Hormones in Health and Disease, Molecular Biology of Growth and Carcinogenesis, Environmental Toxicity, and Drug Abuse, among others. Currently, the Department ranks 14th in NIH grant funds among all U.S. public university pharmacology departments.

Admission Requirements

Admission to the graduate program is competitive and is based upon academic background, professional recommendations, performance on the Graduate Record Examination (GRE), experience, and when possible, personal interviews. Students should have completed an undergraduate degree in chemistry, biology, biochemistry, engineering, mathematics, neurosciences, physics pharmacy, or psychology. It is recommended that students have completed undergraduate courses in organic chemistry, physical chemistry, calculus, physics, and biological sciences. The program of

study is tailored to the individual background and career goals of the student and can often include interdepartmental study and research. Students are expected to participate in graduate seminars, journal clubs, research seminars; to interact with visiting scholars; and to present the results of their research at local and national meetings. Financial aid is available for highly qualified students.

Admission to the Ph.D. program in Pharmacology is through the Integrated Biomedical Sciences (IBS) Curriculum. Inquiries regarding admission should be directed to Director, Integrated Biomedical Sciences Curriculum, University of Kentucky College of Medicine. For information about the Ph.D. program in Pharmacology, please contact the Director of Graduate Studies, Department of Pharmacology. Information may also be obtained from the department Web site: < www.mc.uky.edu/pharmacology/>.

GRADUATE COURSES

PHA 522 SYSTEMS PHARMACOLOGY ..... (3)
PHA 602 NEUROPHARMACOLOGY ..... (4)
PHA 603 PHARMACOLOGY OF ORGANS AND SYSTEMS ..... (3)
PHA 605 PRINCIPLES OF NEUROBIOLOGY (SAME AS NEU/PGY/BCH/ANA 605) ..... (4)
PHA 606 MECHANISMS OF NEUROLOGIC DISEASE (SAME AS ANA/NEU 606) ..... (4)
PHA 612 QUANTITATIVE PHARMACODYNAMICS: PHARMACOKINETICS (SAME AS PHR 612) ..... (3)
PHA 621 ADVANCED PHARMACODYNAMICS ..... (3)
PHA 630 SPECIAL TOPICS IN PHARMACOLOGY ..... (1-3)
PHA 634 ADVANCED CARDIOVASCULAR PHARMACOLOGY ..... (2)
PHA 649 ADVANCED MOLECULAR PHARMACOLOGY (SAME AS PHR/TOX 649) ..... (2)
PHA 658 ADVANCED NEUROPHARMACOLOGY ..... (2)
PHA 663 DRUG METABOLISM AND DISPOSITION (SAME AS TOX 663) ..... (2)
PHA 670 CHEMICAL CARCINOGENESIS (SAME AS TOX 670) ..... (3)
PHA 710 AGING OF THE NERVOUS SYSTEM (SAME AS GRN/PGY/ANA 710) ..... (3)
PHA 748 MASTER'S THESIS RESEARCH ..... (0)
PHA 749 DISSERTATION RESEARCH ..... (0)
PHA 750 RESEARCH IN PHARMACOLOGY ..... (1-5)
PHA 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
PHA 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
PHA 770 SEMINAR IN PHARMACOLOGY ..... (1)
PHA 779 MEMBRANE SCIENCES COLLOQUIUM (SAME AS CHE/CME/PHR/BCH 779) ..... (1)

Molecular and Cellular Biochemistry

GRADUATE FACULTY
Full Members
Professors
Delwood C. Collins, Robert C. Dickson, Louis B. Hersh, Salvatore Turco, Thomas Vanaman, Charles Waechter, David Watt, Sidney W. Whiteheart.
Associate Professors
Douglas A. Andres, Malcolm J. Avison, M.S. Kindy, Guo-Min Li, Michael D. Mendenhall, Daniel J. Noonan, Kevin D. Sarge, H. Peter Spielmann.
Assistant Professors
Trevor P. Creamer, Rebecca Dutch, Richard O. McCann, Carole Moncman, Sabire Ozcan, David W. Rodgers.
Emeritus Professors
Albert T. Brown, Shung K. Chan, Robert Lester.

Graduate study in biochemistry is designed to prepare candidates for research careers in academics, industry, and government laboratories. Admission to the graduate program is competitive and is based upon academic background, professional recommendations, performance on the Graduate Record Examination (GRE), experience and, when possible, personal interviews. Students should have completed an undergraduate degree in chemistry, biology, biochemistry, engineering, mathematics, physics, or pharmacy. It is recommended that students have completed undergraduate courses in organic chemistry, physical chemistry, calculus, physics and biological sciences.

Students will have the opportunity to join faculty research programs studying a spectrum of topics including: signal transduction, protein structure and function, transcriptional regulation, the cytoskeleton, secretion and vesicular fusion, disease mechanisms (atherosclerosis, cancer, infectious disease, diabetes, Alzheimer's), drug design, computational biology, development, nucleic acid dynamics, and membrane biogenesis & function. The program of study stresses an interdepartmental approach both in the selection of courses and in the pursuit of research. Students are expected to participate in graduate seminars, journal clubs, and research seminars; to interact with visiting scholars; and to present the results of their research at local and national meetings. Financial aid is available to all students in the program.

Admission Requirements

Admission to the Ph.D. program in Molecular and Cellular Biochemistry is through the Integrated Biomedical Sciences (IBS) Curriculum.

Inquiries regarding admission should be directed to the Director of Graduate Studies, Department of Biochemistry, University of Kentucky College of Medicine. Information regarding the Ph.D. program in Biochemistry may also be obtained at <www.mc/uky.edu/biochemistry/>.

GRADUATE COURSES

BCH 401G FUNDAMENTALS OF BIOCHEMISTRY ..... (3)
BCH 501 GENERAL BIOCHEMISTRY ..... (3)
BCH 502 GENERAL BIOCHEMISTRY ..... (3)
BCH 601 SPECIAL TOPICS IN MOLECULAR AND CELLULAR GENETICS (SAME AS BIO/MI/PLS/PPA 601) ..... (1)
BCH 604 STRUCTURAL BIOLOGY ..... (3)
BCH 605 PRINCIPLES OF NEUROBIOLOGY (SAME AS NEU/PGY/ANA/PHA 605) ..... (4)
BCH 607 BIOMOLECULES AND METABOLISM (SAME AS IBS 601) ..... (3)
BCH 608 BIOMOLECULES AND MOLECULAR BIOLOGY (SAME AS IBS 602) ..... (3)
BCH 609 PLANT BIOCHEMISTRY (SAME AS PPA/PLS 609) ..... (3)
BCH 610 BIOCHEMISTRY OF LIPIDS AND MEMBRANES ..... (3)
BCH 611 BIOCHEMISTRY AND CELL BIOLOGY OF NUCLEIC ACIDS ..... (3)
BCH 612 STRUCTURE AND FUNCTION OF PROTEINS AND ENZYMES ..... (3)
BCH 615 MOLECULAR BIOLOGY (SAME AS BIO/MI 615) ..... (3)
BCH 618 SEMINAR IN BIOCHEMISTRY ..... (1)
BCH 619 SEMINAR IN BIOCHEMISTRY ..... (1)
BCH 640 RESEARCH IN BIOCHEMISTRY ..... (1-9)
BCH 749 DISSERTATION RESEARCH ..... (0)
BCH 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
BCH 779 MEMBRANE SCIENCES COLLOQUIUM (SAME AS CHE/CME/PHR/PHA 779) ..... (1)
BCH 780 TOPICS IN BIOCHEMISTRY ..... (1-3)

Music

GRADUATE FACULTY
Full Members
Professors
Joseph Baber, James B. Campbell, Richard C. Domek, Harold R. Gray, Jr., Alan Hersh, Everett McCorvey, Miles Osland, Gail Robinson, Schuyler Robinson.
Associate Professors
Lance Brunner, Kate Covington, Jonathan Glixon, Stephen King, Charles Lord, Noemi Lugo, Ronald Pen, David W. Sogin, Cecilia H. Wang.
Associate Members
Associate Professors
Richard Clary, Gordon B. Cole, David G. Elliott, Diana R. Hallman, Jefferson Johnson, Benjamin Karp, Daniel Mason.

Assistant Professors
Nancy Clauter, Christopher Fulton, Kevin Holm-Hudson, Lori Krukenberg, Seow-Chin Ong, Rebecca Russell, Irina Vorobieva.

Emeritus Professors
Hubert Henderson, Phyllis Jenness, Phillip Miller, Ronald P. Monsen, Lucien Stark.

The School of Music offers the Master of Arts (M.A.) in musicology or theory; Master of Music (M.M.) in performance, composition, sacred music, or music education; Doctor of Musical Arts (D.M.A.) in performance, conducting (choral or instrumental), or composition; and the Doctor of Philosophy (Ph.D.) in musicology, music education or theory. The applicant for the master's degree is expected to have earned an appropriate undergraduate degree and the applicant for the doctoral degree is expected to have earned an appropriate master's degree at the University of Kentucky or an equivalent degree from a comparable institution.

Graduate work is also provided for persons seeking Rank I and Rank II state certification in music education. Requirements for Rank II coincide with those for the M.M. in Music Education; requirements for Rank I may be completed by a planned and approved 30 semester hour program in addition to Rank II requirements or 60 semester hours of planned and approved graduate credit, including the master's degree.

Admission Requirements

Placement examinations in theory, music history and literature, and the proposed field of specialization are required of all applicants before admission to graduate programs in music. Graduates of, or students currently enrolled at, the University of Kentucky are not exempt from this requirement. Those seeking a degree in performance must audition as well, and should contact the appropriate applied faculty member to schedule an audition. Entrance examinations and auditions are held four times each year for those wishing to enroll: the second Saturday in November, the last Saturday in January, the first Saturday in March and the second Saturday in July. For those wishing to begin studies in the summer session, examinations and auditions must be taken no later than the first Saturday in March. *The Director of Graduate Studies must be notified at least four weeks in advance of the date chosen for examinations (and audition if applicable) by the applicant.* In special circumstances and with the consent of the Director of Graduate Studies, entrance examinations may be taken at times other than those stated. Acceptance of audition tapes is at the discretion of the appropriate applied faculty member, but D.M.A. candidates and those applying for assistantships must audition in person.

Note: Persons not applying for financial assistance may choose any of the above dates. Persons applying for Non-Service Fellowships **must** take the examinations (and the audition if applicable) no later than the last Saturday in January. Those applying for teaching assistantships may choose to take the examinations in November, January, or March for application for the subsequent fall semester. Those wishing to begin studies during a summer session must take the examinations no later than the first Saturday of March.

GENERAL REQUIREMENTS FOR MASTER'S DEGREE

Foreign Language Requirements. The Master of Arts degree requires a reading knowledge of one foreign language, preferably French or German. Voice majors are expected to have taken at least one year each of undergraduate level German, French, and Italian (or the equivalent by petition to the Director of Graduate Studies in the School of Music) as a prerequisite for degree study. If deficient, a student must enroll in language courses each semester of study until the deficiency is removed.

Thesis Requirements. The Master of Arts degree requires a thesis (Plan A: see general requirements). For the Master of Music degree in Composition, a composition of major proportions, acceptable to the composition-theory faculty and publicly performed, must be submitted in lieu of a thesis. A thesis is optional (Plan A or Plan B) for the Master of Music in Music Education.

A final comprehensive examination is required for each program.

MASTER OF ARTS

Prerequisites: A suitable background in music literature and music theory, and a reading knowledge of one foreign language, normally French or German.

MASTER OF ARTS (Musicology Emphasis)

Music History and Literature	9-12
Theory (including MUS 670, 671, or 672)	6-9
Research Methods (MUS 618)	3
Directed Electives	0-6
Thesis	6
	Total 30

MASTER OF ARTS (Theory Emphasis)

Theory	9-12
Music History and Literature	6-9
Research Methods (MUS 618)	3
Directed Electives	0-6
Thesis	6
	Total 30

MASTER OF MUSIC (Composition)

Prerequisites: Submission of three original compositions.

Advanced Composition (MUS 673)	4
Orchestration (MUS 570 and 571)	4
Music History and Literature	6
Theory (including a minimum of one course from: MUS 671, or 672)	9
Directed Electives	1
Thesis Composition	6
	Total 30

The thesis composition must be publicly performed. The student is responsible for the preparation of legible score and parts.

MASTER OF MUSIC (Performance)

Prerequisites: Acceptance by the appropriate faculty of applied music.

Music Performance (including recital)	9
Music History and Literature	6
Theory (including MUS 670, 671 or 672)	6
Directed Electives	9
Recital	0
	Total 30

This degree program is offered in the following areas: piano, voice (see below), organ, violin, viola, cello, flute, oboe, clarinet, saxophone, bassoon, trumpet, horn, trombone, euphonium, tuba, percussion and conducting (choral or instrumental).

Wind, string and conducting majors must participate in at least one University-sponsored performing organization for two semesters.

MASTER OF MUSIC (Voice Performance)

Voice Performance (including recital)	9
Music History and Literature (must include MUS 623)	6
Theory (including MUS 578, 670, 671, or 672)	6
Physiology and Functioning of the Singing Voice (MUS 665)	3
Materials, Techniques, and Literature of Voice Teaching (MUS 667)	3
Advanced German Vocal Repertory (MUS 620)	3
	Total 30

A minimum of three full semesters, excluding summer sessions, is necessary for an M.M. in Performance.

MASTER OF MUSIC
(Sacred Music)

UK Requirements:	27
MUS 660 Choral Methods	3
Music History and Literature	3
Music Theory	3
Ensemble	2
Music Education	3
Choose from MUS 560, MUS 561, MUS 650 or other graduate music education course, in consultation with advisor.	
Internship	3
Specialized area of study	10
Course work at an accredited seminary or other institution	6-9
Choose from topics such as Music in Worship, Designing Worship, Congregation, Worship and Spirituality, Worship and Music in the Liturgical Year, or other courses.	
	Total 33

Specialized areas of study:

VOICE or KEYBOARD (organ or piano)

MUP 558 Choral Conducting	4
Music Performance (Voice or Keyboard)	6 +*

CHORAL CONDUCTING

MUP 658 Choral Conducting	8
Keyboard, MUP 501 or 503	2

+An audition in the performing area (voice, organ, or piano) is required.

*A 15-minute jury before either the voice faculty (for vocal emphasis) or the keyboard faculty (for piano or organ emphasis) is required at the end of the applied study.

MASTER OF MUSIC
(Music Education - Plan A)

Core Requirements:	12
MUS 600 Research I	3
MUS 601 Foundations of Music Education	3
Music History and Literature	3
Music Theory (including MUS 578,MUS 670, MUS 671, or MUS 672)	3
Thesis	6
Music Education Electives	6
The student can select any Music Education courses 500 level or above.	
Music Electives	6
The student can select any Music course 500 level or above in Performance, Music History, Music Theory, or Composition.	
	Total 30

Students planning to earn a doctorate in Music Education should elect Plan A.

MASTER OF MUSIC
(Music Education - Plan B)

Core Requirements:	12
MUS 600 Research I	3
MUS 601 Foundations of Music Education	3
Music History and Literature	3
Music Theory (including MUS 578, MUS 670, MUS 671, or MUS 672)	3
Specialized Area of Study	12
(The student will select 12 hours from one of the five areas described below, Instrumental Teaching, Choral Teaching, General Music, Orff Methods, and Choral or Instrumental Conducting. The student and advisor will determine the general area of emphasis and plan a set of courses which best fulfills the needs of the student).	
Music or Education Electives	6
(The student can select any music or education courses 500 level or above.)	
	Total 30

Specialized areas of study for Plan B

INSTRUMENTAL TEACHING EMPHASIS - Band or Orchestra (Student and Advisor choose twelve hours from courses below which would best fulfill the student's needs.)

MUP Applied Performance (maximum of 4 hours)	1-4
MUP Secondary Applied	1-2
MUS 680 Band History and Literature	3
MUS 622 Symphonic Literature	3
MUS 660 Adv. Methods: Elementary General Music	3
MUP 558 Conducting or	
MUP 658 Conducting	1-4
MUS 684 Advanced String Methods and Materials	3
MUS 570 Orchestration	2
MUS 706 Music Learning and Behavior	3

CHORAL TEACHING EMPHASIS (Student and Advisor choose twelve hours from courses below which would best fulfill the student's needs.)

MUP Applied Performance (Maximum of 4 hours)	1-4
MUS 660 Adv. Methods: Elementary General Music	3
MUS 650 Music Education Workshop	1-3
MUS 660 Adv. Methods: Choral Techniques	3
MUP 558 Conducting	
or	
MUP 658 Conducting	1-4
MUS 706 Music Learning and Behavior	3

GENERAL MUSIC TEACHING EMPHASIS - Elementary Music, Jr. High, Middle School General Music (Student and Advisor choose twelve hours from courses below which would best fulfill the student's needs.)

MUP Applied Performance (maximum of 4 hours)	1-4
MUS 660 Adv. Methods: Elementary General Music	3
MUS 560 Orff Schulwerk Workshop	1-3
MUS 561 Orff Schulwerk Certification	2-6
MUS 650 Music Education Workshop	1-3
MUS 766 Seminar in Music Education	3
MUS 664 Music and Special Learners	3
MUS 706 Music Learning and Behavior	3

CONDUCTING EMPHASIS - Instrumental or Choral (Student and advisor choose twelve hours from courses below which would best fulfill the student's needs.)

MUP Applied Performance (maximum of 4 hours)	1-4
MUP Secondary Applied Performance	1-2
MUS 680 Band History and Literature	3
MUS 622 Symphonic Literature	3
MUS 681 Advanced Rehearsal Techniques - Band	3
MUP 558 Conducting	
or	
MUP 658 Conducting (4 hours required)	1-4
MUS 660 Adv. Methods: Choral Techniques	3
MUS 570 Orchestration	
or	
MUS 571 Orchestration	2
MUS 684 Adv. String Methods & Materials	3
MUS 706 Music Learning and Behavior	3

DOCTOR OF MUSICAL ARTS

The Doctor of Musical Arts program offers opportunity for fullest development as a performer, composer, or teacher of music performance or composition. Technical excellence is a prerequisite for admission into the program; doctoral study emphasizes

work in adjunct areas of music, related fields, and research as they enhance and support the major area.

One foreign language, normally French or German, is required for all D.M.A. students. As a prerequisite for doctoral study, voice majors must have satisfied the foreign language requirement specified above for the Master of Music (Voice Performance) degree. If deficient, a student must enroll in language courses each semester of study until the deficiency is removed.

One lecture-recital and three formal recitals are required for performance majors and choral conducting majors. One lecture-recital and two formal recitals are required for instrumental conducting majors. The program content of the recitals will be established in cooperation with the student's Advisory Committee. With its approval, a program of chamber music, a concerto performance with orchestra, or a major role in an opera or oratorio may fulfill the requirement for one of the recitals. In lieu of a dissertation, a doctoral project will be required as an indication of the student's ability for scholarly study and research.

The Project for the D.M.A. in Performance will consist of two parts. Part 1 is a monograph that represents the culmination of a significant research project on a topic related to that of the lecture-recital. The monograph must be a well-reasoned, original contribution to the field of study, and should provide evidence of scholarly achievement. A D.M.A. monograph differs from a Ph.D. dissertation principally in that it may be of more restricted scope, and that it may take a more interpretive, synthetic, or practical approach than is usual for a dissertation. Part 2 consists of thoroughly researched and documented written discussions of the remaining repertoire used in fulfilling the performance requirements. The monograph and discussions of repertoire are to be approved by the Advisory Committee in the same manner as a Ph.D. dissertation. If the Major Professor of a student in a performance program is not a Full Member of the Graduate Faculty, another member of the Advisory Committee, who is a Full Member of the Graduate Faculty, shall serve as co-chair. If the major professor of a student in a performance program is not a member of the Graduate Faculty, a Full Member of the Graduate Faculty shall serve as chair and major academic professor; the performance teacher shall serve as an additional, non-voting member of the committee.

The Project for the D.M.A. in Composition will consist of two parts. Part 1 is a large-scale original composition. The candidate is responsible for arranging a public performance of the work. Part 2 is an in-depth analysis and discussion of the composition. The composition and in-depth written analysis and discussion are to be approved by the Advisory Committee in the same manner as a Ph.D. dissertation.

The minimum course requirements beyond the master's degree are as follows:

MUS 618 Research Methods*	3
Music History and Literature	9
Advanced Music Theory**	6
Performance Major	12
Minor (optional)***	9
	Total 30-39

DOCTOR OF MUSICAL ARTS (Voice Performance)

Research Methods (MUS 618)*	3
Music History and Literature (must include MUS 623*)	6
Advanced Music Theory**	6
Voice Performance	12
Performance Related Study: must include MUS 665*, 667*, and 620* and 6 credits of Directed Research in Vocal Literature (MUS 780)	6-15
Minor (Optional)***	9
	Total 33-51

DOCTOR OF MUSICAL ARTS (Choral Conducting)

Research Methods (MUS 618)*	3
Music History and Literature (must include MUS 625)	9
Advanced Music Theory**	6
Advanced Choral Methods (MUS 660)	3
Performance Major****	12
Minor (Optional)***	9
	Total 33-42

DOCTOR OF MUSICAL ARTS (Instrumental Conducting)

Research Methods (MUS 618)*	3
Music History and Literature (must include MUS 622 or MUS 680)	9
Advanced Music Theory**	6
Advanced Rehearsal Techniques (MUS 681)	3
Performance Major (6 hours of MUP 658 and 6 hours of MUP 758)	12
Minor (Optional)***	Total 33-42

*If not completed at the master's level.
**MUS 578 cannot be used to fulfill this requirement.
***The minor may be taken within or outside the School of Music, and is subject to the approval of the Advisory Committee and the chairman of the department concerned.
****Must include a minimum of 4 credits of MUP 758

DOCTOR OF PHILOSOPHY IN MUSIC

The School of Music offers courses and research opportunities leading to the Ph.D. in music. Applicants must meet the entrance requirements of The Graduate School as well as those of the School of Music, and must show evidence of competence in musical performance. Applicants must submit a master's thesis or a research paper of sufficient scope and quality to demonstrate competence in research and clarity of expression. The basic core requirements beyond the master's degree are as follows:

Research Methods: MUS 618 (if not taken at themaster's level)	3
Music History and Literature beyond the master's	9
Advanced Music Theory beyond the master's*	6
Three seminars (minimum) beyond the master's	Total 27

(24 hours if competency in Research Methods is accepted by the Musicology faculty.)
There is no specific requirement in a minor area, but such work may be required by a student's Advisory Committee if it is essential to the major research or field of concentration.
Satisfaction of language requirements will conform to The Graduate School policy; however, specific languages required will vary with individual options.
*MUS 578 cannot be used to fulfill this requirement.

The Ph.D. in music may be pursued in one of three areas: music education, music theory, or musicology. The program outline for each area beyond the core requirements is given below; the student's Advisory Committee advises on and plans the actual program of study.

MUSIC EDUCATION

Music in Higher Education (MUS 762)
Psychology of Music (MUS 770)
At least one graduate level course in statistics
A knowledge of acoustics (PHY 140 or equivalent), A knowledge of specialized research in music education (MUS 600 or equivalent). These requirements must be met by the end of the first year of doctoral study.
Additional courses in music education or adjunct subjects as recommended by the Advisory Committee.

MUSIC THEORY

Pedagogy of Theory (MUS 674)
Advanced Analytical Techniques (MUS 676)
History of Music Theory (MUS 678)
Additional courses in music theory or adjunct subjects as recommended by the Advisory Committee
A reading knowledge of French, German, or a language appropriate to the research interest

MUSICOLOGY

Medieval and Renaissance Notation (MUS 700)
Proseminar in Musicological Methods (MUS 703)
Additional courses in musicology or adjunct subjects as recommended by the Advisory Committee
A reading knowledge of at least two foreign languages, normally German and either French or Italian

In all cases, the foreign language requirement(s) must be met by the end of the first full year of study in the Ph.D. program. The student's Advisory Committee must be formed and appointed by the Dean of the Graduate School prior to advance registration for the student's third semester. The dissertation topic and prospectus must be approved by the Advisory Committee; the dissertation itself must be the result of original research which adds to or modifies what has previously been known on the subject. Qualifying examinations must be taken no later than one semester after the completion of course work. A student is admitted to candidacy for the Ph.D. degree only after meeting the language requirement(s) and passing the qualifying examinations.

COOPERATIVE PH.D. IN MUSICOLOGY

University of Kentucky and University of Louisville

A cooperative Ph.D. in Musicology is available from the University of Kentucky and the University of Louisville. The faculties and facilities of both universities are available to students on either campus. If the student is enrolled full-time at either university, courses from the other are available without charge.

Students interested in this program should contact the Associate Dean of the Graduate School, University of Louisville, or the Director of Graduate Studies at the University of Kentucky, School of Music, for further information. The general regulations for doctoral students at the University of Kentucky will apply.

Admission. Every applicant must be admitted to the graduate schools of BOTH universities. Official transcripts and GRE scores for students admitted to the University of Louisville will be sent to the Director of Graduate Studies, School of Music, University of Kentucky by the Graduate School, University of Louisville. Applicants may be admitted provisionally on the recommendation of the Director of Graduate Studies in Music at the University of Kentucky pending receipt of GRE scores and/or completion of the placement examination at the University of Louisville.

Language Requirements. The University of Louisville will notify the Director of Graduate Studies, University of Kentucky, that a student has completed the language requirements.

Residence Requirements. At least three regular courses must be taken at the University of Kentucky. Residence requirements may be satisfied at the University of Louisville, University of Kentucky, or a combination of both. A student must be in residence as a full-time student or the equivalent for a minimum of four semesters beyond the master's degree. At least two of these semesters must be consecutive and precede the qualifying examination.

The University of Louisville will notify the Director of Graduate Studies, University of Kentucky, (if residency is being fulfilled at the University of Louisville) of the intent to schedule the qualifying examination and confirm that the student meets pre-qualifying requirements. Each candidate for the doctorate fulfilling residency at the University of Kentucky must complete two semesters of full-time dissertation study immediately after the qualifying examination by registering for a total of 18 credit hours in MUS 769. The candidate must maintain candidacy by registering for MUS 769 or Music History 769 (zero credit) each semester thereafter until the dissertation is successfully defended.

Advisory Committee. The Advisory Committee will be composed of six graduate faculty members, three from each institution.

Further information may be obtained from the University of Louisville Graduate School Bulletin.

CERTIFICATE IN MUSIC THEORY PEDAGOGY

The School of Music offers course work leading to the Certificate in Music Theory Pedagogy. The Certificate requires a total of 15 hours consisting of the following courses:

MUS 674 Theory Pedagogy	(3)
MUS 675 Internship	(3)
MUS 676 Advanced Analytic Techniques	(3)
and	
two elective theory courses selected from the following:	
MUS 572 Counterpoint	(3)
MUS 573 Counterpoint	(3)
MUS 670 Musical Style I	(3)
MUS 671 Musical Style II	(3)
MUS 672 Musical Style III	(3)
MUS 677 Contemporary Music Idioms	(3)
MUS 678 History of Theory	(3)
MUS 772 Seminar in Theory	(3)
MUS 799 Independent Work in Music Theory	(1-3)

The Certificate will be awarded upon completion of the requirements. Students working on the Certificate are expected to earn a grade of B or higher in each certificate requirement.

MUSIC COURSES

All music performance courses (MUP) may be repeated three times for credit. Music ensemble courses (MUC) may be repeated indefinitely.

All music performance courses carry from one to four credits during the fall and spring semesters. (Applied music offerings during the summer are limited.)

GRADUATE COURSES

MUC 570 ADVANCED CHAMBER MUSIC ENSEMBLE	**(1)**
MUC 596 OPERA WORKSHOP	**(1-3)**
MUC 675 JAZZ ENSEMBLE	**(1)**
MUC 689 WIND ENSEMBLE	**(1)**
MUC 691 ORCHESTRA	**(1)**
MUC 692 UNIVERSITY CHORISTERS	**(1)**
MUP 501 PIANO	**(1-4)**
MUP 502 VOICE	**(1-4)**
MUP 503 ORGAN	**(1-4)**
MUP 504 VIOLIN	**(1-4)**
MUP 505 VIOLA	**(1-4)**
MUP 506 CELLO	**(1-4)**
MUP 507 STRING BASS	**(1-4)**
MUP 508 FLUTE	**(1-4)**
MUP 509 OBOE	**(1-4)**
MUP 510 CLARINET	**(1-4)**
MUP 511 BASSOON	**(1-4)**
MUP 512 TRUMPET	**(1-4)**
MUP 513 FRENCH HORN	**(1-4)**
MUP 514 TROMBONE	**(1-4)**
MUP 515 EUPHONIUM	**(1-4)**
MUP 516 TUBA	**(1-4)**
MUP 517 SAXOPHONE	**(1-4)**
MUP 518 PERCUSSION	**(1-4)**
MUP 519 HARP	**(1-4)**
MUP 520 HARPSICHORD	**(1-4)**
MUP 521 ENGLISH HORN	**(1-4)**

MUP 522 HISTORICAL INSTRUMENTS ..... (1-4)
MUP 523 CLASSICAL GUITAR ..... (1-4)
MUP 530 VOCAL COACHING FOR SINGERS ..... (1-3)
MUP 558 CONDUCTING ..... (1-4)
MUP 601 PIANO ..... (1-4)
MUP 602 VOICE ..... (1-4)
MUP 603 ORGAN ..... (1-4)
MUP 604 VIOLIN ..... (1-4)
MUP 605 VIOLA ..... (1-4)
MUP 606 CELLO ..... (1-4)
MUP 607 STRING BASS ..... (1-4)
MUP 608 FLUTE ..... (1-4)
MUP 609 OBOE ..... (1-4)
MUP 610 CLARINET ..... (1-4)
MUP 611 BASSOON ..... (1-4)
MUP 612 TRUMPET ..... (1-4)
MUP 613 FRENCH HORN ..... (1-4)
MUP 614 TROMBONE ..... (1-4)
MUP 615 EUPHONIUM ..... (1-4)
MUP 616 TUBA ..... (1-4)
MUP 617 SAXOPHONE ..... (1-4)
MUP 618 PERCUSSION ..... (1-4)
MUP 619 HARP ..... (1-4)
MUP 620 HARPSICHORD ..... (1-4)
MUP 622 HISTORICAL INSTRUMENTS ..... (1-4)
MUP 623 CLASSICAL GUITAR ..... (1-4)
MUP 630 VOCAL COACHING FOR SINGERS ..... (1-3)
MUP 658 CONDUCTING ..... (1-4)
MUP 701 PIANO ..... (1-4)
MUP 702 VOICE ..... (1-4)
MUP 703 ORGAN ..... (1-4)
MUP 704 VIOLIN ..... (1-4)
MUP 705 VIOLA ..... (1-4)
MUP 706 CELLO ..... (1-4)
MUP 708 FLUTE ..... (1-4)
MUP 709 OBOE ..... (1-4)
MUP 710 CLARINET ..... (1-4)
MUP 711 BASSOON ..... (1-4)
MUP 712 TRUMPET ..... (1-4)
MUP 713 FRENCH HORN ..... (1-4)
MUP 714 TROMBONE 0 ..... (1-4)
MUP 716 TUBA ..... (1-4)
MUP 717 SAXOPHONE ..... (1-4)
MUP 718 PERCUSSION ..... (1-4)
MUP 730 VOCAL COACHING FOR SINGERS ..... (1-3)
MUP 758 CONDUCTING ..... (1-4)
MUS 400G MUSIC HISTORY REVIEW ..... (3)
MUS 470G REVIEW OF HARMONY ..... (1)
MUS 471G REVIEW OF AURAL SKILLS ..... (1)
MUS 500 MUSIC OF THE MIDDLE AGES ..... (3)
MUS 501 MUSIC OF THE RENAISSANCE ..... (3)
MUS 502 MUSIC OF THE BAROQUE ERA ..... (3)
MUS 503 MUSIC OF THE CLASSIC PERIOD ..... (3)
MUS 504 MUSIC OF THE NINETEENTH CENTURY ..... (3)
MUS 505 MUSIC OF THE TWENTIETH CENTURY ..... (3)
MUS 506 HISTORY OF AMERICAN MUSIC ..... (3)
MUS 520 VOCAL SOLO LITERATURE ..... (3)
MUS 521 ORGAN LITERATURE ..... (3)
MUS 522 PIANO LITERATURE TO 1830 ..... (3)
MUS 523 PIANO LITERATURE SINCE 1830 ..... (3)
MUS 530 COLLEGIUM MUSICUM ..... (1-3)
MUS 540 APPLICATIONS OF MUSIC TECHNOLOGY ..... (3)
MUS 550 TOPICS IN MUSIC EDUCATION (SUBTITLE REQUIRED) ..... (1-3)
MUS 560 ORFF SCHULWERK ..... (1-3)
MUS 561 ORFF CERTIFICATION: LEVEL I, II, OR III ..... (2)
MUS 566 PIANO PEDAGOGY ..... (3)
MUS 570 ORCHESTRATION ..... (2)
MUS 571 ORCHESTRATION ..... (2)
MUS 572 COUNTERPOINT ..... (3)
MUS 573 COUNTERPOINT ..... (3)
MUS 574 COMPOSITION ..... (2)
MUS 575 COMPOSITION ..... (2)
MUS 578 ANALYSIS AND STYLE SURVEY ..... (3)
MUS 600 RESEARCH I ..... (3)
MUS 601 FOUNDATIONS IN MUSIC EDUCATION ..... (3)
MUS 618 RESEARCH METHODS ..... (3)
MUS 620 ADVANCED VOCAL REPERTORY (SUBTITLE REQUIRED) ..... (3)
MUS 622 SYMPHONIC LITERATURE ..... (3)
MUS 623 OPERA LITERATURE I ..... (3)
MUS 624 CHAMBER MUSIC LITERATURE ..... (3)
MUS 625 CHORAL LITERATURE ..... (3)
MUS 627 OPERA LITERATURE II ..... (3)
MUS 650 MUSIC EDUCATION WORKSHOP ..... (1-4)
MUS 660 ADVANCED MUSIC EDUCATION METHODS AND MATERIALS (SUBTITLE REQUIRED) ..... (3)
MUS 664 MUSIC AND SPECIAL LEARNERS ..... (3)
MUS 665 PHYSIOLOGY AND FUNCTIONING OF THE SINGING VOICE ..... (3)
MUS 667 MATERIALS, TECHNIQUES AND LITERATURE OF VOICE TEACHING ..... (3)
MUS 670 MUSICAL STYLE I ..... (3)
MUS 671 MUSICAL STYLE II ..... (3)
MUS 672 MUSICAL STYLE III ..... (3)
MUS 673 ADVANCED COMPOSITION ..... (2)
MUS 674 PEDAGOGY OF THEORY ..... (3)
MUS 675 INTERNSHIP IN THEORY PEDAGOGY ..... (1)
MUS 676 ADVANCED ANALYTICAL TECHNIQUES ..... (3)
MUS 677 CONTEMPORARY MUSIC IDIOMS ..... (3)
MUS 678 HISTORY OF THEORY ..... (3)
MUS 680 BAND HISTORY AND LITERATURE ..... (3)
MUS 684 ADVANCED STRING METHODS AND MATERIALS ..... (3)
MUS 690 TOPICS IN MUSICOLOGY (SUBTITLE REQUIRED) ..... (3)
MUS 695 INDEPENDENT WORK IN MUSIC ..... (1-3)
MUS 700 MEDIEVAL AND RENAISSANCE NOTATION ..... (3)
MUS 702 SEMINAR IN MUSICOLOGY ..... (3)
MUS 703 PROSEMINAR IN MUSICOLOGICAL METHODS ..... (3)
MUS 704 MUSIC TECHNOLOGIES ..... (3)
MUS 705 RESEARCH II ..... (3)
MUS 706 MUSIC LEARNING AND BEHAVIOR ..... (3)
MUS 707 TESTS AND MEASUREMENTS IN MUSIC ..... (3)
MUS 719 INDEPENDENT WORK IN MUSICOLOGY ..... (1-3)
MUS 748 MASTER'S THESIS RESEARCH ..... (0)
MUS 749 DISSERTATION RESEARCH ..... (0)
MUS 762 MUSIC IN HIGHER EDUCATION ..... (3)
MUS 766 SEMINAR IN MUSIC EDUCATION ..... (3)
MUS 767 INDEPENDENT WORK IN MUSIC EDUCATION ..... (1-3)
MUS 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
MUS 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (1-12)
MUS 770 PSYCHOLOGY OF MUSIC ..... (3)
MUS 772 SEMINAR IN THEORY ..... (3)
MUS 780 DIRECTED RESEARCH IN VOCAL LITERATURE ..... (1-3)
MUS 799 INDEPENDENT WORK IN MUSIC THEORY ..... (1-3)

Nursing

GRADUATE FACULTY

Full Members

Professors

Dorothy Brockopp, Lynne Hall, Debra K. Moser, Ann R. Peden, Juliann G. Sebastian, Marcia K. Stanhope, Carolyn Williams, John F. Wilson.

Associate Professors

Norma J. Christman, Ellen J. Hahn, Patricia B. Howard, Sharon L. Sheahan.

Assistant Professors

Steve Browning, Deborah Reed.

Associate Members

Associate Professors

Debra Anderson, Sharon J. Barton, Teresa A. Free, Margaret J. Hickman, Sharon E. Lock, L. Sherry Warden.

Research Associate Professors

Mary Kay Rayens.

Assistant Professors

Mary C. DeLetter.

Emeritus Professors

Juanita Fleming, Margaret Grier, Gretchen LaGodna, Gwendolen Lee, Barbara A. Sachs.

The College of Nursing offers graduate programs leading to the Master of Science in Nursing and to the Doctor of Philosophy.

Master of Science

The Master of Science in Nursing program builds on a student's undergraduate degree, and prepares the individual for advanced practice nursing in a chosen specialty. Research utilization, evidence-based practice, and leadership are emphasized throughout the program. There are six specialty tracks:

1. Acute Care Nurse Practitioners focus on diagnosing and managing acute health problems, provide tertiary preventive care and work with interdisciplinary teams.
2. Adult Nursing focuses upon the care of adults across the life span in critical illness, adult, oncology, rehabilitation, ER-trauma, gerontological nursing, and nurse care manager.
3. Parent-Child Nursing focuses upon children, adolescents, and families, perinatal nursing, and neonatal.
4. Primary Care Nurse Practitioners focus on providing primary health care. They diagnose and treat common health problems, promote wellness and prevent illness and help clients learn effective self-care.
5. Psychiatric/Mental Health Nursing focuses upon the specialized care of individuals and families with psychiatric and addictive problems in hospital and community settings.
6. Public Health Nursing focuses on preparing nurses to assume positions in public health agencies delivering health and nursing services to specific populations, as nurse managers, community health clinical nurse specialists, and nurse care managers.

Admission Requirements

Applicants to the master's degree program must meet the minimum requirements of the Graduate School, as well as the following requirements of the nursing program: satisfactory scores on the Graduate Record Examination (GRE), a minimum undergraduate grade point average of 2.75 on a 4.0 grading scale, a baccalaureate degree in nursing from a school accredited by a nationally recognized organization, a goal statement, three references, and an interview. Nurse licensure in Kentucky and one year of experience as a nurse are required before enrolling in a clinical practicum. Final admission recommendations are made on a competitive basis.

The Master of Science in Nursing degree requires a minimum of 40 credit hours of course work and clinicals. Some specialties may require more. All students are required to take theories, assessment, clinical reasoning, research, leadership, evidence-based nursing practice, a graduate-level course in statistics (prequisite to NUR 602 Research Methods in Advanced Practice Nursing), and an elective. In addition, each student must complete an evidence-based practice project and pass a final examination. Students may pursue part-time study through flexible scheduling and selected evening/weekend courses. The College has outreach sites in Morehead and Madisonville, KY. The deadline for receipt of all application materials is March 1 for Fall admission and November 1 for Spring admission. Some MSN specialty areas admit Fall semester only. Late applicants will be considered on a space-available basis.

Nurses with diplomas or associate degrees have the choice of combining their programs of study for the BSN and MSN degrees. The BSN/MSN option provides qualified registered nurses with an accelerated approach to career advancement from the associate or hospital diploma in nursing to the master's degree. Applicants to the BSN/MSN track must meet the criteria listed for the BSN program and for the MSN program and that of the Graduate School. Admission requirements are: an earned associate degree in nursing from a college accredited by one of the six academic accrediting associations, successful completion of ACT-PEP test for diploma program graduates only, evidence of one year of nursing experience, completion of all University Studies Program requirements, a GPA of 3.0 on a 4.0 scale, satisfactory GRE scores, a written goal statement, three letters of reference, and a personal interview. The MSN degree will not be awarded without concurrent or prior completion of the BSN requirements. The deadline for receipt of all application materials is May 1. Late applicants will be considered on a space-available basis.

Doctor of Philosophy

The Doctor of Philosophy in Nursing program prepares nurse scholars to contribute to the development of nursing science through clinical research and the application of knowledge to nursing practice. Graduates assume roles in research, education, and administration.

Admission Requirements

Applicants to the Ph.D. program must meet the minimum requirements of the Graduate School, as well as the following requirements of the nursing program. An applicant must possess a master's degree in nursing from a nationally accredited school and a 3.3 or higher grade point average on a 4.0 scale for all master's level work. Satisfactory scores on the GRE are expected. Personal interviews and three references are required. Final admission recommendations are made on a competitive basis.

A student enrolled in the master's degree program, who has completed 17 credit hours of MSN course work, can apply for admission to the Ph.D. program. To apply for Ph.D. study, a MSN student must submit a letter to the Assistant Dean for Research and Ph.D. Studies expressing a desire to enroll in the doctoral program, submit a revised goal statement reflecting interest in doctoral education and research, attach a sample of scholarly work, request the academic advisor to send the Assistant Dean an admission recommendation, and complete an interview with the Assistant Dean and one additional faculty member.

The Doctor of Philosophy degree in nursing requires a minimum of 45 credit hours of course work beyond the master's degree, plus 18 hours of residence credit for dissertation research. Written and oral examinations are required to qualify as a degree candidate. Pre- and post-qualifying residency requirements can be fulfilled using any of the three models approved by the Graduate School. There is a final examination for defense of the dissertation research.

GRADUATE COURSES

NUR 510 OLDER WOMEN AND THEIR HEALTH (SAME AS HSE 510) ..... (3)
NUR 512 COMPLEMENTARY/ALTERNATIVE APPROACHES TO HEALTH CARE ..... (3)
NUR 514 ADVANCED HEALTH ASSESSMENT ..... (2)
NUR 520 SPECIAL TOPICS IN NURSING: (SUBTITLE REQUIRED) ..... (2-4)
NUR 600 ADVANCED NURSING PRACTICE: ROLES AND ISSUES ..... (3)
NUR 601 THEORETICAL BASIS FOR ADVANCED PRACTICE NURSING ..... (2)
NUR 602 RESEARCH METHODS IN ADVANCED PRACTICE NURSING ..... (3)
NUR 603 CLINICAL REASONING IN ADVANCED PRACTICE NURSING ..... (3)
NUR 604 LEADERSHIP IN ADVANCED PRACTICE NURSING ..... (3)
NUR 605 EVIDENCE-BASED NURSING PRACTICE ..... (3)
NUR 610 CONCEPTS AND THEORIES IN NURSING ..... (2)
NUR 612 NURSING RESEARCH METHODS ..... (3)
NUR 613 RESEARCH APPLICATIONS IN NURSING ..... (3)
NUR 614 PRACTICUM IN CLINICAL NURSING I ..... (4)
NUR 615 PRACTICUM IN CLINICAL NURSING II ..... (5)
NUR 620 PROBLEMS IN CLINICAL NURSING ..... (2-6)
NUR 624 PEDIATRIC HEALTH SCREENING AND HEALTH PROMOTION .. (2)
NUR 628 POPULATION FOCUSED PRACTICE IN THE COMMUNITY ..... (2)
NUR 629 EPIDEMIOLOGICAL PRINCIPLES APPLIED TO HEALTH CARE AND NURSING PRACTICE ..... (3)
NUR 631 APPLICATIONS OF ADVANCED HEALTH ASSESSMENT ..... (2)
NUR 632 COMPREHENSIVE PATIENT MANAGEMENT I ..... (2)
NUR 633 COMPREHENSIVE PATIENT MANAGEMENT II ..... (4)
NUR 650 ADVANCED PHYSICAL AND HEALTH ASSESSMENT ..... (2-6)
NUR 651 DIAGNOSTIC LABORATORY PROCEDURES ..... (2)
NUR 652 PHARMACOLOGIC APPLICATIONS IN PRIMARY CARE ..... (3)
NUR 653 PATHOPHYSIOLOGY ..... (3)
NUR 654 COMMON HEALTH PROBLEMS OF YOUNG, MIDDLE, AND OLDER ADULTS I ..... (3)
NUR 655 COMMON HEALTH PROBLEMS OF YOUNG, MIDDLE, AND OLDER ADULTS II ..... (3)
NUR 656 HEALTH PROBLEMS OF THE PEDIATRIC CLIENT ..... (2)
NUR 657 HEALTH ISSUES OF THE CHILD AND ADOLESCENT CLIENT ..... (2)

NUR 658 RISKY BEHAVIORS AND HEALTH ..... (3)
NUR 662 CLINICAL NURSING PRACTICE IN EXPANDED ROLES I ..... (1-4)
NUR 668 PSYCHOTHERAPEUTICS FOR ADVANCED NURSING PRACTICE (SAME AS PHR 668) ..... (3)
NUR 672 CLINICAL NURSING PRACTICE IN EXPANDED ROLES II ..... (3-4)
NUR 673 MANAGEMENT OF CLINICAL NURSING PRACTICE II ..... (4)
NUR 676 WOMEN'S HEALTH: A PUBLIC HEALTH PERSPECTIVE (SAME AS PM 676) ..... (3)
NUR 682 CLINICAL NURSING PRACTICE IN EXPANDED ROLES III ..... (3-8)
NUR 700 BEHAVIORAL RESPONSES TO HEALTH PROBLEMS ..... (2)
NUR 701 BIOLOGICAL RESPONSES TO HEALTH PROBLEMS ..... (2)
NUR 702 BIOLOGICAL PHENOMENA IN ACUTE ILLNESS ..... (3)
NUR 703 BIOLOGICAL AND BEHAVIORAL PHENOMENA IN CHRONIC ILLNESS ..... (2)
NUR 704 ACUTE AND CHRONIC ILLNESS AND NURSING THERAPEUTICS I ..... (3)
NUR 705 ACUTE AND CHRONIC ILLNESS AND NURSING THERAPEUTICS II ..... (6)
NUR 706 ADVANCED PRACTICE NURSING CARE OF ACUTELY ILL ADULTS ..... (2)
NUR 707 ADVANCED PRACTICE NURSING CARE OF CRITICALLY ILL ADULTS ..... (6)
NUR 708 MEASURING AND DOCUMENTING NURSING PRACTICE ..... (4)
NUR 710 ADVANCED PARENT-CHILD NURSING I ..... (2)
NUR 711 ADVANCED PARENT-CHILD NURSING II ..... (2)
NUR 712 ADVANCED PARENT-CHILD SEMINAR ..... (3)
NUR 713 ADVANCED NURSING CARE FOR FAMILIES, PRE-CONCEPTION THROUGH ADOLESCENCE I ..... (6)
NUR 714 ADVANCED NURSING CARE FOR FAMILIES, PRE-CONCEPTION THROUGH ADOLESCENCE II ..... (4)
NUR 720 ADVANCED PSYCHIATRIC/MENTAL HEALTH NURSING I ..... (2)
NUR 721 ADVANCED PSYCHIATRIC/MENTAL HEALTH NURSING II ..... (2)
NUR 722 CLINICAL TOPICS IN ADVANCED PRACTICE PSYCHIATRIC MENTAL HEALTH NURSING ..... (3)
NUR 723 ADVANCED PRACTICE PSYCHIATRIC NURSING I ..... (6)
NUR 724 ADVANCED PRACTICE PSYCHIATRIC NURSING II ..... (4)
NUR 725 ADVANCED PRACTICE NURSING SEMINAR FOR NURSE PRACTITIONERS ..... (3)
NUR 726 PRIMARY CARE ADVANCED PRACTICE NURSING SEMINAR ..... (3)
NUR 727 PRIMARY CARE ADVANCED PRACTICE NURSING SEMINAR .... (2-5)
NUR 730 NURSING MANAGEMENT IN THE ORGANIZATION I ..... (3)
NUR 731 NURSING MANAGEMENT IN THE ORGANIZATION II ..... (3)
NUR 732 ADVANCED PRACTICE IN PUBLIC HEALTH NURSING ASSESSMENT SPECIALTY SEMINAR ..... (3)
NUR 733 ADVANCED PRACTICE IN PUBLIC HEALTH NURSING PRACTICUM I: POLICY AND PROGRAM DEVELOPMENT ..... (6)
NUR 734 ADVANCED PRACTICE IN PUBLIC HEALTH NURSING: PRACTICUM II: ASSURANCE ..... (4)
NUR 735 FAMILY AND COMMUNITY HEALTH PROMOTION ..... (3)
NUR 737 NURSING CARE MANAGEMENT - RESOURCE MANAGEMENT .... (3)
NUR 738 MODELS AND PROCESSES OF NURSING CARE MANAGEMENT . (3)
NUR 739 NURSING CARE MANAGEMENT - CLINICAL OUTCOMES AND QUALITY IMPROVEMENT ..... (2-3)
NUR 740 NURSE-MIDWIFERY MANAGEMENT: NEONATE ..... (2)
NUR 744 NURSE-MIDWIFERY MANAGEMENT: WOMAN WITH PROBLEMS (2)
NUR 745 NURSE-MIDWIFERY PRACTICE ORGANIZATIONS ..... (2)
NUR 748 MASTER'S THESIS RESEARCH ..... (0)
NUR 749 DISSERTATION RESEARCH ..... (0)
NUR 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
NUR 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
NUR 776 SPECIAL TOPICS SEMINAR (SUBTITLE REQUIRED) ..... (2-4)
NUR 778 PROSEMINAR IN CONTEMPORARY HEALTH AND NURSING POLICY ISSUES ..... (3)
NUR 779 DOCTORAL SEMINAR (PROPOSED TITLE) ..... (1-3)
NUR 781 INDEPENDENT STUDY IN NURSING ..... (1-3)
NUR 790 KNOWLEDGE DEVELOPMENT IN NURSING ..... (3)
NUR 791 QUALITATIVE METHODS IN NURSING RESEARCH ..... (3)
NUR 792 QUANTITATIVE METHODS IN NURSING RESEARCH ..... (3)
NUR 793 MEASUREMENT OF NURSING PHENOMENA ..... (4)
NUR 794 ANALYSIS, INTERPRETATION, AND PRESENTATION OF QUANTITATIVE DATA ..... (3)

Nutritional Sciences

GRADUATE FACULTY

Full Members

Professors

Kenneth B. Ain, James W. Anderson, Gilbert A. Boissonneault, James A. Boling, Geza Bruckner, Lisa Cassis, Linda H. Chen, Ching K. Chow, Alan Daugherty, Frederick C. deBeer, James F. Drummond, Vincent S. Gallicchio, Howard Glauert, Ramesh Gupta, Bernard Hennig, David Hildebrand Jr., Laurie L. Humphries, Thomas H. Kelly, Thomas Kemp, Merlin D. Lindemann, Claire Pomeroy, Thomas H. Schwarcz, Brett Spear, Daret St. Clair, Deneys R. van der Westhuyzen, Youling L. Xiong.

Adjunct Professors

Craig McClain.

Associate Professors

Kwaku Addo, Douglas Archbold, Margaret Barth, Maria G. Boosalis, Austin H. Cantor, Ion Deaciuc, Willem deVillers, Hazel W. Forsythe, Lawrence Gates, Daniell Hill, Edward J. Kasarskis, Mark S. Kindy, Robert Lodder, Bin-Tao Pan, Todd D. Porter, Eric Smart, Michal Toborek, James Yates.

Assistant Professors

Paul M. Kingery, Jean McCrory

Associate Members

Professors

Eun Lee.

Associate Professors

Deborah L. Crooks, Dennis Karounos, Guo-Min Li, Raymond Reynolds.

Adjunct Associate Professors

Shrish Barve.

Assistant Professors

Reto Asmis, Jody Clasey, Maria deBeer, David R. Gater, James Matthews, Ginnell Post, Steven Post, William H. St Clair, Eric Vanzant, Nancy Webb.

Research Assistant Professors

Gabriele Ludewig.

Adjunct Assistant Professors

Changzheng Wang.

Emeritus Professors

Virgil W. Hays, George E. Mitchell Jr..

The multidisciplinary Graduate Program in Nutritional Sciences provides opportunity for advanced study leading to the M.S. and Ph.D. degrees. The aim of the program is to develop nutritional scientists who are able to function in a variety of sophisticated academic, industrial and professional settings. Educational opportunities exist in agricultural, biological, clinical, medical, social and basic nutritional sciences. The program is organized on an interdepartmental and intercollege basis. More than 38 faculty members from various academic units of the university including Agronomy, Animal Sciences, Anthropology, Behavioral Science, Biochemistry, Clinical Sciences, Endocrinology, Horticulture and Landscape Architecture, Internal Medicine, Neurology, Nutrition and Food Science, Oral Health Science, Psychiatry, Surgery and Toxicology are involved in the teaching and research activities of the program. The program is diversified and systematic, yet highly flexible. Individualized professional training and extensive research opportunities are available to students.

Program faculty have modern research laboratory facilities for conducting human, animal, and cell culture studies using state-of-the-art molecular biology, trace mineral, vitamin, lipid, amino acid, enzyme, hormone, stable and radioactive isotope, microcirculatory, and energy assessment analysis. Clinical facilities for training and research include the University of Kentucky Hospital, Veterans Administration Hospital, Sanders-Brown Center on Aging, University of Kentucky Medical Center Outpatient Clinics, and the Markey Cancer Center. Clinical research units are present at both the University of Kentucky Medical Center and the Veterans Administration Medical Center, and on-going nutritional studies are performed at both units. All facilities are within walking distance of each other. Nutritional support teams are established at both the University and Veterans Administration Hospitals. Opportunities for community-based research exist locally, throughout the state, and in international settings. Further information

may be obtained by writing to the Director of Graduate Studies, Multidisciplinary Ph.D. Program in Nutritional Sciences, 203A Health Sciences Building, University of Kentucky, Lexington, KY 40506-0003.

Admission Requirements

Admission to the Ph.D. degree program requires:

1. An M.S. Degree with a GPA of 3.2 or above on a 4.0 scale.
2. A B.S. Degree with a GPA of 3.0 or above on a 4.0 scale.
3. An average GRE score, on all three sections, greater than the 50th percentile.
4. For international applicants a TOEFL score of 550 or better is required; all applicants must demonstrate proficiency in verbal and written English communication.
5. Submission of a brief essay (not in excess of 3 pages) describing the long-term career goals of the applicant and how she/he feels the Program in Nutritional Sciences would advance these goals.
6. Three letters of reference.

Admission to the M.S. degree program requires:

1. A baccalaureate degree from a fully accredited institution of higher learning.
2. A minimum undergraduate grade point average of 2.9 and 3.0 on all graduate work.
3. A total of 1,400 or more on the verbal, quantitative, and analytical portions of the Graduate Record Examination.
4. For international applicants a TOEFL score of 550 or better is required; all applicants must demonstrate proficiency in verbal and written English communication.
5. Submission of a brief essay (not in excess of 3 pages) describing the long-term career goals of the applicant and how she/he feels the Program in Nutritional Sciences would advance these goals.
6. Three letters of reference.

Degree Requirements

Students are required to complete the core curriculum. Elective courses to be taken will be recommended by the advisory committee.

I. Ph.D. in Nutritional Sciences - Core Curriculum

Nutrition Core Courses	Credit Hours
NS/CNU 601 Macronutrient Metabolism	4
NS/ASC 602 Micronutrient Metabolism	4
NS/CNU/NFS 771 Graduate Seminar in Nutritional Sciences	0-1*
NS/CNU/NFS 704 Current Topics in Nutrition	1

*Minimum of 2 hours required

Other Core Courses	Credit Hours
STA 570 Basic Statistical Analysis	4
BCH 607 General Biochemistry I	3
BCH 608 General Biochemistry II	3
PGY 502 Principles of Physiology	5

Nutrition Selectives	Credit Hours
6 hours to be selected from:	
NS/ANT/BS/NFS 607 Food-Related Behaviors	3
NS/CNU 701 Nutrition and Chronic Diseases	4
ASC 580 Physiology of Nutrient Digestion and Absorption	3
ASC 681 Energy Metabolism	2
ASC 683 Protein Metabolism	2
NS/CNU 604 Lipid Metabolism	3
	Total 30-32

II. M.S. in Nutritional Sciences - Core Curriculum

Plan A (Thesis Option)	Credit Hours
NS/CNU 601 Macronutrient Metabolism	4
NS/ASC 602 Micronutrient Metabolism	4
NS/CNU/NFS 704 Current Topics in Nutritional Sciences	1
STA 570 Basic Statistical Analysis	4
BSC/ANT/NFS 607 Food-Related Behaviors	3
NS 771 Graduate Seminar in Nutritional Sciences	0-1*
Emphasis Requirements	12
TOTAL MINIMUM HOURS REQUIRED (plus thesis research):	29
Thesis Research: NS/CNU/NFS 790 — Research in Nutritional Sciences	0-6

*Students are required to register twice for 0 credits, and once for 1 credit.

Plan B (Non-Thesis Option)	Credit Hours
NS/CNU 601 Macronutrient Metabolism	4
NS/ASC 602 Micronutrient Metabolism	4
NS/CNU/NFS 704 Current Topics in Nutritional Sciences	1
STA 570 Basic Statistical Analysis	4
BSC/ANT/NFS 607 Food Related Behaviors	3
NS 771 Graduate Seminar in Nutritional Sciences	0-1**
NS/CNU/NFS 782 Special Problems	1-6
Emphasis Requirements and Electives	18
TOTAL MINIMUM HOURS REQUIRED:	35

**Students are required to register twice for 0 credits

III. M.S. in Nutritional Sciences - Emphasis Area Requirements

Clinical Nutrition	Credit Hours
NS/CNU 701 Nutrition and Chronic Diseases	4
NS/CNU 702 Clinical Nutrition Problem Based Case Studies	4
NS/NFS 640 Human Nutrition Assessment	3
Electives Plan A or Plan B	1 or 7

Community Nutrition	Credit Hours
NS/NFS 630 Advanced Community Nutrition	3
NS/NFS 640 Human Nutrition Assessment	3
HES 600 Research Methodology in Human Environmental Sciences	3
NFS 516 Maternal and Child Nutrition	3
(or)	
NS/NFS 620 Nutrition and Aging	2
Electives Plan B only	6-7

Molecular & Biochemical Nutrition	Credit Hours
BCH 607 General Biochemistry I	3
BCH 608 General Biochemistry II	3
PGY 412G Principles of Human Physiology	4
NS/CNU 606 Molecular Biology Applications in Nutrition	2
Electives Plan B only	6

Wellness/Sports Nutrition	Credit Hours
NS/CN 605 Wellness and Sports Nutrition	3
NS/NFS 630 Advanced Community Nutrition	3
NS/NFS 640 Human Nutrition Assessment	3
KHP 620 Advanced Exercise Physiology	3
Electives Plan B only	6

GRADUATE COURSES

NS 601 MACRONUTRIENT METABOLISM (SAME AS CNU 601) ..... (4)
NS 601 MACRONUTRIENT METABOLISM (SAME AS CNU 601) ..... (4)
NS 602 MICRONUTRIENT METABOLISM (SAME AS ASC 602) ..... (4)
NS 604 LIPID METABOLISM (SAME AS CNU 604) ..... (3)
NS 605 WELLNESS AND SPORTS NUTRITION (SAME AS PT/CNU 605) ..... (3)
NS 606 MOLECULAR BIOLOGY APPLICATIONS IN NUTRITION (SAME AS CNU 606) ..... (2)
NS 607 FOOD RELATED BEHAVIORS (SAME AS NFS/ANT/BSC 607) ..... (3)
NS 608 NUTRITIONAL IMMUNOLOGY (SAME AS CNU 608) ..... (3)
NS 609 ETHICS IN CLINICAL SCIENCES RESEARCH (SAME AS CNU 609) .... (1)
NS 620 NUTRITION AND AGING (SAME AS NFS 620) ..... (2)
NS 630 ADVANCED COMMUNITY NUTRITION (SAME AS NFS 630) ..... (3)
NS 640 HUMAN NUTRITION: ASSESSMENT (SAME AS NFS 640) ..... (3)
NS 651 TOPICS IN NUTRITIONAL SCIENCES I ..... (2)
NS 652 TOPICS IN NUTRITIONAL SCIENCES II ..... (2)
NS 680 LABORATORY METHODS IN NUTRITIONAL SCIENCES (SAME AS ASC 680) ..... (4)

NS 701 NUTRITION AND CHRONIC DISEASES (SAME AS CNU 701) ..... (4)
NS 702 CLINICAL/WELLNESS PROBLEM-BASED CASE STUDIES ..... (1-3)
NS 704 CURRENT TOPICS IN NUTRITIONAL SCIENCES (SAME AS CNU/NFS 704) ..... (1)
NS 748 MASTER'S THESIS RESEARCH (SAME AS NFS 748) ..... (0)
NS 749 DISSERTATION RESEARCH ..... (0)
NS 768 RESIDENCE CREDIT FOR THE MASTERS DEGREE (SAME AS NFS 768) ..... (1-6)
NS 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
NS 771 GRADUATE SEMINAR IN NUTRITIONAL SCIENCES ..... (0-1)
NS 782 SPECIAL PROBLEMS (SAME AS CNU/NFS 782) ..... (1-6)
NS 790 RESEARCH IN NUTRITIONAL SCIENCES (SAME AS CNU/NFS 790) ..... (0-6)

CNU 601 MACRONUTRIENT METABOLISM (SAME AS NS 601) ..... (4)
CNU 604 LIPID METABOLISM (SAME AS NS 604) ..... (3)
CNU 605 WELLNESS AND SPORTS NUTRITION (SAME AS NS/PT 605) ..... (3)
CNU 606 MOLECULAR BIOLOGY APPLICATIONS IN NUTRITION (SAME AS NS 606) ..... (2)
CNU 608 NUTRITIONAL IMMUNOLOGY (SAME AS NS 608) ..... (3)
CNU 609 ETHICS IN CLINICAL SCIENCES RESEARCH (SAME AS NS 609) .... (1)
CNU 701 NUTRITION AND CHRONIC DISEASES (SAME AS NS 701) ..... (4)
CNU 702 CLINICAL/WELLNESS PROBLEM-BASED CASE STUDIES ..... (1-3)
CNU 704 CURRENT TOPICS IN NUTRITIONAL SCIENCES (SAME AS NFS/NS 704) ..... (1)
CNU 782 SPECIAL PROBLEMS (SAME AS NFS/NS 782) ..... (1-6)
CNU 790 RESEARCH IN NUTRITIONAL SCIENCES (SAME AS NFS/NS 790) ..... (0-6)

Pharmaceutical Sciences

GRADUATE FACULTY

Full Members

Professors

Bradley Anderson, Robert A. Blouin, Lisa Cassis, Peter Crooks, Patrick DeLuca, Linda Dwoskin, Thomas S. Foster, Boyd Haley, Michael Jay, William Lubawy, Patrick J. McNamara, Robert Rapp, Kenneth Roberts, Hsin-Hsuing Tai, Robert A. Yokel.

Associate Professors

Paul M. Bummer, Thomas Burke, Eric D. Endean, C. Gary Gairola, Jimmi C. Hatton, Robert Kuhn, Robert Lodder, Jim Pauly, Mary M. Piascik, Todd Porter, Peter Wedlund, Daniel P. Wermeling, John R. Yannelli.

Associate Members

Professors

Sunil Chatterjee.

Research Professors

Tian-Xiang Xiang.

Associate Professors

Karen Blumenschein, P. Andrew Pearson.

Research Associate Professors

Michael Morgan.

Assistant Professors

Val Adams, W. Scott Akers, George Davis, Russell Mumper, Marcos Oliveira, Ginell Post, Frank Romanelli, Audra Stinchcomb, Bryan Yeager.

Research Assistant Professors

Michelle Marra.

Emeritus Professors

George Digenis, Lewis Dittert, Milton Kornet, Harry Kostenbauder, Harry Smith, Joseph Swintosky.

Admission Requirements

For admission to graduate study in pharmaceutical sciences a student should have a sound background in pharmacy, chemistry, biology, or chemical engineering, with a mastery of mathematics through calculus.

Entry into the program will require an undergraduate or professional program GPA of at least 2.75 for the MS degree and 3.0 for the Ph.D. degree. We also require three letters of recommendation from current or former college professors addressing the scientific research skills and motivation of the applicant.

The Pharmaceutical Sciences Graduate Program was established in 1967 to prepare motivated individuals for academic and industrial careers in pharmaceutical and biomedical research. It has trained more than 180 Ph.D. graduates. The program offers two training options: a traditional option in which most of the students have been enrolled, and another track focused on clinical research.

Traditional Pharmaceutical Science Track

The goal is to develop scientists who possess a blend of contemporary basic science skills and an understanding of their role in the development of new drugs. This is achieved through intense laboratory experiences in a biomedical science of interest, such as pharmacology, medicinal chemistry or pharmaceutics that lead to a laboratory-based dissertation research project.

Clinical Pharmaceutical Science Track

The goal is to develop scientists who possess a blend of contemporary clinical and basic science skills. This is achieved through research in the clinically oriented pharmaceutical sciences that includes intense clinical experience in a medical specialty of interest, such as cardiology, neuroscience, critical care, neonatal/pediatric medicine or oncology and an integrated laboratory-based and clinical dissertation research project. A Pharm.D., M.D., D.D.S., D.V.M. or other professional health degree is required for admission into this training track.

Both Tracks include state-of-the-art course work.

Research projects are focused in one of four areas of Graduate Study.

Drug Discovery and Design

Research in this area focuses on chemical, biochemical, biophysical and molecular approaches toward the design and development of new therapeutic entities. Specific areas of focus include the development of anticancer agents, anti-inflammatory drugs, anti-thrombotic drugs, novel opiate analgesics, anticonvulsants, anti-Alzheimer and anti-Parkinson drugs, agents for the treatment of psychostimulant abuse, neuroprotective agents, and drugs that interact with nicotinic receptors. Research is also being carried out on cell signaling pathways, facilitating the development of strategies designed to correct such signaling defects.

Pharmaceutics Drug Delivery and Analysis

Research in this area focuses on discovery and evaluation of novel drug delivery systems as they relate to the physical, chemical, and biochemical properties of a therapeutic entity. It includes the development of intravenous and extravascular dosage formulations for synthetic organic molecules, bioengineered proteins, and anti-sense oligonucleotides to optimize their therapeutic value.

Pharmacology

Research in this area utilizes multidisciplinary approaches to study drug response mechanisms in healthy and pathophysiological states. It includes substrate/receptor interactions, and their ability to trigger physiological, pharmacological and toxicological responses in various models ranging from cell culture, to whole animal studies.

Pharmacodynamics, Pharmacokinetics and Drug Metabolism

Research in this area focuses on characterization and assessment of the relationship between drug concentration and response. It is supported by studies on the fundamental mechanisms by which drugs and other bioactive substances are absorbed, transported, metabolized, and excreted from the body. It utilizes state-of-the-art techniques to understand the cellular and molecular basis for the effect that disease, genetic variation and drug-drug interactions may have on these processes.

Course Work

The following courses will be taken by all students enrolled in the program, although courses may be waived or other courses substituted given the background of the individual student.

PHR 760 Introduction to Pharmaceutical Sciences	2
PHA 522 Systems Pharmacology	3
BCH 607 General Biochemistry I	3
STA 570 Basic Statistical Analysis	4
Departmental Seminar Series	
and	
Graduate Student Seminar Series	total 2 each year

Additionally, students take some of the following courses, depending on their Area of Graduate Study:

CHE 440G Physical Chemistry	3
CHE 538 Advanced Organic Chemistry	3
PGY 502 Physiology	5
BCH 608 General Biochemistry II	3
PHR 612 Quantitative Pharmacodynamics: Pharmacokinetics	3
PHR 647 Introduction to Molecular Pharmacotherapeutics	3
PHR 649 Advanced Molecular Pharmacology	2
PHR 664 Theory and Practice of Drug Metabolism	3
PHR 776 Seminar in Pharmaceutical Sciences I	1
PHR 778 Seminar in Pharmaceutical Sciences II	1

Students often take electives that prepare them for their dissertation research project and career goals. Some of these electives are:

PHR 510 Modern Methods in Pharmaceutical Analysis	5
PHR 520 Special Topics in Pharmacy Law	2
PHR 525 Introduction to Sociopharmacology	2
PHR 530 Radiopharmaceutics	3
PHR 541 Pharmaceutical Technology Clerkship	4
PHR 545 Sterile Parenterals and Devices	2-3
PHR 595 Independent Problems in Pharmacy Administration	1-3
PHR 620 Natural Products Chemistry	3
PHR 622 Advanced Biopharmaceutics	2
PHR 630 Pharmaceutical Rate Processes	3
PHR 631 Equilibrium Phenomena in Pharmaceutical Systems	3
PHR 645 Neurotoxicology	2
PHR 762 Bioorganic Mechanisms	3
PHR 779 Membrane Science Colloquium	1

For further information visit our Web site: <www.uky.edu/Pharmacy>, then select Graduate Program.

GRADUATE COURSES

PHR 510 MODERN METHODS IN PHARMACEUTICAL ANALYSIS ..... (5)
PHR 520 SPECIAL TOPICS IN PHARMACY LAW ..... (2)
PHR 530 RADIOPHARMACEUTICS ..... (3)
PHR 545 STERILE PARENTERALS AND DEVICES ..... (2-3)
PHR 595 INDEPENDENT PROBLEMS IN PHARMACY ADMINISTRATION (1-3)
PHR 612 QUANTITATIVE PHARMACODYNAMICS: PHARMACOKINETICS (SAME AS PHA 612) ..... (3)
PHR 620 NATURAL PRODUCTS CHEMISTRY ..... (3)
PHR 622 ADVANCED BIOPHARMACEUTICS ..... (2)
PHR 630 PHARMACEUTICAL RATE PROCESSES ..... (3)
PHR 631 EQUILIBRIUM PHENOMENA IN PHARMACEUTICAL SYSTEMS .. (3)
PHR 645 NEUROTOXICOLOGY ..... (2)
PHR 647 INTRODUCTION TO MOLECULAR PHARMACOTHERAPEUTICS (3)
PHR 649 ADVANCED MOLECULAR PHARMACOLOGY (SAME AS PHA/TOX 649) ..... (2)
PHR 664 THEORY AND PRACTICE OF DRUG METABOLISM ..... (3)
PHR 668 PSYCHOTHERAPEUTICS FOR ADVANCED NURSING PRACTICE (SAME AS NUR 668) ..... (3)
PHR 748 MASTER'S THESIS RESEARCH ..... (0)
PHR 749 DISSERTATION RESEARCH ..... (0)
PHR 760 TOPICS IN PHARMACEUTICAL SCIENCES ..... (1-4)
PHR 762 BIOORGANIC MECHANISMS ..... (3)
PHR 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
PHR 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
PHR 774 GRADUATE SEMINAR IN PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS ..... (1)
PHR 776 SEMINAR IN PHARMACEUTICAL SCIENCES I ..... (1)
PHR 778 SEMINAR IN PHARMACEUTICAL SCIENCES II ..... (1)
PHR 779 MEMBRANE SCIENCES COLLOQUIUM (SAME AS CHE/CME/BCH/PHA 779) ..... (1)
PHR 780 SPECIAL PROBLEMS IN PHARMACEUTICAL SCIENCES ..... (1-6)
PHR 790 RESEARCH IN PHARMACEUTICAL SCIENCES ..... (1-12)

Philosophy

GRADUATE FACULTY
Full Members
Professors
J. Daniel Breazeale, Ronald C. Bruzina, Joan C. Callahan, James E. Force, Daniel H. Frank, Oliver Leaman, James W. Manns, Alan R. Perreiah, Theodore R. Schatzki.
Associate Professors
Sanford Goldberg, Harmon R. Holcomb, Brandon Look, Henry A. Schankula, Anita M. Superson.
Associate Members
Professors
John Rogers.
Assistant Professors
David Bradshaw, Bradley Monton, Christopher Zurn.
Emeritus Professors
Dallas M. High, Thomas Olshewsky.

Admission Requirements

It is expected that candidates admitted to the graduate program in philosophy will: (1) provide proof of completion of a B.A., B.S., or M.A.; (2) have given evidence of superior skills on the GRE; (3) have achieved an overall grade-point average of at least 3.2 (4.0 scale) in all undergraduate course work; and (4) have achieved an overall grade-point average of at least 3.5 in all graduate course work.

Degree Requirements

The Department of Philosophy offers programs of study leading to the Doctor of Philosophy and the Master of Arts degrees. Ordinarily, applicants for graduate study in philosophy at the University of Kentucky will enter the Ph.D. program. The purpose of the Ph.D. program is to develop the student's ability to do serious, advanced research in philosophy. The program is designed to accommodate the needs of individual students at an advanced level to pursue a traditional degree in philosophy, engage in interdisciplinary research to prepare for professions outside of philosophy itself, or prepare for the profession of teaching philosophy. The Ph.D. program requires the completion of 66 hours of course work, or 36 hours of course work beyond course work done for an M.A. in philosophy at the University of Kentucky or elsewhere. Normally, 18 of the 36 required post-M.A. hours will be taken for writing the dissertation, leaving 18 of the required hours for non-dissertation course work. Students will need to demonstrate reading competence in at least one foreign language, as well as competence in logic. They will also complete a three course requirement in 20th century philosophy. In addition, all Ph.D. students will need to pass comprehensive examinations in metaphysics and epistemology and in value theory. A Qualifying Examination in each student's area of specialization precedes the writing of the dissertation. Students entering the Ph.D. program without an M.A. in philosophy from the University of Kentucky are expected to complete their degree work within five years. Every effort will be made to see that all students entering the Ph.D. program without an M.A. in philosophy from the University of Kentucky are offered five years of financial support (teaching assistantships and/or fellowships), with ongoing funding for those years contingent on the availability of funds and the student's continuing to make

satisfactory progress through the program. Ph.D. students who have completed all requirements for the M.A. in philosophy at the University of Kentucky will be eligible to receive the M.A. in philosophy *en passant.*

GRADUATE COURSES

PHI 500 TOPICS IN PHILOSOPHY (SUBTITLE REQUIRED) ..... (3)
PHI 503 TOPICS IN ANCIENT PHILOSOPHY ..... (3)
PHI 504 ISLAMIC AND JEWISH PHILOSOPHY AND THE CLASSICAL TRADITION ..... (3)
PHI 506 TOPICS IN MEDIEVAL PHILOSOPHY ..... (3)
PHI 509 TOPICS IN THE HISTORY OF MODERN PHILOSOPHY ..... (3)
PHI 513 NINETEENTH CENTURY PHILOSOPHY ..... (3)
PHI 514 AMERICAN PHILOSOPHY ..... (3)
PHI 515 CONTEMPORARY PHILOSOPHY: THE ANALYTIC TURN ..... (3)
PHI 516 CONTEMPORARY PHILOSOPHY: PHENOMENOLOGICAL DIRECTIONS ..... (3)
PHI 517 EXISTENTIALISM ..... (3)
PHI 519 CRITICAL SOCIAL THOUGHT ..... (3)
PHI 520 SYMBOLIC LOGIC II ..... (3)
PHI 530 ETHICAL THEORY ..... (3)
PHI 531 ADVANCED TOPICS IN ETHICS (SUBTITLE REQUIRED) ..... (3)
PHI 535 SOCIAL AND POLITICAL PHILOSOPHY ..... (3)
PHI 537 PHILOSOPHY OF LAW (SAME AS LAW 837) ..... (3)
PHI 540 FEMINIST PHILOSOPHY ..... (3)
PHI 545 PHILOSOPHY OF RELIGION ..... (3)
PHI 550 PHILOSOPHICAL PROBLEMS IN KNOWLEDGE AND REALITY ... (3)
PHI 560 PHILOSOPHY OF SCIENTIFIC METHOD ..... (3)
PHI 561 PHILOSOPHICAL PROBLEMS IN THE NATURAL SCIENCES (SUBTITLE REQUIRED) ..... (3)
PHI 562 PHILOSOPHICAL PROBLEMS IN THE SOCIAL AND BEHAVIORAL SCIENCES ..... (3)
PHI 565 PHILOSOPHY OF LANGUAGE ..... (3)
PHI 575 PHILOSOPHY OF MIND ..... (3)
PHI 592 AESTHETICS (SAME AS A-H 592) ..... (3)
PHI 630 SEMINAR IN VALUE THEORY ..... (3)
PHI 650 SEMINAR IN METAPHYSICS AND EPISTEMOLOGY (SUBTITLE REQUIRED) ..... (3)
PHI 680 SPECIAL TOPICS IN PHILOSOPHY ..... (3)
PHI 700 SEMINAR IN ANCIENT PHILOSOPHY ..... (3)
PHI 705 SEMINAR IN MEDIEVAL PHILOSOPHY ..... (3)
PHI 710 SEMINAR IN MODERN PHILOSOPHY ..... (3)
PHI 715 SEMINAR IN RECENT PHILOSOPHY ..... (3)
PHI 749 DISSERTATION RESEARCH ..... (0)
PHI 755 TUTORIAL IN INTERDISCIPLINARY ISSUES ..... (1-6)
PHI 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
PHI 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
PHI 790 RESEARCH IN PHILOSOPHY ..... (3)

Physical Therapy

GRADUATE FACULTY
Full Members
Professors
Susan K. Effgen, Terry R. Malone, Arthur J. Nitz.
Associate Members
Associate Professors
Stuart K. Ware.
Assistant Professors
Joan C. Darbee, Patrick H. Kitzman, Susan A. Queen.

The division of Physical Therapy offers the Master of Science in Physical Therapy degree with both thesis (Plan A) and non-thesis (Plan B) options. Plan A is designed as an advanced degree sequence involving an area of speciality concentration (musculosketal, neuromuscular, cardiopulmonary) and the completion of an individual research project resulting in a thesis. Plan B is designed for the graduate physical therapist to further his or her knowledge in Physical Therapy practice and clinical research and requires the completion of a joint research project rather than the individual project and thesis. A dual degree sequence of study prepares the student to enter the physical therapy profession as an appropriately credentialed individual awarded a Bachelor of Health Science and a Master of Science in Physical Therapy (non-thesis option including a joint research project). Additional graduate/doctoral offerings for graduate physical therapists are available through the Department of Rehabilitation Sciences - Ph.D. Program.

Admission Requirements

M.S. in Physical Therapy

In addition to meeting all the general criteria for admission to the Graduate School at the University of Kentucky, students entering the Physical Therapy Master's Program (Plan A and Plan B) must:

1. have completed an entry level program in physical therapy (certificate, bachelor's, or master's);
2. be licensed or eligible for licensure as a physical therapist in Kentucky or provide evidence of current licensure as a physical therapist in another of the United States;
3. furnish three personal/professional references;
4. obtain a minimum combined score of 1000 on the verbal and quantitative areas of the GRE.

Bachelor of Health Science and M.S. in Physical Therapy Dual Degree

The following descriptors deal with the graduate phase of this program of study. In addition to meeting all the general criteria for admission to the Graduate School at the University of Kentucky, students entering this dual degree program must:

1. have completed a minimum of 90 semester hours including specific University/Professional prerequisites and the initial two semesters of the Professional Physical Therapy curriculum.
2. complete the overall application process including references, GRE and appropriate Graduate School requirements.

The final selection of students for Plan A, Plan B, and the dual degree sequence will be on a competitive admissions basis. Specific information and details are available from the Division of Physical Therapy. Students pursuing the dual degree must follow the application procedures as outlined through the division of Physical Therapy for both the undergraduate and graduate sequence.

Degree Requirements

Plan A (Thesis)

The Plan A degree candidate must complete 24 semester credit hours of graduate course work with a grade point average of 3.0 (B) or higher standing and must write and defend a thesis (6 credit hours). At least 15 hours will be completed at the 600 or 700 course level. The student, in consultation with an advisor, will design a program of study which both incorporates the core requirements and is suitable for his or her particular needs in the proposed area of concentration.

Plan B (Non-thesis)

The Plan B degree candidate must complete 30 semester credit hours of graduate course work with a grade point average of 3.0 (B) or higher standing and must complete a joint clinical research project to be presented in both a written and oral format. At least 15 hours will be completed at the 600 or 700 course level. In addition to core requirements, the student, in consultation with an advisor, will design a program of study suitable for his or her particular needs and proposed area of clinical concentration.

B.H.S./M.S.P.T. Dual Degree Program

The dual degree program of study results in the awarding of a Bachelor of Health Science and a Master of Science in Physical Therapy. (This program of study is accredited by the Commission on Accreditation for Physical Therapy Education.) Specifics on course requirements for the B.H.S. component of this program are available from the Division of Physical Therapy. The graduate phase of the program builds upon the strong Basic Science Professional prerequisites as well as the first year of the program which includes 16 hours of advanced Basic Science course work. Participants must apply and be admitted to the Graduate School for the fall semester following the first year of the professional curriculum. Students must satisfy all Plan B requirements, including a written comprehensive examination and the completion and presentation of a joint research project, in both oral and written format, during the final portion of their graduate sequence of study.

GRADUATE COURSES

PT 603 PHARMACOLOGY FOR PHYSICAL THERAPY STUDENTS ..... (1)
PT 605 WELLNESS AND SPORTS NUTRITION (SAME AS CNU/NS 605) ..... (3)
PT 606 PHYSICAL THERAPY IN LONG TERM CARE ..... (3)
PT 610 ETHICS IN CLINICAL SCIENCES RESEARCH (SAME AS CD/CLS/RAS 610) ..... (1)
PT 625 ADVANCED ASSESSMENT AND MANAGEMENT OF THE PATIENT WITH MUSCULOSKELETAL DISORDERS ..... (3)
PT 628 GERONTOLOGY FOR PHYSICAL THERAPY STUDENTS ..... (1)
PT 645 RESEARCH AND MEASUREMENT IN PHYSICAL THERAPY ..... (3)
PT 650 DYSFUNCTION OF PERIPHERAL JOINTS ..... (3)
PT 651 DYSFUNCTION OF VERTEBRAL JOINTS ..... (3)
PT 652 PATHOMECHANICS ..... (3)
PT 654 MECHANISMS OF MOTOR CONTROL ..... (3)
PT 655 NEUROMOTOR DEVELOPMENT ..... (3)
PT 660 ADVANCED CLINICAL PRACTICUM IN PHYSICAL THERAPY ..... (1-6)
PT 668 RESEARCH TOPICS IN PHYSICAL THERAPY: ANALYSIS ..... (1-3)
PT 669 RESEARCH TOPICS IN PHYSICAL THERAPY: OUTCOMES ..... (1-3)
PT 676 ELECTROPHYSIOLOGICAL TESTING AND THERAPEUTICS ..... (1-3)
PT 686 SPECIALTY ELECTIVES ..... (1-4)
PT 695 INDEPENDENT STUDY IN PHYSICAL THERAPY ..... (1-3)
PT 705 SKELETAL MUSCLE PHYSIOLOGY AND ADAPTABILITY ..... (3)
PT 748 MASTER'S THESIS RESEARCH ..... (0)
PT 754 SEMINAR ON MOTOR CONTROL ..... (3)
PT 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
PT 770 SEMINAR IN PHYSICAL THERAPY ..... (3)
PT 776 CURRENT ISSUES IN PEDIATRIC PHYSICAL THERAPY ..... (3)
PT 778 CURRENT TRENDS IN NEUROLOGICAL PHYSICAL THERAPY ..... (3)

Physician Assistant Studies

GRADUATE FACULTY
Full Members
Professors
Gerry Gairola.
Associate Professors
Robert D. Hadley, Karen Skaff.
Associate Members
Associate Professors
Doris Rapp.

The University of Kentucky Division of Physician Assistant Studies offers a Plan B, non-thesis, physician assistant master's degree program that is accredited by the American Medical Association Committee on Allied Health Education and Accreditation. The Master of Science in Physician Assistant Studies (M.S.P.A.S.) program is designed for 1) students who wish to become PAs and hold a baccalaureate or will have earned a baccalaureate degree by the time they enter the program and for 2) PAs who already hold a baccalaureate degree in Physician Assistant Studies from an accredited Physician Assistant program. The M.S.P.A.S. program is offered at the Lexington campus and at the rural campus of Morehead State University.

The goal of the M.S.P.A.S. program is to develop well-educated and highly skilled primary care physician assistants who will extend the physician's effectiveness and improve access to health care. The physician assistant functions under the supervision and responsibility of a licensed physician and is competent to elicit a comprehensive health history, perform a physical examination, interpret and evaluate diagnostic data, establish basic treatment plans, counsel and educate, and respond appropriately to commonly encountered emergency care situations.

The M.S.P.A.S. program prepares highly qualified graduates with enhanced clinical competencies in evidenced-based medicine, geriatrics, health services management, clinical nutrition, pharmacology and applied research to meet the emerging health care needs of the 21st century, especially the increasing aging population and medically underserved communities. Physician assistants may serve in a variety of health care settings, such as primary care practices, geriatric long-term care facilities, hospitals, correctional institutions and community-based clinics. The M.S.P.A.S. program also prepares graduates to be competitive for positions in clinical research, health care administration and higher education. Graduates of the program are eligible to take the Physician Assistant National Certifying Examination. After successful completion of the exam, they are eligible for state certification/licensure to practice as certified physician assistants.

Admission to the M.S.P.A.S. program is annual with a new class beginning each January. Qualified applicants simultaneously must apply to both the University of Kentucky Graduate School and to the M.S.P.A.S. program. Applicants interested in attending the rural Morehead campus apply to the University of Kentucky Graduate School and the M.S.P.A.S. program by the same process as Lexington campus applicants.

Admission Requirements

In addition to satisfying the general requirements for admission to the Graduate School, applicants to the M.S.P.A.S. program must have achieved a combined score of 1200 on the verbal, quantitative and analytical portions of the Graduate Record Examination taken within the last five years of application to the program. Applicants must hold a baccalaureate degree from an accredited college or university (or will have earned a baccalaureate degree by the time of entry into the program) with a minimum undergraduate GPA of 3.0, and a C grade or better earned in the following prerequisite courses:

PREREQUISITE COURSES	
General Chemistry with laboratory	1 semester
Organic Chemistry with laboratory (Pre-med or Chemistry major level)	1 semester
General Psychology	1 semester
Developmental Psychology	1 semester
Microbiology with laboratory	1 semester
Biology/Zoology with laboratory	1 semester
Human Physiology (Pre-med or Biology major level)	1 semester
Human Anatomy (Pre-med or Biology major level)	1 semester
Sociology/Anthropology	1 semester
Medical Terminology	1 semester

In addition, three (3) letters of recommendation from people acquainted with the applicant for at least one year and familiar with his/her professional goals must be submitted to CASPA along with an admission essay of graduate quality that reflects the applicant's commitment to primary care. The applicant must be certified in *Basic Life Support* by the American Heart Association, and be in

compliance with the *Technical Standards* established by the College of Health Sciences. Competetive applicants will be granted an interview.

Application is made to the M.S.P.A.S. program through the University of Kentucky Graduate School at <www.rgs.uky.edu/gs/gradhome.html> and through the Central Application Service for Physician Assistants (CASPA) at <www.caspaonline.org>. Applicants must instruct the appropriate testing agencies to send copies of relevant score reports to the University of Kentucky Graduate School. Prior health care experience is not required but is deemed beneficial to students entering the M.S.P.A.S. program.
For more information, contact CASPA:

Central Application Service for Physician Assistants (CASPA)
Association of Physician Assistant Programs
950 N. Washington St.
Alexandria, VA 22314-1552
(703) 548-5538
DEADLINE FOR APPLICATION IS JUNE 1

Admission to the M.S.P.A.S. program is selective. Competitive applicants will be granted an interview. In the interview, the applicant must demonstrate an understanding of and commitment to the role and responsibilities of a PA. The applicant also must comply with Technical Standards of the Physician Assistant Studies Program as established by the College of Health Sciences. Proof of current certification in Basic Life Support from the American Heart Association must be provided at the time of the interview and certification must be maintained throughout the program.

M.S.P.A.S. PROGRAM CURRICULUM REQUIREMENTS

All students enrolled in the program will take the following courses:

ANA 811 Human Anatomy For Allied Health Students	(5)
PAS 853 Introduction to Human Diseases	(3)
PGY 412G Human Physiology	(4)
PAS 857 Clinical Laboratory Procedures	(3)
PAS 851 Introduction to PA Profession	(2)
CNU 800 Applied Nutrition	(1)
PAS 655 Psychosocial Factors in Primary Care	(3)
PAS 850 Clinical Methods	(3)
PAS 880 Seminar in PA Studies I	(2)
STA 570 Basic Statistical Analysis	(4)
PAS 672 Pharmacology I	(3)
PAS 654 Clinical Lecture Series	(4)
PAS 856 Patient Evaluation and Management	(3)
PAS673 Pharmacology II	(3)
HSM 601 Overview of The Health Care Delivery System	(3)
PAS 610 Research Methods and Epidemiology	(3)
PAS 658 Clinical Lecture Series II	(4)
PAS 645 Master's Project I	(1)
PAS 640 Survey of Geriatric Medicine	(3)

PROGRAM CLERKSHIP REQUIREMENTS

All students will complete the following clerkship requirements:

PAS 660 Family Medicine Clerkship	(6)
PAS 661 Pediatrics Clerkship	(6)
PAS 862 Obstetrics and Gynecology Clerkship	(3)
PAS 663 Surgery Clerkship	(6)
PAS 864 Geriatrics Clerkship	(3)
PAS 669 Internal Medicine Clerkship	(6)
PAS 870 Emergency Medicine Clerkship	(3)
PAS 871 Psychiatry Clerkship	(3)
PAS 842 Elective Clerkship	(3)
PAS 680 Seminar In Pa Studies II	(2)
PAS 646 Master's Project II	(2-6)

After successfully completing the course work and clerkship requirements, students who receive a passing score on an oral examination will be awarded a Master of Science in Physician Assistant Studies (M.S.P.A.S.) degree. Graduates of the program are eligible to take the Physician Assistant National Certifying Examination. After successful completion of the exam, they are eligible for state certification/licensure to practice as certified physician assistants.

M.S.P.A.S. for Graduates of Programs in Physician Assistant Studies

PAs applying to the M.S.P.A.S. program, who already hold a baccalaureate degree in Physician Assistant Studies from an accredited Physician Assistant program, must have maintained a 3.0 GPA in their undergraduate work and achieved a combined score of 1200 on the verbal, quantitative and analytical portions of the GRE taken within the last five years of application to the program. To satisfy the M.S.P.A.S. curriculum, these students are required to complete a 24 credit hour core of M.S.P.A.S. courses and a minimum of 9 credit hours in an academic concentration of their choosing for a total of 33 credit hours. The anticipated starting date for the M.S.P.A.S. program for PAs is January 2003.

M.S.P.A.S. PROGRAM CORE COURSES	
STA 570 Basic Statistical Analysis	(4)
PAS 610 Research Methods and Epidemiology	(3)
HSM 601 Overview of the Health Care Delivery System	(3)
PAS 673 Pharmacology II	(3)
PAS 640 Survey Of Geriatric Medicine	(3)
PAS 680 Seminar in PA Studies II	(2)
PAS 646 Master's Project II	(2-6)
PAS 690 Physician Assistant Clerkship	(3-6)

A minimum of nine credit hours of elective courses will be completed with a concentration in gerontology, health care administration, or clinical nutrition.

ELECTIVE COURSES IN AREAS OF CONCENTRATION

Gerontology Concentration	
GRN 643 Biomedical Aspects of Aging	(3)
BIO/GRN 612 Biology of Aging	(3)
BSC 770 Psychosocial Issues of Aging and Health	(3)
BSC 772 Women, Health and Aging	(3)
NUR 510 Older Women and Their Health	(3)
BSC 779 Behavioral Factors in Death and Dying	(3)
HSM 510 Organization of Long Term Care Sector	(3)
NFS680 Nutrition and Aging	(3)
GRN 513 Geriatric Pharmacy	(3)

Health Care Administration Concentration	
HSM 602 Strategic Planning and Management of Health Care Organizations	(3)
HSM 626 Health Economics	(3)
HSM 627 Health Finance	(3)
HSM 603 Legal Aspects of Health Administration	(3)

HSM 642 Management of Public Health Organizations (3)

Clinical Nutrition Concentration

CNU 601 Clinical Nutrition (4)
CNU701 Advanced Clinical Nutrition (4)
CNU 602 Current Topics in Clinical Nutrition (1)
CNU 605 Wellness and Sports Nutrition (3)
KHP 624 Exercise and Heart Disease (3)
CNU 782 Independent Study (1)

For more information contact the M.S.P.A.S. Program:

www.mc.uky.edu/pa/

Or write:

Director of Graduate Studies
Division of Physician Assistant Studies
CAHP Building
121 Washington Ave.
Lexington, KY 40536-0003
M.S.P.A.S.-dgs@lsv.uky.edu
Phone: (859) 323-1100 (ext. 273)

GRADUATE COURSES

PAS 610 RESEARCH METHODS AND EPIDEMIOLOGY ..... (3)
PAS 640 SURVEY OF GERIATRIC MEDICINE ..... (3)
PAS 645 MASTER'S PROJECT I ..... (1)
PAS 646 MASTER'S PROJECT II ..... (2-6)
PAS 654 CLINICAL LECTURE SERIES ..... (4)
PAS 655 PSYCHOSOCIAL FACTORS IN PRIMARY CARE ..... (3)
PAS 658 CLINICAL LECTURE SERIES II ..... (4)
PAS 660 FAMILY MEDICINE CLERKSHIP ..... (6)
PAS 661 PEDIATRICS CLERKSHIP ..... (6)
PAS 663 SURGERY CLERKSHIP ..... (6)
PAS 669 INTERNAL MEDICINE CLERKSHIP ..... (6)
PAS 672 PHARMACOLOGY I ..... (3)
PAS 673 PHARMACOLOGY II ..... (3)
PAS 680 SEMINAR IN PA STUDIES II ..... (2)
PAS 690 PHYSICIAN ASSISTANT CLERKSHIP ..... (3-6)

Physics and Astronomy

GRADUATE FACULTY

Full Members

Professors

Joseph W. Brill, Michael J. Cavagnero, John Connolly, Lance E. DeLong, Moshe Elitzur, Gary J. Ferland, Herbert A.Fertig, Tim P. Gorringe, Howard Grotch, Gerald Huffman, Michael Kovash, Bing-an Li, Keh-Fei Liu, Keith B. MacAdam, Nicholas L.S. Martin, Kwok-Wai Ng, Isaac Shlosman, Joseph P. Straley, Thomas H. Troland.

Associate Professors

Suketu P. Bhavsar, John E. Christopher, Daniel Dale, Sumit Das, Terrence A. Draper, Michael Eides, Susan Gardner, David A. Harmin, Ganpathy Murthy, Alfred Shapere.

Assistant Professors

Wolfgang Korsch, Yuri Sushko.

Associate Members

Associate Professors

Gang Cao, John Fowlkes.

Assistant Professors

Nancy Levenson.

Emeritus Professors

Eugene B. Bradley, Guy Lehman, Alan MacKellar, Marcus McEllistrem, Jesse Weil.

The Department of Physics and Astronomy offers courses and research opportunities leading to the M.S. and Ph.D. degrees in the special areas of astronomy and astrophysics, atomic and molecular physics, low and medium energy nuclear physics, condensed matter physics, and theoretical particle physics. More detailed descriptions of each of these options will be sent on request. Both experimental and theoretical work are being pursued in all the above mentioned areas except particle physics, where only theoretical research is carried out. Excellent laboratory facilities and library materials are available. A major experimental facility is the six-million volt Van de Graaff accelerator.

Admission Requirements

In addition to the admissions requirements of the Graduate School, the Department of Physics & Astronomy requires graduate applicants to have a sound foundation in undergraduate physics. This foundation will normally include advanced courses in classical mechanics, electromagnetism and quantum mechanics. International applicants may be asked to take the Test of Spoken English (TSE). Applicants are encouraged to take the GRE physics subject exam.

Applicants wishing to apply for financial aid in the form of a teaching assistantship, research assistantship or fellowship must supply letters of recommendation from three individuals familiar with their academic capabilities. Such applicants must also submit a written statement of their interests and background in physics.

Admissions requirements are the same for the M.S. and the Ph.D. programs except that applicants for the Ph.D. must possess an interest in carrying out original research at the advanced level.

All graduate students are expected to demonstrate competence in the core areas of mechanics, electromagnetic theory, quantum mechanics and statistical physics, and breadth in topical areas such as atomic, nuclear, condensed matter, astrophysics, and particle physics. This can be done by passing the appropriate courses and scoring sufficient points on the departmental Cumulative Examination, the tests of which are given five times a year and consist of questions on the above mentioned core areas at both intermediate and advanced levels. Scores of 3, 2, 1, and 0 may be obtained on each question.

Degree Requirements

An M.S. student must accumulate at least ten points on the Cumulative Exam within a continuous two-year period before taking the M.S. oral exam. Plan A or Plan B may be used to satisfy the requirements for the M.S. degree. The M.S. program can include an emphasis on applied physics, and students are encouraged to take courses in related programs such as engineering and biology when such courses satisfy academic objectives. The M.S. candidate must pass a departmental oral exam covering the core course work and the thesis, if one was done under Plan A.

The Ph.D. degree is a research degree granted on the basis of broad knowledge of physics and in-depth study in a specific area leading to a dissertation reflecting original work by the doctoral candidate which is eligible for publication in a refereed journal. The Qualifying Examination for the Ph.D. consists of a written part and an oral part. The periodic Cumulative Exams shall constitute the written portion of the Qualifying Examination. A Ph.D. candidate must accumulate a minimum of 20 points on the exams within a continuous two-year period, with at least ten points being earned at the advanced level, in order to pass the written part of the exam and be eligible to take the oral part of the exam.

Candidates for doctoral degrees may perform their dissertation research work at the Lexington Campus of the University of Kentucky or arrangements may be made to do this work at other institutions or laboratories such as the Oak Ridge National Laboratory, the National Astronomical Radio Observatory or other places by special arrangement.

GRADUATE COURSES

PHY 401G SPECIAL TOPICS IN PHYSICS AND ASTRONOMY FOR ELEMENTARY, MIDDLE, AND HIGH SCHOOL TEACHERS ..... (1-4)
PHY 402G ELECTRONIC INSTRUMENTATION AND MEASUREMENTS (SAME AS EE 402G) ..... (3)
PHY 404G MECHANICS ..... (3)

PHY 416G ELECTRICITY AND MAGNETISM ..... (3)
PHY 417G ELECTRICITY AND MAGNETISM ..... (3)
PHY 472G INTERACTION OF RADIATION WITH MATTER (SAME AS RM 472G) ..... (3)
PHY 504 ADVANCED MECHANICS ..... (3)
PHY 506 METHODS OF THEORETICAL PHYSICS I (SAME AS MA 506) ..... (3)
PHY 507 METHODS OF THEORETICAL PHYSICS II (SAME AS MA 507) ..... (3)
PHY 520 INTRODUCTION TO QUANTUM MECHANICS ..... (3)
PHY 522 HEAT AND THERMODYNAMICS ..... (3)
PHY 524 SOLID STATE PHYSICS (SAME AS EE 524) ..... (3)
PHY 525 SOLID STATE PHYSICS ..... (3)
PHY 530 EXPERIMENTAL PHYSICS: OPTICS AND SPECTROSCOPY ..... (2)
PHY 535 EXPERIMENTAL PHYSICS: ATOMIC AND NUCLEAR ..... (2)
PHY 545 RADIATION HAZARDS AND PROTECTION (SAME AS RM/RAS 545) ..... (3)
PHY 546 GENERAL MEDICAL RADIOLOGICAL PHYSICS (SAME AS RM/RAS 546) ..... (3)
PHY 554 FUNDAMENTALS OF ATOMIC PHYSICS ..... (3)
PHY 555 FUNDAMENTAL NUCLEAR PHYSICS ..... (3)
PHY 556 FUNDAMENTAL PARTICLE PHYSICS ..... (3)
PHY 567 INTRODUCTION TO LASERS AND MASERS (SAME AS EE 567) .... (3)
PHY 570 SEMINAR ON TEACHING PHYSICS ..... (1)
PHY 571 SEMINAR ON TEACHING PHYSICS LABORATORIES ..... (1)
PHY 591 ASTROPHYSICS I - STARS (SAME AS AST 591) ..... (3)
PHY 592 ASTROPHYSICS II - THE GALAXY (SAME AS AST 592) ..... (3)
PHY 600 SELECTED TOPICS IN ADVANCED PHYSICS ..... (2-3)
PHY 611 ELECTROMAGNETIC THEORY I ..... (3)
PHY 613 ELECTROMAGNETIC THEORY II ..... (3)
PHY 614 QUANTUM MECHANICS I ..... (3)
PHY 615 QUANTUM MECHANICS II ..... (3)
PHY 624 THEORY OF THE SOLID STATE ..... (3)
PHY 625 THEORY OF THE SOLID STATE ..... (3)
PHY 629 NUCLEAR PHYSICS ..... (3)
PHY 630 TOPICS IN NUCLEAR AND INTERMEDIATE ENERGY PHYSICS (SUBTITLE REQUIRED) ..... (3)
PHY 632 STATISTICAL MECHANICS ..... (3)
PHY 639 PHYSICAL PROCESSES IN ASTROPHYSICS (SAME AS AST 639) ... (3)
PHY 640 GALAXIES AND COSMOLOGY (SAME AS AST 640) ..... (3)
PHY 651 ATOMIC PHYSICS ..... (3)
PHY 716 ADVANCED QUANTUM MECHANICS ..... (3)
PHY 748 MASTER'S THESIS RESEARCH ..... (0)
PHY 749 DISSERTATION RESEARCH ..... (0)
PHY 756 PARTICLE PHYSICS ..... (3)
PHY 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
PHY 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
PHY 770 COLLOQUIUM ..... (1)
PHY 781 INDEPENDENT WORK IN PHYSICS ..... (1-9)
PHY 790 RESEARCH IN PHYSICS ..... (3)
PHY 791 RESEARCH IN PHYSICS ..... (5)

AST 591 ASTROPHYSICS I - STARS (SAME AS PHY 591) ..... (3)
AST 592 ASTROPHYSICS II - THE GALAXY (SAME AS PHY 592) ..... (3)
AST 639 PHYSICAL PROCESSES IN ASTROPHYSICS (SAME AS PHY 639) ... (3)
AST 640 GALAXIES AND COSMOLOGY (SAME AS PHY 640) ..... (3)

Physiology

GRADUATE FACULTY

Full Members

Professors

Kenneth B. Ain, Nausherwan Burki, Thomas Getchell, Henry Hirsch, Brian Jackson, Lu-Yuan Lee, Sandra J. Legan, Douglas G. McMahon, Cobern E. Ott, David Randall, Daniel Richardson, Gary Van Zant, David Wekstein.

Associate Professors

Steven Estus, Robert Lasley, Timothy S. McClintock, Ok-Kyong Park-Sarge, Eric J. Smart, George Smith, Dexter F. Speck, John P. Williams.

Associate Members

Associate Professors

Paolo Fanti, John L. Fowlkes, Stephen J. Szilvassy.

Assistant Professors

Reto Asmis, Stephen Carrithers, Scott Diamond, Ming Cui Gong, Rodney P. Guttman, Lei Li, Mariana Nikolova-Karakashian, Simon Smith.

Research Assistant Professors

Malathi Srivatsan.

Emeritus Professors

Louis Boyarsky, Donald Frazier, James Lafferty, Jesse Sisken, Fred Zechman, James Zolman.

Graduate study in physiology is designed to prepare candidates for research careers as independent scientists in academics, industry, and government laboratories. Admission to the graduate program is competitive and is based upon academic background, professional recommendations, performance on the Graduate Record Examination (GRE), experience, and when possible, personal interviews. Students should have completed an undergraduate degree in chemistry, biology, biochemistry, chemical engineering, mathematics, physics, pharmacy or psychology. It is recommended that students have completed undergraduate courses in organic chemistry, physical chemistry, calculus, physics, and the biological sciences.

Students will have the opportunity to join faculty research programs across a spectrum of topics such as neural, endocrine, cardiovascular, renal, respiratory, sensory, cellular, molecular, and signal transduction physiology. The program of study is tailored to the individual background and career goals of the student and stresses an interdepartmental approach both in the selection of courses and in the pursuit of research. Students are expected to participate in graduate seminars, journal clubs, research seminars; to interact with visiting scholars; and to present the results of their research at local and national meetings. Financial aid is available for highly qualified students.

Admission Requirements

Admission to the Ph.D. program in Physiology is through the Integrated Biomedical Sciences (IBS) Curriculum. Inquiries regarding admission should be directed to Director, Integrated Biomedical Sciences Curriculum, University of Kentucky College of Medicine. For information about the Ph.D. program in Physiology, please contact the Director of Graduate Studies, Department of Physiology. Information may also be obtained from the department Web site: <www.mc.uky.edu/physiology/>.

GRADUATE COURSES

PGY 412G PRINCIPLES OF HUMAN PHYSIOLOGY LECTURES ..... (4)
PGY 502 PRINCIPLES OF SYSTEMS, CELLULAR AND MOLECULAR PHYSIOLOGY (SAME AS BIO 502) ..... (5)
PGY 504 INDEPENDENT WORK IN PHYSIOLOGY ..... (2-4)
PGY 522 QUANTITATIVE PHYSIOLOGY ..... (4)
PGY 535 COMPARATIVE NEUROBIOLOGY AND BEHAVIOR (SAME AS BIO 535) ..... (3)
PGY 549 COMPARATIVE ENDOCRINOLOGY (SAME AS BIO 549) ..... (3)
PGY 560 PATHOPHYSIOLOGY: INTEGRATIVE STUDY IN PHYSIOLOGY AND MEDICINE ..... (1)
PGY 590 CELLULAR AND MOLECULAR PHYSIOLOGY (SAME AS MI 590) . (4)
PGY 601 MAMMALIAN ENDOCRINOLOGY (SAME AS ASC 601) ..... (3)
PGY 602 READINGS IN SYSTEMS, CELLULAR AND MOLECULAR PHYSIOLOGY ..... (3)
PGY 603 DESIGN AND ANALYSIS ..... (3)
PGY 604 ADVANCED CARDIOVASCULAR PHYSIOLOGY ..... (3)
PGY 605 PRINCIPLES OF NEUROBIOLOGY (SAME AS NEU/ANA/BCH/PHA 605) ..... (4)
PGY 606 ADVANCED NEUROPHYSIOLOGY ..... (3)
PGY 608 ADVANCED RENAL PHYSIOLOGY ..... (3)
PGY 609 ADVANCED RESPIRATORY PHYSIOLOGY ..... (3)
PGY 610 EXPERIMENTAL PHYSIOLOGY ..... (4)
PGY 612 BIOLOGY OF AGING (SAME AS BIO/ANA/GRN 612) ..... (3)
PGY 613 BEHAVIORAL ECOLOGY AND COMPARATIVE NEUROBIOLOGY (SAME AS BIO/PSY/ENT/ANA 613) ..... (2)
PGY 614 TECHNIQUES IN BEHAVIORAL ECOLOGY AND COMPARATIVE NEUROBIOLOGY (SAME AS BIO/PSY/ENT/ANA 614) ..... (2)
PGY 615 SEMINAR IN TEACHING MEDICAL SCIENCE (MED SCIENCE TEACHING I) (SAME AS GRN 615) ..... (2)
PGY 616 PRACTICUM IN TEACHING MEDICAL SCIENCE (MED SCIENCE TEACHING II) ..... (2)
PGY 618 MOLECULAR NEUROBIOLOGY (SAME AS MI/ANA/BIO 618) ..... (4)
PGY 627 PROSEMINAR IN PHYSIOLOGICAL PSYCHOLOGY (SAME AS PSY 627) ..... (3)
PGY 630 ADVANCED TOPICS IN PHYSIOLOGY ..... (1-3)
PGY 638 DEVELOPMENTAL NEUROBIOLOGY (SAME AS BIO/ANA/PSY 638) ..... (3)

PGY 650 ANIMAL PHYSIOLOGY LABORATORY (SAME AS BIO 650) ..... (2)
PGY 660 BIOLOGY OF REPRODUCTION (SAME AS ASC /ANA 660) ..... (3)
PGY 710 AGING OF THE NERVOUS SYSTEM (SAME AS PHA/GRN/ANA 710) ..... (3)
PGY 748 MASTER'S THESIS RESEARCH ..... (0)
PGY 749 DISSERTATION RESEARCH ..... (0)
PGY 767 TOPICAL SEMINAR BEHAVIORAL NEUROSCIENCE (SAME AS PSY 767) ..... (3)
PGY 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
PGY 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
PGY 771 PROSEMINAR IN CELL PHYSIOLOGY ..... (2)
PGY 774 GRADUATE SEMINAR IN PHYSIOLOGY ..... (1)
PGY 791 RESEARCH IN PHYSIOLOGY ..... (1-15)

Plant Pathology

GRADUATE FACULTY
Full Members
Professors
Said A. Ghabrial, James W. Hendrix, Christopher L. Schardl, J.G.Shaw, David A. Smith.
Associate Professors
Lisa J. Vaillancourt.
Assistant Professors
Mark L. Farman, Peter Nagy.
Associate Members
Extension Professors
Donald E. Hershman, William C. Nesmith, Paul C. Vincelli.
Emeritus Professors
Joseph Kuc, Thomas P. Pirone, Louis Shain, Shuh J. Sheen, Malcolm R. Siegel.

The department offers work leading to the M.S. and Ph.D. degrees. For the Ph.D. degree, individual programs of study must conform with the requirements established by the Graduate School; a minor is not required.

Admission Requirements

The Graduate School's requirements for admission are likewise the minimum requirements for acceptance into the M.S. and Ph.D. programs of the Department of Plant Pathology. However, additional materials are required for application to the Plant Pathology graduate programs. Each applicant must arrange for three letters of recommendation, and must send a curriculum vitae and a written statement identifying the applicant's reasons to enter studies in this department. These materials and those submitted to the Graduate School are considered on a case-by-case basis by the Department Academic Program Committee, which then makes a recommendation on admission. Admission to a graduate program in Plant Pathology does not guarantee financial assistance to the student. Applicants who are admitted will also be informed of any financial offer in a contract which they must sign to be admitted to the Graduate School.

GRADUATE COURSES

PPA 400G PRINCIPLES OF PLANT PATHOLOGY ..... (3)
PPA 601 SPECIAL TOPICS IN MOLECULAR AND CELLULAR GENETICS (SAME AS PLS/BIO/BCH/MI 601) ..... (1)
PPA 609 PLANT BIOCHEMISTRY (SAME AS BCH/PLS 609) ..... (3)
PPA 640 IDENTIFICATION OF PLANT DISEASES (SAME AS PLS 640) ..... (3)
PPA 652 PLANT PATHOGENIC FUNGI ..... (4)
PPA 656 PLANT VIROLOGY ..... (3)
PPA 660 PLANT-MICROBE INTERACTIONS I ..... (3)
PPA 661 PLANT-MICROBE INTERACTIONS II ..... (3)
PPA 695 EPIDEMIOLOGY AND MANAGEMENT OF PLANT DISEASES ..... (3)
PPA 748 MASTER'S THESIS RESEARCH ..... (0)
PPA 749 DISSERTATION RESEARCH ..... (0)
PPA 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
PPA 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
PPA 770 PLANT PATHOLOGY SEMINAR ..... (1)
PPA 784 SPECIAL PROBLEMS IN PLANT PATHOLOGY ..... (1-3)
PPA 794 RESEARCH IN PLANT PATHOLOGY ..... (1-9)
PPA 799 TEACHING IN PLANT PATHOLOGY ..... (1-2)

Plant Physiology

GRADUATE FACULTY
Full Members
Professors
Michael Barrett, Lowell P. Bush, Joseph Chappell, Robert Geneve, David Hildebrand, Robert Houtz, Arthur G. Hunt, Thomas R. Kemp, Christopher L. Schardl, George Wagner.
Associate Professors
Douglas D. Archbold, William S. Cohen, David D. Wagner.
Associate Members
Associate Professors
Susheng Gan.
Assistant Professors
A. Bruce Downie, Deane Falcone, Sharyn Perry, Mark Williams.
Research Assistant Professors
Lynnette Dirk.
Adjunct Assistant Professors
Kirk Pomper.
Emeritus Professors
George Cheniae, Joseph Kuc.

This University-wide, interdepartmental graduate program offers a plan of study leading to the Doctor of Philosophy degree. The aim of this program is to aid students in developing a high degree of excellence in plant physiology/biochemistry/molecular biology.

Faculty members of the program are from the Thomas Hunt Morgan School of Biological Sciences in the College of Arts and Sciences and the Departments of Agronomy, Forestry, Horticulture, and Plant Pathology in the College of Agriculture. Areas of research pursued by the faculty members include stress physiology and biochemistry, metabolism and roles of secondary products in disease resistance, biochemical and molecular basis of disease resistance, and biochemistry of photosynthesis and photorespiration, physiology of crop yield, senescence, regulation of gene expression, physiology of stress and population genetics in forest species, mineral nutrition and ion transport, allopathy, plant morphogenesis in tissue culture, and genetic transformation of plants.

Plant Physiology utilizes courses in the Departments of Biochemistry, Chemistry, Mathematics, and Statistics as supporting courses to suit the needs and interests of the individual student.

Admission Requirements

Admission to the Plant Physiology Program is competitive and based on the applicant's undergraduate and graduate records, performance on standardized exams, and the evaluations and recommendations of professionals. It is expected that applicants to the Plant Physiology Program will meet the minimum standards established by the University of Kentucky Graduate School. An adequate preparation for graduate study in Plant Physiology includes courses in general biology, general chemistry, organic chemistry, and calculus. In addition, courses in biochemistry and physical chemistry are highly recommended. As part of the application process, applicants to the Plant Physiology Program should arrange to have at least three letters of recommendation forwarded to the Director of Graduate Studies.

In addition to satisfying Graduate School residency requirements, candidates for the Ph.D. must complete CHE 550, CHE 552,

BCH 607, BCH 608, PLS 601, PLS 622, PLS 623, PLS 773, and an acceptable dissertation. A plant physiology minor requires PLS 622, PLS 623, and nine additional credit hours of prescribed course work. For additional information, contact: the Director of Graduate Studies, N212A Agricultural Science Center - North.

GRADUATE COURSES

PPA 660 PLANT-MICROBE INTERACTIONS I ..... (3)
PPA 661 PLANT-MICROBE INTERACTIONS II ..... (3)

PLS 622 PHYSIOLOGY OF PLANTS I (SAME AS BIO/FOR 622) ..... (3)
PLS 623 PHYSIOLOGY OF PLANTS II (SAME AS BIO/FOR 623) ..... (3)
PLS 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
PLS 773 SEMINAR IN PLANT PHYSIOLOGY (SAME AS BIO 773) ..... (1)

Plant and Soil Science

GRADUATE FACULTY
Full Members
Professors
Carol C. Baskin, Robert Geneve, Robert Houtz, J.W. Hendrix, Dewayne Ingram, Thomas Kemp.
Associate Professors
Douglas D. Archbold, Jack Buxton, Mark S. Coyne, Timothy D. Phillips, John Snyder.
Associate Members
Extension Professors
Gerald R. Brown, Jonathan D. Green, Richard T. Jones, Richart T. McNiel, Andrew J. Powell Jr., William O. Thom, Kenneth L. Wells.
Associate Professors
D. Nicholas McLetchie.
Extension Associate Professors
David C. Ditsch, Winston Dunwell, Jimmy C. Henning, Gary K. Palmer, Robert C. Pearce, A. Brent Rowell.
Adjunct Associate Professors
Frank Sikora.
Assistant Professors
Elisa M. D'Angelo, A. Bruce Downie, Christopher Matocha, Thomas Mueller, Sharyn Perry, David Williams, Mark Williams.
Research Assistant Professors
Lynnette Dirk.
Extension Assistant Professors
Richard E. Durham.
Adjunct Assistant Professors
Paul Cappiello, Kirk Pomper.

The Plant and Soil Science graduate program offers graduate work leading to the Master of Science degree. This interdisciplinary program is jointly administered by faculty from the Departments of Agronomy and Horticulture. Most of the graduate faculty in Plant and Soil Science also participate in doctoral programs in Crop Science, Plant Physiology or Soil Science, which are separately listed.

The program is designed to allow students to specialize in one of the diverse aspects of plant/soil systems; specialization areas include: Crop Science, Horticultural Science, Plant Physiology and Soil Science. The curriculum will accommodate the needs of students directed either towards further doctoral work and research careers, or towards post-M.S. employment in horticultural, crops or soils related professions.

Degree Requirements

Plan A requires the completion of 24 hours of graduate course work and submission of an approved thesis. Plan B substitutes an additional six hours of graduate credit for the thesis requirement. The core curriculum consists of disciplinary as well as basic science/research methods courses. Plan A requires twelve hours of designated core course work, (Plan B, fifteen hours) of which at least three-quarters must be at the 600-level or above, distributed in the following manner:

Disciplinary Courses

(Plan A: 6-9 credits; Plan B: 9-12 credits)

PLS 622 Physiology of Plants I	3
PLS 623 Physiology of Plants II	3
PLS 502 Ecology of Economic Plants	3
PLS 601 Special Topics in Molecular and Cellular Genetics	1
PLS 602 Principles of Yield Physiology	3
PLS 650 Soil-Plant Relationships	3
PLS 573 Soil Morphology and Classification	3
PLS 664 Plant Breeding I	3
PLS 772 Plant and Soil Science Seminar	1

Basic Science/Research Methods

(Plan A or B: 4-6 credits)

STA 570 Basic Statistical Analysis	4
STA 671/672 Regression/Correlation/Design	4

Area of Specialization

At least twelve credit hours of graduate courses (fifteen hours for Plan B) are required which support the designated area of specialization: Crop Science, Horticultural Science, Plant Physiology, or Soil Science. Consult the Director of Graduate Studies for a listing of appropriate courses.

GRADUATE COURSES

PLS 450G BIOGEOCHEMISTRY (SAME AS NRC 450G) ..... (3)
PLS 455G WETLAND DELINEATION (SAME AS NRC 455G) ..... (3)
PLS 456G CONSTRUCTED WETLANDS (SAME AS NRG 456G) ..... (3)
PLS 468G SOIL USE AND MANAGEMENT ..... (3)
PLS 470G SOIL NUTRIENT MANAGEMENT ..... (3)
PLS 477G LAND TREATMENT OF WASTE (SAME AS NRC 477G) ..... (3)
PLS 501 RECLAMATION OF DISTURBED LAND ..... (3)
PLS 502 ECOLOGY OF ECONOMIC PLANTS ..... (3)
PLS 510 FORAGE MANAGEMENT AND UTILIZATION ..... (3)
PLS 515 TURF MANAGEMENT ..... (3)
PLS 520 VEGETABLE CROP MANAGEMENT ..... (3)
PLS 525 GREENHOUSE FLORAL CROP MANAGEMENT ..... (3)
PLS 531 FIELD SCHOOLS IN CROP PEST MANAGEMENT ..... (2)
PLS 556 SEED PRODUCTION AND TECHNOLOGY ..... (3)
PLS 564 FOREST SOILS (SAME AS FOR 564) ..... (3)
PLS 566 SOIL MICROBIOLOGY ..... (3)
PLS 567 METHODS IN SOIL MICROBIOLOGY ..... (1)
PLS 573 SOIL MORPHOLOGY AND CLASSIFICATION ..... (3)
PLS 575 SOIL PHYSICS ..... (3)
PLS 576 LABORATORY IN SOIL PHYSICS ..... (1)
PLS 581 CHEMICAL ANALYSIS OF SOILS AND PLANTS ..... (4)
PLS 582 SPECIAL PROBLEMS IN HORTICULTURE ..... (1-4)
PLS 597 SPECIAL TOPICS IN PLANT AND SOIL SCIENCE (SUBTOPIC REQUIRED) ..... (1-3)
PLS 599 SPECIAL PROBLEMS IN PLANT AND SOILS SCIENCE ..... (1-4)
PLS 601 SPECIAL TOPICS IN MOLECULAR AND CELLULAR GENETICS (SAME AS BIO/BCH/MI/PPA 601) ..... (1)
PLS 602 PRINCIPLES OF YIELD PHYSIOLOGY ..... (3)
PLS 605 PHYSIOLOGICAL MECHANISMS IN HORTICULTURAL PLANTS .. (3)
PLS 609 PLANT BIOCHEMISTRY (SAME AS BCH/PPA 609) ..... (3)
PLS 620 PLANT MOLECULAR BIOLOGY (SAME AS BIO 620) ..... (3)
PLS 622 PHYSIOLOGY OF PLANTS I (SAME AS FOR/BIO 622) ..... (3)
PLS 623 PHYSIOLOGY OF PLANTS II (SAME AS FOR/BIO 623) ..... (3)
PLS 640 IDENTIFICATION OF PLANT DISEASES (SAME AS PPA 640) ..... (3)
PLS 650 SOIL-PLANT RELATIONSHIPS ..... (3)
PLS 657 SEED BIOLOGY ..... (3)
PLS 658 ADVANCED WEED SCIENCE ..... (4)
PLS 660 ADVANCED SOIL BIOLOGY ..... (2)
PLS 664 PLANT BREEDING I ..... (3)
PLS 671 SOIL CHEMISTRY ..... (4)
PLS 676 QUANTITATIVE INHERITANCE IN PLANT POPULATIONS (SAME AS STA 676) ..... (3)
PLS 697 SPECIAL TOPICS IN PLANT AND SOIL SCIENCE (SUBTITLE REQUIRED) ..... (1-3)
PLS 712 ADVANCED SOIL FERTILITY ..... (4)
PLS 721 PEDOGENIC PROCESSES ..... (4)
PLS 741 CLAY MINERALOGY (SAME AS GLY 741) ..... (3)
PLS 748 MASTER'S THESIS RESEARCH ..... (0)
PLS 749 DISSERTATION RESEARCH ..... (0)
PLS 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
PLS 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)

PLS 770 HORTICULTURE SEMINAR ..... (1)
PLS 772 PLANT AND SOIL SCIENCE SEMINAR ..... (1)
PLS 773 SEMINAR IN PLANT PHYSIOLOGY (SAME AS BIO 773) ..... (1)
PLS 790 RESEARCH IN HORTICULTURE ..... (1-4)
PLS 799 RESEARCH IN PLANT AND SOIL SCIENCE ..... (1-4)

Political Science

GRADUATE FACULTY
Full Members
Professors
Bradley Canon, Charles L. Davis, Donald A. Gross, Edward T. Jennings, Karen Mingst, Mark Peffley, Herbert Reid, Phillip Roeder, Ernest Yanarella.
Associate Professors
Matthew J. Gabel, Stuart J. Kaufman, Penny M. Miller, Ellen D. Riggle.
Associate Members
Associate Professors
Horace A. Bartilow, Richard Fording.
Assistant Professors
Douglas Gibler, D. Stephen Voss.
Emeritus Professors
Vincent Davis, George Gadbois, Malcolm Jewell.

Admission Requirements

Candidates for admission to the graduate program in political science must provide the information required by the Graduate School, and must also submit the following *directly to the Department of Political Science:* 1. the Political Science Graduate Admissions form, available on the department's Web site at <www.uky.edu/ArtsSciences/PoliSci/grad_studies.htm>; and 2. three letters of recommendation from persons familiar with the applicant's academic performance. Applicants are also encouraged to submit to the department a sample of their writing on a topic relevant to political science.

Applicants will be evaluated on the basis of the Department's judgment of the likelihood of their success in the program, as compared with other applicants and considering the limited number of applicants accepted to the program. In evaluating candidates, the Department will consider the totality of their records, including grades, test scores, letters of recommendation, relevant work experience, and other relevant information. Applicants to the MA and Ph.D. programs will be evaluated according to the different demands and expectations for the two degrees. Students who do not have political science undergraduate majors are welcome in this program.

Degree Requirements

The Political Science Department offers both the M.A. and Ph.D. degrees. The M.A. degree may be earned under either of two plans: Plan A requires at least 24 hours of course work and a thesis; Plan B requires at least 30 hours of course work and examination in three fields of political science, or in two fields of political science and one outside field. Under either plan, the student must take at least two-thirds of the required semester hours in political science, and at least half of the political science work must be in courses open only to graduate students. A candidate for the Plan B master's degree must pass a foreign language requirement or an analytical skills requirement.

The Ph.D. program is divided into a general phase and a specialized phase. Entering students spend their first year in the general phase, which includes proseminars in methodology and in at least four major fields of political science. (Students who have previously taken graduate work may be exempt from some of these proseminars.) At the end of the first year of graduate work, the student is evaluated by a departmental committee which determines whether the general phase has been satisfactorily completed.

During the specialized phase of the graduate program, the student's work is based on a program prepared with the Advisory Committee. The student takes advanced work in at least two substantive fields in political science. The qualifying examination in political science consists of a written and oral examination in each of the two substantive fields specified in the student's program. The examination is given by the Advisory Committee. Following this examination the student writes a prospectus for the dissertation and is examined orally on this by the Advisory Committee. The student then writes a dissertation and defends it in a final oral examination.

Candidates for the Ph.D. in political science must demonstrate proficiency in a research skill. The required research skill will consist of additional quantitative skills or proficiency in a foreign language that is directly pertinent to the student's research interests.

Additional details concerning departmental requirements may be secured from the Department of Political Science.

GRADUATE COURSES

PS 411G COMPARATIVE GOVERNMENT-PARLIMENTARY DEMOCRACIES I ..... (3)
PS 417G SURVEY OF SUB-SAHARAN POLITICS (SAME AS AAS 417G) ..... (3)
PS 419G THE GOVERNMENTS AND POLITICS OF EASTERN ASIA ..... (3)
PS 420G GOVERNMENTS AND POLITICS OF SOUTH ASIA ..... (3)
PS 421G GOVERNMENT AND POLITICS OF SOUTHEAST ASIA ..... (3)
PS 428G LATIN AMERICAN GOVERNMENT AND POLITICS ..... (3)
PS 429G GOVERNMENT AND POLITICS IN RUSSIA AND THE POST-SOVIET STATES ..... (3)
PS 430G THE CONDUCT OF AMERICAN FOREIGN RELATIONS ..... (3)
PS 431G NATIONAL SECURITY POLICY ..... (3)
PS 433G POLITICS OF INTERNATIONAL ECONOMIC RELATIONS ..... (3)
PS 436G INTERNATIONAL ORGANIZATION ..... (3)
PS 437G DYNAMICS OF INTERNATIONAL LAW ..... (3)
PS 439G CONTEMPORARY INTERNATIONAL PROBLEMS ..... (3)
PS 441G EARLY POLITICAL THEORY ..... (3)
PS 442G MODERN POLITICAL THEORY ..... (3)
PS 453G URBAN GOVERNMENT AND POLITICS ..... (3)
PS 456G APPALACHIAN POLITICS ..... (3)
PS 461G CIVIL LIBERTIES ..... (3)
PS 463G THE AMERICAN JUDICIAL PROCESS ..... (3)
PS 465G CONSTITUTIONAL LAW ..... (3)
PS 467G THE U.S. SUPREME COURT ..... (3)
PS 470G AMERICAN POLITICAL PARTIES ..... (3)
PS 472G POLITICAL CAMPAIGNS AND ELECTIONS ..... (3)
PS 473G PUBLIC OPINION ..... (3)
PS 474G POLITICAL PSYCHOLOGY ..... (3)
PS 475G POLITICS AND THE MASS MEDIA ..... (3)
PS 476G LEGISLATIVE PROCESS ..... (3)
PS 480G GOVERNMENT AND THE ECONOMY ..... (3)
PS 487G INTRODUCTION TO PUBLIC ADMINISTRATION ..... (3)
PS 489G THE ANALYSIS OF PUBLIC POLICY ..... (3)
PS 538 CONFLICT AND COOPERATION IN LATIN AMERICAN RELATIONS ..... (3)
PS 539 THE FOREIGN POLICY OF THE SOVIET UNION ..... (3)
PS 545 AMERICAN POLITICAL THOUGHT ..... (3)
PS 557 KENTUCKY GOVERNMENT AND POLITICS ..... (3)
PS 566 CONSTITUTIONAL INTERPRETATION ..... (3)
PS 580 THE BUDGETARY PROCESS ..... (3)
PS 584 THE AMERICAN PRESIDENCY AND THE FEDERAL EXECUTIVE ..... (3)
PS 620 COMPARATIVE POLITICS: THEORY AND METHOD ..... (3)
PS 671 STRATEGIES OF INQUIRY IN POLITICAL SCIENCE ..... (3)
PS 672 INTRODUCTION TO TECHNIQUES OF POLITICAL RESEARCH ..... (3)
PS 674 PROSEMINAR IN THEORIES OF INTERNATIONAL POLITICS ..... (3)
PS 679 AMERICAN POLITICAL INSTITUTIONS ..... (3)
PS 680 PROSEMINAR IN POLITICAL INSTITUTIONS AND PROCESS ..... (3)
PS 681 AMERICAN POLITICAL BEHAVIOR ..... (3)
PS 684 PROSEMINAR IN POLICY STUDIES ..... (3)
PS 685 PROSEMINAR IN PUBLIC ADMINISTRATION AND POLICY ..... (3)
PS 690 PROSEMINAR IN CONTEMPORARY POLITICAL THEORY ..... (3)
PS 711 TOPICAL SEMINAR IN POLITICAL SCIENCE (SUBTITLE REQUIRED) ..... (3)

PS 731 INTERNATIONAL SECURITY/CONFLICT ANALYSIS ..... (3)
PS 732 COMPARATIVE FOREIGN POLICY (SUBTITLE REQUIRED) ..... (3)
PS 733 INTERNATIONAL POLITICAL ECONOMY ..... (3)
PS 737 TRANSNATIONAL ORGANIZATIONS AND PROCESSES ..... (3)
PS 748 MASTER'S THESIS RESEARCH ..... (0)
PS 749 DISSERTATION RESEARCH ..... (0)
PS 750 POLITICAL PARTIES AND ELECTIONS IN AMERICA ..... (3)
PS 756 REGIONAL POLITICS (SUBTITLE REQUIRED) ..... (3)
PS 758 SEMINAR IN SOVIET POLITICS, GOVERNMENT, AND FOREIGN POLICY ..... (3)
PS 759 COMPARATIVE POLITICAL BEHAVIOR ..... (3)
PS 762 SEMINAR IN JUDICIAL POLICY MAKING ..... (3)
PS 765 RESEARCH PROBLEMS IN JUDICIAL POLITICS ..... (3)
PS 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
PS 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
PS 772 ADVANCED PROBLEMS IN RESEARCH METHODS ..... (3)
PS 775 SEMINAR IN PUBLIC POLICY ..... (3)
PS 776 TOPICAL SEMINAR IN POLICY STUDIES (SUBTITLE REQUIRED) .. (3)
PS 778 RESEARCH PROBLEMS IN TRANSNATIONAL POLITICS ..... (3)
PS 780 LEGISLATIVE BEHAVIOR ..... (3)
PS 795 SPECIAL PROBLEMS IN POLITICAL SCIENCE ..... (1-3)
PS 796 DIRECTED RESEARCH IN POLITICAL SCIENCE ..... (1-3)

Psychology

GRADUTE FACULTY

Full Members

Professors

Michael A. Andrykowski, Michael Bardo, David T. Berry, Charles R. Carlson, Jonathan M. Golding, Rick H. Hoyle, Thomas H. Kelly, Philip Kraemer, Elizabeth Lorch, Robert E. Lorch, Richard S. Milich, Thomas W. Miller, Michael Nietzel, Frederick A. Schmitt, Thomas A. Widiger, John F. Wilson, Thomas Zentall.

Associate Professors

Chana K. Akins, Ruth A. Baer, Susan Barron, Ramesh S. Bhatt, Melody Carswell, Mitzi M.S. Johnson, Monica Harris Kern, Donald R. Lynam, Margo J. Monteith, John D. Ranseen, Gregory T. Smith, Richard H. Smith.

Associate Members

Professors

Louise Graham.

Associate Professors

Toufic Fakhoury, Sung Hee Kim, James Norton, Craig Rush, Ronald Taylor.

Assistant Professors

Tamara Brown, Jean Cibula, Mark Fillmore, Peter Giancola, Larry Gottlob, Mark Prendergast, Suzanne Segerstrom.

Emeritus Professors

John Haley, Donald McCoy, John R. Neill.

The department offers one Ph.D. degree in psychology in two programs: clinical psychology and experimental psychology, the latter subdivided into cognitive/developmental studies, behavioral neuroscience/psychopharmacology, and social psychology. The major goal of the doctoral programs in psychology is to prepare the student for a career in research in both academic and non-academic settings and in teaching.

The area of specialization in clinical psychology provides academic courses, practica, and internships which permit students to combine their teaching and research activities with a clinical career in the mental health field. Special areas of expertise among clinical faculty include psychological assessment, child clinical psychology, health psychology, neuropsychology, personality, psychopathology and diagnosis, psychotherapy, research methodologies, and substance abuse. Clinical training is facilitated by early placement of students at a variety of settings including various medical settings, a federal corrections facility, community mental health centers, state and private psychiatric hospitals, and the department's own psychological clinic. The clinical program is fully accredited by the American Psychological Association.

The cognitive/developmental studies area and the behavioral neuroscience/psychopharmacology area provide a combination of integrated course work and individualized training designed to prepare students for a career in research and teaching. Emphasis is placed on theoretical analysis and empirical studies of change. Scholarship in basic theory is the primary focus of training, but students interested in applying their training to nonacademic settings will not be discouraged. Current research within these areas includes memory, reading, human factors, animal cognition and intelligence, psychopharmacology, developmental psychobiology, and development of perception, attention, memory, and comprehension.

The area in social psychology is designed to provide intensive experience in research with members of the social psychology faculty, with the aim of developing in the student a strong theoretical and research competence with complex social phenomena. Traditions of both experimental laboratory research and naturalistic study are utilized; emphases include theoretical and applied significance of research. Within broad limits set by the program, any given student's course of study is designed to fit that student's particular needs and interests. Research experience in related behavioral sciences (for example, communication, marketing, anthropology) are encouraged.

During the first year of the doctoral program, students in all areas gain experience in the major content areas of psychology and in psychological statistics. Thereafter, the student and the adviser construct a program of study consistent with the academic interests and professional goals of the student.

The M.A. and M.S. degrees are awarded under Plan A only, as one component of doctoral training.

Admission Requirements

The minimum departmental standards for admission to graduate work in psychology include an undergraduate overall average of B or better, a satisfactory score on the verbal and quantitative portions of the Graduate Record Examination (GRE) and three letters of recommendation. All admissions are on a competitive basis. For additional information concerning the program in psychology and such matters as financial support, contact the Director of Graduate Studies, Department of Psychology or see <www.uky.edu/ArtsSciences/Psychology> on the Web.

GRADUATE COURSES

PSY 503 PSYCHOLOGY OF INDUSTRIAL PERSONNEL PROCEDURE ..... (3)
PSY 529 PSYCHOLINGUISTICS ..... (3)
PSY 532 PERSONALITY ..... (3)
PSY 533 ABNORMAL PSYCHOLOGY ..... (3)
PSY 534 CHILD PSYCHOPATHOLOGY ..... (3)
PSY 535 PSYCHOLOGICAL TESTING ..... (3)
PSY 552 ANIMAL BEHAVIOR ..... (4)
PSY 558 BIOLOGY OF MOTIVATION ..... (3)
PSY 561 ADVANCED TOPICS IN FOUNDATIONS OF CLINICAL PSYCHOLOGY (SUBTITLE REQUIRED) ..... (3)
PSY 562 ADVANCED TOPICS IN COGNITIVE PSYCHOLOGY (SUBTITLE REQUIRED) ..... (3)
PSY 563 ADVANCED TOPICS IN DEVELOPMENTAL PSYCHOLOGY (SUBTITLE REQUIRED) ..... (3)
PSY 564 ADVANCED TOPICS IN LEARNING (SUBTITLE REQUIRED) ..... (3)
PSY 565 ADVANCED TOPICS IN NEUROSCIENCE (SUBTITLE REQUIRED) (3)
PSY 566 ADVANCED TOPICS IN SOCIAL PSYCHOLOGY (SUBTITLE REQUIRED) ..... (3)
PSY 603 PSYCHOPATHOLOGY ..... (3)
PSY 610 PSYCHOMETRICS ..... (3)
PSY 611 PSYCHOLOGICAL RESEARCH ..... (3)
PSY 613 BEHAVIORAL ECOLOGY AND COMPARATIVE NEUROBIOLOGY (SAME AS BIO/ENT/PGY/ANA 613) ..... (2)
PSY 614 TECHNIQUES IN BEHAVIORAL ECOLOGY AND COMPARATIVE NEUROBIOLOGY (SAME AS BIO/PGY/ENT/ANA 614) ..... (2)
PSY 616 RESEARCH DESIGN IN CLINICAL PSYCHOLOGY ..... (3)
PSY 620 PROSEMINAR IN HISTORY AND SYSTEMS OF PSYCHOLOGY (SAME AS EDP 615) ..... (3)
PSY 621 PROSEMINAR IN LEARNING ..... (3)

PSY 622 PROSEMINAR IN PERSONALITY ..... (3)
PSY 623 PROSEMINAR IN SENSATION AND PERCEPTION. ..... (3)
PSY 624 PROSEMINAR IN SOCIAL PSYCHOLOGY ..... (3)
PSY 625 PROSEMINAR IN DEVELOPMENTAL PSYCHOLOGY ..... (3)
PSY 626 SURVEY OF HEALTH PSYCHOLOGY (SAME AS BSC 626) ..... (3)
PSY 627 PROSEMINAR IN PHYSIOLOGICAL PSYCHOLOGY (SAME AS PGY 627) ..... (3)
PSY 628 PROSEMINAR IN COGNITIVE PROCESSES ..... (3)
PSY 629 INTRODUCTION TO CLINICAL PSYCHOLOGY ..... (2)
PSY 630 CLINICAL METHODOLOGY I ..... (2)
PSY 631 PRACTICUM IN CLINICAL METHODOLOGY I ..... (2)
PSY 632 CLINICAL METHODOLOGY II ..... (2)
PSY 633 PRACTICUM IN CLINICAL METHODOLOGY II ..... (2)
PSY 636 SYSTEMS OF PSYCHOTHERAPY ..... (3)
PSY 637 PRACTICUM IN PSYCHOLOGICAL ASSESSMENT AND INTERVENTION ..... (1-3)
PSY 638 DEVELOPMENTAL NEUROBIOLOGY (SAME AS BIO/ANA/PGY 638) ..... (3)
PSY 708 INTERNSHIP IN CLINICAL PSYCHOLOGY ..... (0)
PSY 710 TOPICAL SEMINAR IN CLINICAL PSYCHOLOGY ..... (3)
PSY 748 MASTER'S THESIS RESEARCH ..... (0)
PSY 749 DISSERTATION RESEARCH ..... (0)
PSY 767 TOPICAL SEMINAR IN BEHAVIORAL NEUROSCIENCE (SAME AS PGY 767) ..... (3)
PSY 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
PSY 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
PSY 772 TOPICAL SEMINAR IN LEARNING ..... (3)
PSY 776 SEMINAR IN DEPENDENCY BEHAVIOR (SAME AS BSC/SOC/ANT 776) ..... (3)
PSY 778 TOPICAL SEMINAR IN DEVELOPMENTAL PSYCHOLOGY ..... (3)
PSY 779 TOPICAL SEMINAR IN SOCIAL PSYCHOLOGY (SAME AS SOC 779) ..... (3)
PSY 780 PROBLEMS IN PSYCHOLOGY ..... (1-3)
PSY 781 RESEARCH PARTICIPATION ..... (1)
PSY 790 RESEARCH IN PSYCHOLOGY ..... (1-12)

Public Administration

GRADUATE FACULTY
Full Members
Professors
Glenn C. Blomquist, David Freshwater, Richard W. Furst, Donald A. Gross, Merlin Hackbart, William H. Hoyt, Edward T. Jennings, Mark Peffley, Robert Rodgers, Phillip Roeder, Eugenia Toma, David F. Wildasin.
Associate Professors
Matt Gabel, Thomas R. Greider, Jeffery C. Talbert.
Associate Members
Professors
Thomas Miller.
Associate Professors
Karen Blumenschein, Richard Fording.
Assistant Professors
Sarah Wackerbarth.
Adjunct Assistant Professors
Gregory L. Hager.
Emeritus Professors
Philip K. Berger, Donald L. Hochstrasser.

The Martin School of Public Policy and Administration, a research, academic and service unit of the Graduate School, offers the Ph.D., the M.P.A., and the M.H.A. degrees. The Ph.D. in Public Administration is designed to prepare students to function at a high level of analytic sophistication in academic and administrative positions. The Master of Public Administration is a 45-credit-hour program designed for those seeking careers in the public, nonprofit, and private sectors.

The interdisciplinary faculty have primary or joint appointments in the Martin School and in one of the academic departments of the College of Business and Economics, the College of Arts and Sciences, or the Medical Center.

Doctor of Philosophy

The curriculum of the Ph.D. program provides knowledge of the principles of organizational behavior, an understanding of the public policy process and policy issues, and an ability to analyze policy and administrative problems through research and analytical methods.

Admission Requirements

In addition to the Graduate School Admission Requirements, applicants must submit the following items to be considered for admission to the Doctoral program in Public Administration.

1. Three letters of recommendation.
2. A one to three page statement explaining why you wish to pursue a Ph.D. degree.
3. The Applicant Information Form.

Entering students are expected to have at least a 3.0 grade point average in undergraduate work (on a 4.0 scale), a 3.5 in all graduate level work, a cumulative score of 1200 or more on the quantitative and verbal sections of the GRE, or a minimum of 600 on the GMAT, and 3 letters of recommendation that provide convincing evidence about the applicant's ability and potential. However, the Martin School considers all aspects of the student's record, including evidence of improving performance during the student's academic career.

Pre-requisites and Exemptions

Many incoming students will hold a master's degree in public administration from a NASPAA-accredited program. Other students with master's degrees in such areas as political science, economics, agricultural economics or business administration will be evaluated with respect to their background in public administration. All students are expected to have taken four University of Kentucky courses: PA 652 (Public Policy Economics), PA 631 (Public Financial Management), PA 642 (Public Organizational Theory and Behavior), and PA 651 (The Policy Process), or their equivalents from a NASPAA accredited program. All students are also expected to have a strong background in research methodology.

All Ph.D. students must demonstrate proficiency in basic computer skills. This requirement may be met by passing a self-administered diagnostic examination or by completing a computer assisted instructional module administered by the Martin School. These basic computer skills will be supplemented by computer-based assignments throughout the curriculum.

Degree Requirements

Students are required to take 42 hours of graduate course work beyond the master's degree or its equivalent. The program of study includes a 27-hour Core covering:

Public Policy Management
Research Methods
Theory

and a 15-hour Area of Concentration selected from one of the following:

Health Finance
Public Policy
Public Financial Management

Areas are designed by students in conjunction with their faculty advisers.

The dissertation involves research on a public management or

public policy issue. An internship is necessary for students without significant public experience.

Financial support is available to qualified students through fellowships, assistantship, and research grants.

Inquiries should be made through the Director of Graduate Studies, 415 Patterson Tower.

Core Courses

Public Policy and Management (12 hours)

PA 731 Fiscal and Budgetary Policy	3
PA 742 Theory of Public Organizations	3
PA 751 Public Policy Formulation	3
PA 752 The Economics of Policy Analysis	3

Research Methods (9 hours)

Nine hours of research methods are chosen by the student with the approval of the Advisory Committee.

Theory (6 hours)

Six hours of theory courses are selected with the apporval of the Advisory Committee.

Master of Public Administration

The M.P.A. program offers a professional degree that prepares students for careers of leadership in the public service as analysts and managers in the public, not-for-profit, and private sectors. Students enter the program with diverse academic backgrounds.

Admission Requirements

Applicants must meet the admission standards of both the Graduate School and the Martin School. Applicants must submit the following items to be considered for admission to the Master of Public Administration program.

1. Three letters of recommendation.
2. A one to three page statement explaining why you wish to pursue a master's degree.
3. The Applicant Information Form.

The final selection of students for admission will be subject to the discretion of the admissions committee of the M.P.A. program.

Competitive admission is based on a consideration of the documents listed above. Provisional admission may be offered to students who do not meet the above criteria but who show the potential to succeed in the program.

Students are admitted from various academic disciplines. If not previously exposed to business disciplines, students should develop an understanding of the concepts of macroeconomics.

Deadlines

Deadlines for the program are the same as the Graduate School admission deadlines. Applications completed by March 1 will have priority for financial aid.

Generally, courses are offered in the late afternoon and evening to accommodate working students.

The Martin School M.P.A. program is accredited by the National Association of Schools of Public Administration (NASPAA). For additional information contact:

Student Affairs Office – The Martin School
415 Patterson Office Tower
University of Kentucky
Lexington, KY 40506-0027

Two dual degree programs are offered: a dualJ.D./M.P.A. program and a dual.Pharm.D./M.P.A. degree. For more information about those programs, see *Graduate Admission* on page 12.

The M.P.A. program incorporates:

1. an Administrative Core of 27 semester hours covering the areas of public policy formulation and analysis, public policy economics, organization and management, budgeting, finance, and analytical methods;
2. an area of concentration of 9 semester hours in one of six areas of specialization (public financial management, policy analysis, environmental management, health policy, gerontology, or transportation systems management) or in an individually designed concentration;
3. one 3-hour elective class selected to complement the area of concentration or enhance skills and knowledge acquired in the core curriculum;
4. a 3-hour Capstone Course and Capstone Project;
5. an administrative internship for 3 semester hours of credit. Students with a significant professional experience may substitute an independent study policy paper or an additional graduate course.

Course Requirements

Completion of a minimum of 45 semester hours of graduate work is required.

A. Administrative Core (27 semester hours)

PA 621 Quantitative Methods of Research	3
PA 622 Public Program Evaluation	3
PA 623 Decision Analysis	3
PA 631 Public Financial Management	3
PA 632 Public Funds Management	3
PA 641 Political Environment of Public Organizations	3
PA 642 Public Organization Theory and Behavior	3
PA 651 The Policy Process	3
PA 652 Public Policy Economics	3

B. Area of Concentration (9 semester hours)

Public Financial Management

Students completing this specialization will be prepared for an entry-level professional position in public and not-for-profit organizations.

Select 9 hours from:

ACC 410G Not for Profit Accounting	3
FIN 585 Bank Management	3
FIN 680 Money, Interest and Capital	3
ECO 485G Monetary Economics	3
ECO 611 Business Conditions Analysis	3

Policy Analysis

This concentration provides students the ability to analyze and interpret qualitative and quantitative data, conduct and present results of quantitative and qualitative analyses, and communicate complex ideas in a concise, straightforward manner.

Select 9 hours from:

PA 680 Benefit-Cost Analysis	3
A course in quantitative or qualitative methods	3
A course in a substantive policy area, PA 775, PA 796, or PA 722	3

Environmental Management

Martin School graduates with a concentration in environmental management will be ready to contribute to the design and implementation of environmental policy.

Complete the following 9 hours:

PA 727 Environmental Economics, Regulation and Policy	3
ES 610 Engineering and Physical Sciences in Environmental Systems	3

ES 620 Natural, Biological, Medical Sciences in Environmental Systems 3

Health Policy

The health policy concentration prepares students for careers as managers and analysts of health policy in federal, state, and local agencies, not-for-profit organizations, and the private sector.

Select 9 hours from:

PA 636 Health Economics 3
PA 673 Health Policy Development 3
PA 785 Independent Study in Health Administration 3
or
PA 680 Benefit-Cost Analsis 3

Gerontology

This concentration prepares students for professional careers in policy analysis and management of programs for the elderly. Students must complete 9 hours of courses from the Gerontology Graduate Certificate selected in consultation with a faculty adviser.

Transportation Systems Management

This area of specialization consists of 9 semester hours of classes offered through the Interdisciplinary Certificate in Transportation. It prepares students for careers as policy analysts and managers working in diverse transportation settings, including consulting firms, not-for-profit organizations, and government agencies at the federal, state, and local level.

C. Elective Course (3 semester hours)

A course selected in consultation with a faculty adviser.

D. Capstone Course and Capstone Project (3 semester hours)

All students must take the 3-hour capstone class and successfully complete and defend a capstone project developed in that class. The purpose of the course and the project is to integrate the learning experience of the MPA program and apply knowledge and skills acquired in the program to a policy issue or management problem.

PA 681 Capstone in Public Administration 3

E. Internship (3 semester hours)

PA 711 Internship in Public Administration 3

GRADUATE COURSES

PA 621 QUANITITATIVE METHODS OF RESEARCH (SAME AS HA 621) ..... (3)
PA 622 PUBLIC PROGRAM EVALUATION ..... (3)
PA 623 DECISION ANALYSIS AND SUPPORT SYSTEMS (SAME AS HA 623) (3)
PA 628 PERSONNEL MANAGEMENT IN THE PUBLIC SECTOR ..... (3)
PA 631 PUBLIC FINANCIAL MANAGEMENT ..... (3)
PA 632 PUBLIC FUNDS MANAGEMENT (SAME AS HA 632) ..... (3)
PA 633 MUNICIPAL SECURITIES ..... (3)
PA 636 HEALTH ECONOMICS (SAME AS HA 636, ECO 653) ..... (3)
PA 637 HEALTH FINANCE (SAME AS FIN/HA/HSM 637) ..... (3)
PA 641 POLITICAL ENVIRONMENT OF PUBLIC ORGANIZATIONS ..... (3)
PA 642 PUBLIC ORGANIZATION THEORY AND BEHAVIOR (SAME AS HA 642) ..... (3)
PA 651 THE POLICY PROCESS ..... (3)
PA 652 PUBLIC POLICY ECONOMICS (SAME AS ECO/HA 652) ..... (3)
PA 653 LOCAL ECONOMIC DEVELOPMENT (SAME AS AEC 653) ..... (3)
PA 656 MANAGERIAL EPIDEMIOLOGY (SAME AS HA 656) ..... (3)
PA 660 PUBLIC POLICY OF THE NONPROFIT SECTOR ..... (3)
PA 661 FINANCIAL MANAGEMENT OF NONPROFIT ORGANIZATION ..... (3)
PA 671 OVERVIEW OF THE HEALTH CARE DELIVERY SYSTEM (SAME AS HA/HSM 601/SPH 602) ..... (3)
PA 673 HEALTH POLICY DEVELOPMENT (SAME AS HA 673) ..... (2)
PA 680 BENEFIT-COST ANALYSIS (SAME AS ECO 654) ..... (3)
PA 681 CAPSTONE IN PUBLIC ADMINISTRATION ..... (3)
PA 711 INTERNSHIP IN PUBLIC ADMINISTRATION ..... (3)
PA 727 ENVIRONMENTAL ECONOMICS, REGULATION AND POLICY (SAME AS ECO 721) ..... (3)
PA 731 FISCAL AND BUDGETARY POLICY ..... (3)
PA 742 THEORY OF PUBLIC ORGANIZATIONS ..... (3)
PA 749 DISSERTATION RESEARCH ..... (0)
PA 751 PUBLIC POLICY FORMULATION AND IMPLEMENTATION ..... (3)
PA 752 THE ECONOMICS OF POLICY ANALYSIS (SAME AS ECO 752) ..... (3)
PA 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
PA 775 SPECIAL TOPICS IN HEALTH ADMINISTRATION (SAME AS HA/HSM 775) ..... (1-3)
PA 785 INDEPENDENT STUDY IN HEALTH ADMINISTRATION (SAME AS HA/HSM 785) ..... (1-3)
PA 795 SPECIAL TOPICS IN PUBLIC ADMINISTRATION ..... (1-3)
PA 796 INDEPENDENT STUDY IN PUBLIC ADMINISTRATION ..... (1-3)

Public Health

GRADUATE FACULTY
Full Members
Professors
Ramesh Gupta, Eugene C. Rich, F. Douglas Scutchfield, David A. Snowdon.
Associate Professors
Sanford W. Horstman, Robert McKnight, Barbara Phillips, Thomas C. Tucker.
Research Associate Professors
Claudia Hopenhayn-Rich.
Associate Members
Professors
Thomas W. Samuel.
Associate Professors
Renee Girdler, Donald R. Holleman Jr., T. Scott Prince.
Assistant Professors
Julia Costitch, Kevin Pearce, Susan H. Pollack, Lyle Snider, Pamela B. Teaster, Suzanne Tyas.
Emeritus Professors
Terence Collins.

The Kentucky School of Public Health offers the Master of Public Health Degree. The M.P.H. degree is designed to prepare graduates for entry and advancement in public health careers in public, non-profit and proprietary health care organizations. The curriculum is designed to meet the needs of non-traditional and part time students as well as full time students. Most courses are offered in the late afternoon or evening, one day per week. Internet and interactive video courses are currently under development for distance education.

The curriculum is designed to develop skills and knowledge upon which to build or enhance a career in public health. A distinctive characteristic of the M.P.H. degree is that public health focuses on the health of groups rather than individuals. Unique sequencing of courses, community-based program activities, and field/laboratory research provide students with multiple opportunities to define their public health specialty and provide a broad overview of the disciplines of public health. The degree requirements include a core curriculum in epidemiology, environmental health, health enhancement, health services management, and biostatistics along with a concentration in one of these five areas, elective course work, and a field practicum in the community, a public health agency, a government agency, or related setting. Separate MPH tracks are available in each of the five core areas of public health.

Admission Requirements

Admission into the graduate program is competitive and is based upon undergraduate GPA (2.75 minimum), bachelors' degree in an appropriate field, experience and career plans. Applicants must also have achieved an acceptable score on the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT).

Applicants must complete and submit the separate MPH Application form, a one- to two-page personal statement regarding their interest in the field of public health, background and experiences, career plans, and how they relate to the degree. Three letters of recommendation must also be submitted.

As an interdisciplinary degree, the M.P.H. curriculum utilizes an array of courses offered by Medical Center and Lexington Campus departments including Preventive Medicine, Health Services Management, Environmental Science, Statistics, Behavioral Science, and Communications.

For additional information concerning the Kentucky School of Public Health and its degree, call (859) 323-6010 or send e-mail to kysph@uky.edu.

GRADUATE COURSES

PM 601 OCCUPATIONAL AND ENVIRONMENTAL HEALTH (SAME AS SPH 601) ..... (4)
PM 602 OCCUPATIONAL AND ENVIRONMENTAL HEALTH ..... (4)
PM 620 EPIDEMIOLOGY (SAME AS SPH 605) ..... (3)
PM 621 TOPICS IN ADVANCED EPIDEMIOLOGY ..... (3)
PM 651 WORK PLACE VENTILATION ..... (3)
PM 661 INDUSTRIAL HYGIENE SAMPLING ..... (3)
PM 662 PUBLIC HEALTH PRACTICE AND ADMINISTRATION ..... (3)
PM 663 PRACTICUM IN ADVANCED INDUSTRIAL HYGIENE ..... (1-3)
PM 670 CLINICAL EPIDEMIOLOGY (SAME AS SPH 815) ..... (3)
PM 675 RESEARCH DESIGN IN PUBLIC HEALTH ..... (4)
PM 676 WOMEN'S HEALTH: A PUBLIC HEALTH PERSPECTIVE (SAME AS NUR 676) ..... (3)
PM 748 MASTER'S THESIS RESEARCH ..... (0)
PM 768 RESIDENCY CREDIT FOR MASTER'S DEGREE ..... (1-6)
PM 770 SEMINAR IN PREVENTIVE MEDICINE AND PUBLIC HEALTH ..... (1-3)
PM 780 SPECIAL PROBLEMS IN PREVENTIVE MEDICINE AND PUBLIC HEALTH ..... (1-3)
PM 790 RESEARCH IN PREVENTIVE MEDICINE AND PUBLIC HEALTH .. (1-3)

SPH 601 OCCUPATIONAL AND ENVIRONMENTAL HEALTH (SAME AS PM 601) ..... (4)
SPH 602 OVERVIEW OF THE HEALTH CARE DELIVERY SYSTEM (SAME AS HA/HSM 601/PA 671) ..... (3)
SPH 605 EPIDEMIOLOGY (SAME AS PM 620) ..... (3)
SPH 768 RESIDENCY CREDIT FOR MASTER'S DEGREE ..... (1-6)

HSM 502 ORGANIZATION AND SUPERVISION IN HEALTH CARE DELIVERY ..... (3)
HSM 510 ORGANIZATION OF THE LONG-TERM CARE SECTOR ..... (3)
HSM 511 INDEPENDENT STUDY IN HEALTH SERVICES ADMINISTRATION ..... (1-3)
HSM 601 OVERVIEW OF THE HEALTH CARE DELIVERY SYSTEM (SAME AS HA 601/SPH 602/PA 671) ..... (3)
HSM 602 ORGANIZATIONAL CHANGE AND STRATEGIC PLANNING (SAME AS HA 602) ..... (3)
HSM 603 LEGAL ASPECTS OF HEALTH ADMINISTRATION (SAME AS HA 603) ..... (2)
HSM 622 MENTAL HEALTH ADMINISTRATION (SAME AS HA 622) ..... (3)
HSM 624 INFORMATION SYSTEM IN HEALTH CAREN SYSTEMS IN HEALTH (SAME AS HA 624) ..... (3)
HSM 635 MANAGEMENT ACCOUNTING FOR HEALTH CARE ORGANIZATIONS (SAME AS HA 635) ..... (3)
HSM 636 HEALTH ECONOMICS ..... (3)
HSM 637 HEALTH FINANCE (SAME AS PA/HA/FIN 637/SPH 852) ..... (3)
HSM 660 DECISION MAKING IN HEALTH CARE ORGANIZATIONS (SAME AS HA 660) ..... (3)
HSM 711 PRACTICUM IN HEALTH ADMINISTRATION (SAME AS HA 711) .. (3)
HSM 775 SPECIAL TOPICS IN HEALTH ADMINISTRATION (SAME AS PA/HA 775) ..... (1-3)
HSM 785 INDEPENDENT STUDY IN HEALTH ADMINISTRATION (SAME AS PA/ HA 785) ..... (1-3)

Radiation Science

GRADUATE FACULTY
Full Members
Professors
Ali S. Meigooni, Mohammed Mohiuddin, Guy Simmons, Robert Zwicker.
Associate Professors
Ralph Christensen.
Associate Members
Assistant Professors
Ellis L. Johnson, Krishna Komanduri.

The Division of Radiation Sciences, Department of Clinical Sciences, offers the program in Radiation Science with options leading to the degree of Master of Science in Radiological Medical Physics or Master of Science in Health Physics. The former is one of a very small number of academic medical physics offerings in North America accredited by CAMPEP, the Commission on Accreditation of Medical Physics Educational Programs.

Admission Requirements

Graduates of accredited colleges with an appropriate baccalaureate degree (preferably a physics major or strong minor) may become candidates for one of these degrees. Applicants must meet the minimum requirements of the Graduate School. Course work prerequisites include physics through modern physics (with atomic and nuclear laboratory), one year of general chemistry, mathematics through (ordinary) differential equations, and individual courses in computer science, scientific statistics, human physiology, and human anatomy. Students lacking certain course prerequisites may be admitted while completing them, if so approved by the Director of Graduate Studies. Applicants are strongly urged to supply three letters of recommendation and are encouraged to visit campus and interview in person (telephone interviews may be arranged if necessary). GRE General test scores must be submitted. An overall undergraduate grade point average of at least 3.0 (on a 4.0 scale) is recommended.

Degree Requirements

Both degree options are interdisciplinary. Plan B (non-thesis) is utilized for the graduate work, incorporating specific courses in several departments. There is no language requirement. A core of courses is common to both options. Additional special course work is prescribed for each option.

CORE PROGRAM

RM/BIO 740 Mammalian Radiation Biology	2
PHY/RM 472G Interaction of Radiation with Matter	3
RAS/RM/PHY 545 Radiation Hazards and Protection	3
RAS/RM/PHY 546 General Medical Radiological Physics	3
RAS/RM 601 Advanced Radiation Dosimetry	2
RAS 710 Seminar in Bioradiation Science	1
RAS/RM 695 Research in the Health-Related Radiation Sciences	2
Subtotal	16

Master of Science in Radiological Medical Physics

Additional Program Requirements

RAS/RM 647 Physics of Diagnostic Imaging I	3
RAS/RM 648 Physics of Diagnostic Imaging II	3
RAS/RM 649 Physics of Radiation Therapy	3
RAS 651 Advanced Laboratory in Diagnostic Imaging Physics	2
PHY/EE 402G Electronic Instrumentation and Measurements	3
Total	30 (minimum)

Available Electives (Partial Listing)

CHE 520 Radiochemistry	3
PHY/EE 567 Introduction to Lasers and Masers	3
RM 660 Graduate Practicum in Radiation Medicine	1-6
RM 842 Radiation Oncology	1
RM 848 Practicum in Brachytherapy Physics	1-3

RM 849 Practicum in External Beam Therapy Physics	1-6
RAS 610 Ethics in Clinical Sciences Research	1

Master of Science in Health Physics

Additional Program Requirements

RAS 575 Applied Health Physics Laboratory	2
CHE 520 Radiochemistry	3
Specialization Electives	9
Total 30 (minimum)	

Available Specialization Electives (Partial Listing)

CHE 521 Radiochemistry Laboratory	1-2
PHY 402G Electronic Instrumentation and Measurements	3
PHY 416G/417G Electricity and Magnetism	6
PHY 520 Quantum Mechanics	3
PHY 554/555 Fundamental Atomic and Nuclear Physics	6
PM 601/602 Environmental and Occupational Health	8
RAS 715 Advanced Problems in Health-Related Radiation Sciences	1-4
RAS/RM 647/648 Physics of Diagnostic Imaging I and II	6

GRADUATE COURSES

RAS 545 RADIATION HAZARDS AND PROTECTION (SAME AS PHY/RM 545) ..... (3)
RAS 546 GENERAL MEDICAL RADIOLOGICAL PHYSICS (SAME AS RM/PHY 546) ..... (3)
RAS 575 APPLIED HEALTH PHYSICS LABORATORY ..... (2)
RAS 601 ADVANCED RADIATION DOSIMETRY (SAME AS RM 601) ..... (2)
RAS 610 ETHICS IN CLINICAL SCIENCES RESEARCH (SAME AS CD/CLS/PT 610) ..... (1)
RAS 647 PHYSICS OF DIAGNOSTIC IMAGING I (SAME AS RM 647) ..... (3)
RAS 648 PHYSICS OF DIAGNOSTIC IMAGING II (SAME AS RM 648) ..... (3)
RAS 649 PHYSICS OF RADIATION THERAPY (SAME AS RM 649) ..... (3)
RAS 651 ADVANCED LABORATORY IN DIAGNOSTIC IMAGING PHYSICS (1-3)
RAS 695 RESEARCH IN HEALTH-RELATED RADIATION SCIENCES (SAME AS RM 695) ..... (1-4)
RAS 710 RADIATION SCIENCE SEMINAR (SUBTITLE REQUIRED) ..... (1)
RAS 715 ADVANCED PROBLEMS IN THE HEALTH-RELATED RADIATION SCIENCES ..... (1-4)

RM 472G INTERACTION OF RADIATION WITH MATTER (SAME AS PHY 472G) ..... (3)
RM 545 RADIATION HAZARDS AND PROTECTION (SAME AS PHY/RAS 545) ..... (3)
RM 546 GENERAL MEDICAL RADIOLOGICAL PHYSICS (SAME AS PHY/RAS 546) ..... (3)
RM 601 ADVANCED RADIATION DOSIMETRY (SAME AS RAS 601) ..... (2)
RM 647 PHYSICS OF DIAGNOSTIC IMAGING I (SAME AS RAS 647) ..... (3)
RM 648 PHYSICS OF DIAGNOSTIC IMAGING II (SAME AS RAS 648) ..... (3)
RM 649 PHYSICS OF RADIATION THERAPY (SAME AS RAS 649) ..... (3)
RM 660 GRADUATE PRACTICUM IN RADIATION MEDICINE ..... (1-6)
RM 695 RESEARCH IN HEALTH-RELATED RADIATION SCIENCES (SAME AS RAS 695) ..... (1-4)
RM 740 MAMMALIAN RADIATION BIOLOGY (SAME AS BIO 740) ..... (2)

Rehabilitation Counseling

GRADUATE FACULTY
Full Members
Professors
Ralph M. Crystal.
Associate Professors
Sonja Feist-Price, Debra Harley.
Associate Members
Assistant Professors
Malachy Bishop.

The Graduate Program in Rehabilitation Counseling is an interdisciplinary program in the Department of Special Education and Rehabilitation Counseling. The curriculum, in accordance with the guidelines of accreditation and certification organizations in rehabilitation counseling, provides for flexible programming in response to individual student needs and interests. The program is accredited by the Council on Rehabilitation Education and fulfills national certification requirements in rehabilitation counseling. Program graduates are eligible to sit for the Rehabilitation Counseling Certification Examination and other national and state certification.

The program trains students to understand the physical, psychological, social, cultural and economic factors of persons with disabilities and barriers to employment in terms of vocational adjustment, independent living, and employment. Rehabilitation counseling is a challenging and expanding profession. The rehabilitation counselor provides and coordinates services to persons with emotional, physical, learning, and developmental disabilities which interfere with productive functioning and independent living. The counselor must demonstrate competencies in establishing and conducting counseling relationships, assessment procedures, vocational placement, program planning and coordination; have an awareness of professional and community resources that can be utilized in the rehabilitation process; have knowledge of persons from culturally diverse backgrounds, and, understand how rehabilitation engineering and technology can be utilized to help clients achieve their goals. Emphasis is placed on severe disability and its consequences, independent living, job development and placement, technology, business and industry, and consumer issues and rights. Graduates of the program are employed in a wide range of public and private rehabilitation settings.

Students who express an interest in employment in public rehabilitation are eligible, when available, for a federal personnel preparation scholarship. This scholarship pays tuition and provides a monthly stipend. Scholarship recipients are required to become employed in a public rehabilitation agency or a program which procures services from a public rehabilitation agency. The program also has a scholarship program to train students for practice in rural rehabilitation environments. In addition, an Endorsement Curriculum in conjunction with Kentucky State University facilitates the enrollment of persons from culturally diverse backgrounds.

Admission Requirements

The rehabilitation counseling program has the following admission requirements. Students are required to submit results from the Graduate Record Examination, have a minimum undergraduate grade point average of 2.75, submit three letters of reference, complete a statement of professional goals and objectives, complete a program application, and participate in an interview with faculty. Under certain circumstances the program may petition the Graduate School to request a waiver of the undergraduate grade point average. The program faculty considers all of this information in making admissions decisions.

Students are admitted from a wide range of backgrounds and academic disciplines. It is anticipated, however, that most students entering the program will have a background in psychology, education, sociology, rehabilitation, or other social-behavioral sciences. Students who have other educational backgrounds are also considered.

Program Requirements

Course and field work total a minimum of 45 credit hours if the student has a bachelor's degree in rehabilitation or related course work. The typical program for other students is 57 hours, up to a maximum of 60 hours. At least 75% of the credit hours must be

taken at the University of Kentucky. Courses are offered in the late afternoon and early evening to accommodate full- and part-time students. Students who attend the program on a full-time basis can complete the program in 16 months. The program is also offered on a state-wide distance education basis using satellite, compressed video, and internet technologies.

The curriculum is composed of three levels of courses: basic core, advanced core, and support areas.

Basic Core

The Basic Core courses or their equivalent are required for students without a background in the field of rehabilitation or who have not otherwise had these courses:

RC 510 Orientation to Rehabilitation Resources
RC 515 Medical and Psychosocial Aspects of Disabilities I
RC 516 Medical and Psychosocial Aspects of Disabilities II
RC 520 Principles of Rehabilitation Counseling
RC 530 Cultural Diversity in Rehabilitation
RC 540 Chemical Dependency in Rehabilitation Counseling
RC 640 Rehabilitation in Business and Industry
RC 650 Rehabilitation Counseling Theory and Techniques I
RC 660 Rehabilitation Counseling Theory and Techniques II

Advanced Core

Advanced Core courses or their equivalent are required for all students enrolled in the degree program:

RC 610 Case Management in Rehabilitation Counseling
RC 620 Vocational Evaluation/Work Adjustment of the Severely Disabled
RC 630 Placement Services and Techniques in Rehabilitation Counseling
RC 710 Practicum
RC 720 Internship
RC 740 Administration, Supervision, and Program Evaluation in Rehabilitation Counseling
RC 750 Rehabilitation Research
RC 760 Contemporary Practices in Rehabilitation

Students who have taken any of the above courses or their equivalent may consult with faculty to request waiver of the required course and to substitute an approved elective.

Other Rehabilitation Courses

RC 558 Special Topics in Rehabilitation Counseling
RC 782 Directed Independent Study

Support Areas

A support area will be chosen by the student in conjunction with a faculty adviser. Students are encouraged to use their electives to develop 'support areas.' A support area is defined as a group of two to three courses, focusing on one theme, to enhance specific skills or knowledge related to rehabilitation.

Courses comprising a support area may be offered by one or more departments. Support areas available through interdisciplinary planning include: learning disabilities, mental retardation, developmental disabilities, gerontology, mental health, administration and management, family studies, research and evaluation, group counseling, policy and planning, criminal justice, hearing impairment, visual impairment, recreation, drugs and alcoholism, business and industry, technology, and advocacy. Cooperating disciplines include Educational and Counseling Psychology, Social Work, Special Education, Sociology, Public Administration, Family Studies, Psychology, Therapeutic Recreation, and Health Sciences.

Admission to Field Work

Admission to field work will be considered after the student has completed two semesters (full-time) of graduate study or when the student has completed 24 hours of graduate study. The decision to advance to field work includes successful completion of the admission to field work examination, demonstrated skill in academic areas, and a judgment by the faculty that the student possesses the personal and social characteristics necessary for providing professional rehabilitation counseling services.

Field Work

The first field work component is a three credit practicum, which consists of 200 clock hours of supervised experience in a rehabilitation or rehabilitation-related setting, a weekly seminar, and individual supervision. Students who receive training support from the Rehabilitation Services Administration must have involvement with business and industry as part of the practicum. Such students are required to be employed with a public rehabilitation program upon graduation. The practicum is generally taken during the eight-week summer session. However, this course is offered every semester to accommodate part-time students. A student must be admitted to field work prior to enrolling in the practicum.

In accordance with national accreditation and certification requirements, students then complete 600 clock hours of supervised internship in a rehabilitation or rehabilitation-related setting. Every intern student also participates in a weekly seminar and individual supervision. Internship is three credits per 200 clock hours, and may be taken in the summer, fall, or spring semesters following practicum. The internship is taken in one semester; or, due to extenuating circumstances, it may be divided into two semesters. It is recommended, however, that the internship be completed in one semester.

Students must successfully complete their internship, and demonstrate competence in working with individuals with disabilities in the context of a professional rehabilitation counseling relationship in order to graduate.

A final written examination is given at the completion of all course work. Graduation is contingent upon the successful completion of this examination.

GRADUATE COURSES

RC 510 ORIENTATION TO REHABILITATION RESOURCES ..... (3)
RC 515 MEDICAL AND PSYCHOSOCIAL ASPECTS OF DISABILITIES I (SAME AS SW 515) ..... (3)
RC 516 MEDICAL AND PSYCHOSOCIAL ASPECTS OF DISABILITIES II (SAME AS SW 516) ..... (3)
RC 520 PRINCIPLES OF REHABILITATION COUNSELING ..... (3)
RC 530 CULTURAL DIVERSITY IN REHABILITATION COUNSELING ..... (2)
RC 540 CHEMICAL DEPENDENCY IN REHABILITATION COUNSELING .... (3)
RC 546 TRANSDISCIPLINARY SERVICES FOR STUDENTS WITH MULTIPLE DISABILITIES (SAME AS EDS 546) ..... (3)
RC 547 COLLABORATION AND INCLUSION IN SCHOOL AND COMMUNITY SETTINGS (SAME AS EDS 547) ..... (3)
RC 558 SPECIAL TOPICS IN REHABILITATION (SAME AS EDS 558) ..... (1-3)
RC 610 CASE MANAGEMENT IN REHABILITATION COUNSELING ..... (3)
RC 620 VOCATIONAL EVALUATION AND WORK ADJUSTMENT FOR THE SEVERELY DISABLED ..... (3)
RC 630 PLACEMENT SERVICES AND TECHNIQUES IN REHABILITATION COUNSELING ..... (3)
RC 640 REHABILITATION IN BUSINESS AND INDUSTRY ..... (3)
RC 650 REHABILITATION COUNSELING THEORY AND PRACTICE I ..... (3)
RC 660 REHABILITATION COUNSELING THEORY AND PRACTICE II ..... (3)
RC 710 PRACTICUM IN REHABILITATION COUNSELING ..... (3)
RC 720 INTERNSHIP IN REHABILITATION COUNSELING ..... (3-9)
RC 740 ADMINISTRATION, SUPERVISION AND PROGRAM EVALUATION IN REHABILITATION COUNSELING ..... (1-3)
RC 750 REHABILITATION RESEARCH ..... (1-3)
RC 760 CONTEMPORARY PRACTICES IN REHABILITATION ..... (1-3)
RC 782 DIRECTED INDEPENDENT STUDY ..... (1-3)

Rehabilitation Sciences

GRADUATE FACULTY

Full Members

Professors

Susan Effgen, Terry Malone, Robert C. Marshall, Arthur Nitz.

Associate Professors

Jodelle Deem, Lori Gonzalez, Judith Page, Sharon R. Stewart, Stuart Ware.

Assistant Professors

Tim L. Uhl.

Associate Members

Professors

Onda Bennett, Stan Cooke, Martin H. Diebold, Lynnda J. Emery, Lisette Kautzman, Doris Pierce, Colleen Schneck.

Associate Professors

Kathryn N. Polmanteer.

Assistant Professors

Joan C. Darbee, Patrick H. Kitzman, Susan A. Queen, Heather H. Wright.

The Divisions of Communication Disorders and Physical Therapy at UK, in cooperation with Occupational Therapy and Communication Disorders programs at Eastern Kentucky University, and Communication Disorders programs at Murray State University and Western Kentucky University, offer a doctor of philosophy degree in rehabilitation sciences. This program has a unique interdisciplinary, inter-institutional emphasis for rehabilitation professionals in the disciplines of communication disorders, occupational therapy, and physical therapy.

The focus of the program is to prepare academic leaders in Rehabilitation Sciences through interdisciplinary academic, clinical, and research experiences. The program is designed to prepare graduates to conduct rehabilitation-related research, teach at the university level, direct discipline-specific educational programs, work in the rehabilitation services field, and collaborate with other professions to provide leadership on various issues related to rehabilitation and health.

Admission Requirements

Individuals applying for admission must be eligible for state licensure or national certification in Communication Disorders, Occupational Therapy, or Physical Therapy. They must also have a master's degree and submit GRE scores, a comprehensive resume, and three (3) letters of recommendation. Students must apply to both the University of Kentucky Graduate School and the Rehabilitation Sciences Doctoral Program. An interview is strongly encouraged. Program application materials can be obtained from <mc.uky.edu/rehabsciences>.

Degree Requirements

Each candidate for the Ph.D. must pass a written and oral Qualifying Examination, submit and defend a dissertation based on original and significant research and satisfy the Graduate School requirements.

The courses expected of all students in the doctoral degree curriculum include the following:

Core Courses

RHB 701 Rehabilitation Theories and Application Through the Life Span	3
RHB 702 Rehabilitation Services in Health Care Systems and Delivery	3
RHB 770 Professional Seminar in Rehaibliation Sciences (Must be taken for six semesters during the student's academic program.)	3

Research Methodologies

STA 671 Regression and Correlation	2
STA 672 Design and Analysis of Experiments	2
Electives	6

Area of Specialization

Three specialization tracks, Pediatrics, Aging and Adult Neurological Disorders, and Movement Dysfunction, are available for concentrated study. Discipline Specific Course Work in each of the three tracks will be offered through the Divisions of Communication Disorders and Physical Therapy at the University of Kentucky and the Department of Occupational Therapy at Eastern Kentucky University. In each track, students must complete the following requirements:

Rehabilitation Sciences Course Work	6
Professional Discipline Specific Course Work	9
Related Areas	9
RHB 787 Teaching Apprenticeship In Rehabilitation Sciences	2

Research Apprenticeship

A research apprenticeship is required for students without prior research experience but may be taken by all students.

RHB 789 Research Apprenticeship In Rehabilitation Sciences	1-4
RHB 769 Residence Credit for the Doctoral Degree	18

For Additional Information, contact:
Director of Graduate Studies
Rehabilitation Sciences Doctoral Program
1030 South Broadway, Suite 5
Lexington, KY 40504-2605

GRADUATE COURSES

RHB 701 REHABILITATION THEORIES AND APPLICATION THROUGH THE LIFE SPAN ..... (3)
RHB 702 REHABILITATION SERVICES IN HEALTH CARE SYSTEMS AND DELIVERY ..... (3)
RHB 740 PEDIATRIC ASSESSMENT: NEONATES TO ADOLESCENTS ..... (3)
RHB 742 INTERVENTION STRATEGIES: NEONATES TO ADOLESCENTS . (3)
RHB 744 ADVANCED TOPICS IN MOTOR DEVELOPMENT ..... (3)
RHB 749 DISSERTATION RESEARCH IN REHABILITATION SCIENCES ..... (0)
RHB 750 AGING AND ADULT NEUROLOGICAL DISORDERS: ASSESSMENT ..... (3)
RHB 752 AGING AND ADULT NEUROLOGICAL DISORDERS: INTERVENTION ..... (3)
RHB 760 ASSESSMENT OF MOVEMENT DYSFUNCTION ..... (3)
RHB 762 TREATMENT OF MOVEMENT DYSFUNCTION ..... (3)
RHB 769 RESIDENCE CREDIT FOR THE DOCTORAL DEGREE ..... (0-9)
RHB 770 PROFESSIONAL SEMINAR IN REHABILITATION SCIENCES ..... (1)
RHB 787 TEACHING APPRENTICESHIP IN REHABILITATION SCIENCES (1-4)
RHB 788 INDEPENDENT STUDY IN REHABILITATION SCIENCES ..... (1-3)
RHB 789 RESEARCH APPRENTICESHIP IN REHABILITATION SCIENCES (1-4)

CD 671 PHONOLOGICAL DEVELOPMENT AND DISORDERS ..... (3)
CD 706 ADVANCED AUDIOLOGICAL ISSUES IN PEDIATRICS ..... (3)
CD 708 ADVANCED AUDIOLOGICAL ISSUES IN GERIATRICS ..... (3)
CD 747 SEMINAR IN LANGUAGE DEVELOPMENT IN CHILDREN ..... (3)
CD 771 DYSPHAGIA ..... (3)
CD 772 ADVANCED SEMINAR IN APHASIA ..... (3)
CD 773 SEMINAR IN MOTOR SPEECH DISORDERS ..... (3)
CD 774 SEMINAR IN ADULT SPEECH AND LANGUAGE ..... (3)
CD 775 SEMINAR IN LITERATE LANGUAGE ..... (3)

PT 606 PHYSICAL THERAPY IN LONG TERM CARE ..... (3)
PT 705 SKELETAL MUSCLE PHYSIOLOGY AND ADAPTABILITY ..... (3)
PT 754 SEMINAR ON MOTOR CONTROL ..... (3)
PT 776 CURRENT ISSUES IN PEDIATRIC PHYSICAL THERAPY ..... (3)
PT 778 CURRENT TRENDS IN NEUROLOGICAL PHYSICAL THERAPY ..... (3)

Social Work

GRADUATE FACULTY
Full Members
Professors
Lauretta F. Byars, Surjit S. Dhooper, Kay Hoffman, David D. Royse, Martin B. Tracy, Vernon Wiehe.
Associate Professors
James J. Clark, Janet P. Ford, Elizabeth L. Rompf, Mary C. Secret, Mary Virginia Sprang, Richard D. Sutphen.
Associate Members
Professors
Dana N. Christensen, Michiel Adriaan van Zyl, Lane Veltkamp, Gale Goldberg Wood.
Associate Professors
Suzanne Midori Hanna, Ruth Nelson Paton, Nathan Sullivan.
Assistant Professors
Dan Chesire, Robin Ersing, Andrew Grogan-Kaylor, Matthew Hiller, Marlene Huff, Pat Litzelfelner, Melanie Otis, Sharon Riley, Jennifer Swanberg, Daniel P. Wulff.
Adjunct Assistant Professors
Arleen Johnson.
Emeritus Professors
Richard Brautigam, S. Zafar Hasan, John Landon, Kennard W. Wellons, Constance Wilson.

Master of Social Work

The College of Social Work offers a graduate curriculum of full-time and part-time study, leading to the Master of Social Work degree in accordance with Plan B. This program is accredited by the Council on Social Work Education. The MSW degree is designed to prepare students for advanced practice in the field of social work.

Admission Requirements

Students must meet the general requirements of the Graduate School, as listed elsewhere in this Bulletin, as well as other specific requirements of the College of Social Work for the Master of Social Work degree as indicated below.

1. Applicants who do not qualify for advanced standing must earn 60 hours of credit with a grade-point average of B or above. Fifty-four of these credits must be in the required social work courses for the Family/Community Concentration and students complete six hours of electives. Fifty-seven credits in required social work courses are needed for the Mental Health Concentration and students complete three hours of electives.
   Minimum academic requirements for admission to the 60-hour program are: baccalaureate degree from an accredited institution of higher learning with a grade point average of 3.0, a grade point average of 3.0 on all graduate work attempted, and submission of official scores on the Graduate Record Examination (GRE). Applicants with less than a 3.0 UGPA will be placed in a "Waiting List" pool where the minimum GPA requirement for admission is the Graduate School's 2.75 GPA. Only a limited number of applicants will be admitted from this pool.
   All applicants must complete the College's application form, the Graduate School's application form, submit transcripts from all colleges or universities attended, three letters of recommendation, as well as autobiographical and values statements.
2. Advanced standing of 22 credit hours may be granted in the Master of Social Work program to graduates of social work programs accredited by the Council on Social Work Education who earned:

   a) an overall 3.0 GPA
   b) a 3.5 GPA in their social work major
   c) a minimum GRE score of 800 (Verbal plus Quantitative).
   d) Additionally, some work experience is preferred.

Degree Requirements

All MSW students must complete the final comprehensive examination. This examination consists of an intensive written review of the student's educational program to determine the breadth and depth of knowledge acquired for professional practice.

Doctor of Philosophy

The College offers a program leading to a Ph.D. degree through the Joint UK-UofL Ph.D. in Social Work Program which draws upon the academic resources of the University of Kentucky and the University of Louisville and is offered at both locations. This program is nationally unique and innovative in the incorporation of technology for fostering joint administrative and instructional activities.

A joint committee approves selection of students for the program; qualifying exams and dissertation committees are made up of professors from both universities.

The program consists of a minimum of 44 credits of post-master's course work plus 18 hours of dissertation research. Students are required to complete a core curriculum of 26 hours and to pass the Preliminary Exam. Students work on an individualized plan of study of 15 credit hours that includes scholarly study of an area of social work practice or research (9 credit hours) and pertinent research and teaching practica (6 credit hours). These courses assist the student in developing a dissertation research plan. Students are also required to complete a course on teaching (3 credit hours). After meeting these requirements, students take the Qualifying Examination which consists of a defense of the dissertation proposal. After successfully passing the Qualifying Exam, 18 hours of dissertation research and a dissertation must be completed.

The major aim of the program is to produce scholars with skills to expand the base of tested knowledge that can guide the profession of social work in addressing major social problems as well as to meet the challenges facing the doctoral level researcher, educator, and practitioner. The program emphasizes theory development and research.

Core Curriculum (26 credit hours)

Theory Development in the Social Work Profession	(3)
Advanced Analysis of Social Welfare Problems	(3)
Human Behavior & Change Theories	(3)
Ethics, Social Work & Society	(3)
Social Work Research I	(3)
Social Work Research II	(3)
Statistics (e.g., STA 570)	(3-4)
Statistics for Social Work II	(3)
Professional Seminar I	(1)
Professional Seminar II	(1)

Preliminary Examination

Individualized Plan of Study (15 credit hours)

Course work in an area of scholarly study	(9)
Research/Teaching Practica (3 hrs. must be in research)	(6)
Course in Teaching/Adult Education	(3)
Qualifying Exam	

Dissertation Research (18)

Admission Requirements

Applicants must have career objectives consistent with the social work profession and demonstrate strong potential to complete a vigorous academic program as evidenced in the following:

- a master's degree in social work from a program accredited by or judged to be equivalent by CSWE;
- at least two years' post-master's full-time, paid experience in social work preferred;
- an undergraduate grade point average (GPA) of 3.0 on a 4.0 scale and a graduate GPA of 3.5;
- official transcripts from each college/university attended;
- Graduate Record Examination (GRE) test scores of 1,000 when verbal and quantitative sections are summed;
- three letters of reference (two academic and one from employer)
- a writing sample or publication
- an autobiography that describes career and research interests and the rationale for pursuing a doctoral degree.

GRADUATE COURSES

SW 505 CHILD WELFARE SERVICES ..... (2-3)
SW 510 MENTAL HEALTH KNOWLEDGE FOR THE SOCIAL PROFESSIONS ..... (2-3)
SW 513 INTEGRATED SERVICES FOR THE HANDICAPPED ..... (3)
SW 514 ALCOHOLISM AND PROBLEM DRINKING ..... (2-3)
SW 515 MEDICAL AND PSYCHOSOCIAL ASPECTS OF DISABILITIES I (SAME AS RC 515) ..... (3)
SW 516 MEDICAL AND PSYCHOSOCIAL ASPECTS OF DISABILITIES II (SAME AS RC 516) ..... (3)
SW 523 SOCIAL PERSPECTIVES ON RACISM AND ETHNIC PREJUDICES IN AMERICA ..... (2-3)
SW 560 SOCIAL WORK PRACTICE IN JUVENILE JUSTICE ..... (3)
SW 571 SOCIAL WORK AND THE LAW ..... (3)
SW 580 TOPICAL SEMINAR IN SOCIAL WORK ..... (2-4)
SW 600 SOCIAL WORK PRACTICE I ..... (3)
SW 601 SOCIAL WORK PRACTICE II ..... (3)
SW 603 SOCIAL WORK PRACTICE WITH CHILDREN AND YOUTH ..... (2)
SW 605 SOCIAL WORK PRACTICE IN HEALTH SERVICES ..... (2)
SW 607 SOCIAL WORK PRACTICE WITH FAMILIES ..... (2)
SW 608 INTRO TO MSW PRACTICE ..... (2)
SW 609 CLINICAL SOCIAL WORK PRACTICE ..... (2)
SW 610 SOCIAL SERVICES IN BLACK COMMUNITIES ..... (3)
SW 611 SOCIAL WORK PRACTICE IN MENTAL HEALTH ..... (2-3)
SW 612 SEMINAR ON SOCIAL WORK PRACTICE WITH WOMEN ..... (2-3)
SW 613 URBAN ECOLOGY AND AGING ..... (2-3)
SW 614 SOCIAL WORK PRACTICE WITH PEOPLE WITH AIDS ..... (2-3)
SW 616 SOCIAL WORK PRACTICE IN SCHOOL SETTINGS ..... (2-3)
SW 617 FAMILY VIOLENCE: SOCIAL WORK INTERVENTIONS ..... (2-3)
SW 618 SOCIAL WORK PRACTICE WITH GAY AND LESBIAN PEOPLE .... (2-3)
SW 620 HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT ..... (3)
SW 623 SOCIAL WORK PRACTICE WITH GROUPS ..... (2-3)
SW 624 PERSPECTIVES ON HUMAN SEXUALITY (SAME AS FAM 624) ..... (3)
SW 625 INTRODUCTION TO THE SOCIAL WORK PROFESSION ..... (3)
SW 626 FORENSIC MENTAL HEALTH: EVALUATION AND TREATMENT (2-3)
SW 630 INTRODUCTION TO SOCIAL WELFARE POLICY AND SERVICES .. (3)
SW 634 COMPARATIVE SOCIAL WELFARE POLICIES AND PROGRAMS . (2-3)
SW 635 INTRODUCTION TO PROFESSIONAL ETHICS ..... (2)
SW 636 MANAGEMENT SKILLS ..... (3)
SW 637 TASK GROUPS IN AN ORGANIZATIONAL CONTEXT ..... (2)
SW 640 FOUNDATION PRACTICUM ..... (4)
SW 641 GRADUATE EDUCATIONAL PRACTICUM II ..... (5)
SW 642 PSYCHOLOGICAL ASPECTS OF HUMAN AGING ..... (3)
SW 643 BIOMEDICAL ASPECTS OF AGING (SAME AS GRN 643) ..... (3)
SW 650 RESEARCH METHODS IN SOCIAL WORK ..... (3)
SW 652 PUBLIC POLICY AND AGING ..... (2-3)
SW 680 SPECIAL PROBLEMS IN SOCIAL WORK PRACTICE ..... (2-6)
SW 700 ADVNCED GENERALIST SOCIAL WORK PRACTICE I ..... (3)
SW 701 ADVANCED GENERALIST SOCIAL WORK PRACTICE II ..... (2)
SW 702 SUBSTANCE MISUSE, VIOLENCE AND RISK MANAGEMENT ..... (3)
SW 704 CHILD ASSESSMENT AND TREATMENT ..... (3)
SW 720 SOCIAL WORK PERSPECTIVES ON HUMAN AND CULTURAL DIVERSITY ..... (2)
SW 722 PSYCHOPATHOLOGY FOR SOCIAL WORK PRACTICE ..... (3)
SW 727 SOCIAL WORK ASSESSMENT AND INTERVENTION IN FAMILY PROBLEMS ..... (3)
SW 730 MENTAL HEALTH POLICY ..... (3)
SW 731 COMMUNITY AND FAMILY POLICY ..... (3)
SW 735 INTEGRATIVE SEMINAR ..... (2)
SW 736 ORGANIZATION AND MANAGEMENT METHODS FOR SOCIAL WORKERS ..... (2-3)
SW 740 ADVANCED GRADUATE EDUCATIONAL PRACTICUM I ..... (5)
SW 741 ADVANCED GRADUATE EDUCATIONAL PRACTICUM II ..... (5)
SW 749 DISSERTATION RESEARCH ..... (0)
SW 750 RESEARCH DESIGN AND IMPLEMENTATION IN SOCIAL WORK PRACTICE I ..... (2)
SW 751 RESEARCH DESIGN AND IMPLEMENTATION IN SOCIAL WORK PRACTICE II ..... (2)
SW 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
SW 770 DOCTORAL RESEARCH I ..... (3)
SW 771 DOCTORAL RESEARCH II ..... (3)
SW 773 DOCTORAL STATISTICS II ..... (3)
SW 780 INDEPENDENT WORK ..... (1-6)
SW 781 THEORY DEVELOPMENT IN THE SOCIAL WORK PROFESSION ... (3)
SW 782 ADVANCED ANALYSIS OF SOCIAL PROBLEMS, POLICY AND PRACTICE ..... (3)
SW 783 HUMAN BEHAVIOR AND CHANGE THEORIES IN SOCIAL WORK PRACTICE ..... (3)
SW 784 ETHICS, SOCIAL WORK AND SOCIETY ..... (3)
SW 785 PROSEMINAR IN SOCIAL WORK RESEARCH ..... (1)
SW 786 DOCTORAL RESEARCH PRACTICUM ..... (3-6)
SW 787 DOCTORAL TEACHING PRACTICUM ..... (3-6)
SW 788 RESEARCH IN SOCIAL WORK SEMINAR ..... (3)
SW 795 ADVANCED DOCTORAL SEMINAR IN SOCIAL WORK: (SUBTITLE REQUIRED) ..... (3)

Sociology

GRADUATE FACULTY
Full Members
Professors
Dwight B. Billings, Richard Clayton, Alan J. DeYoung, Gerry Gairola, Eugene Gallagher, Lorraine E. Garkovich, Thomas Garrity, James Hougland Jr., Carl Leukefeld, Patrick Mooney, William Skinner, Doris Wilkinson.
Extension Professors
Paul Warner.
Associate Professors
Larry Burmeister, Patricia Dyk, Thomas Greider, Rosalind Harris, Laurie Hatch, Scott Hunt, Thomas Janoski, Pamela W. Rountree, Shaunna Scott, Rick S. Zimmerman.
Associate Members
Extension Professors
Gary L. Hansen, Richard C. Maurer.
Associate Professors
Joanna M. Badagliacco.
Assistant Professors
Brian Gran, Matthew McKeever, Graham C. Ousey, Clarence R. Talley, Keiko Tanaka.
Research Assistant Professors
Barbara D. Warner.
Extension Assistant Professors
Julie N. Zimmerman.
Emeritus Professors
Walter Abbott, Thomas R. Ford, William F.Kenkel, Philip M. Moody, Gerald Slatin, Robert Straus.

The Sociology graduate program offers graduate work leading to the Master of Arts, Master of Science in Agriculture, and Doctor of Philosophy. Both Plan A and Plan B are offered for the Master's degrees.

Graduate students pursuing the Ph.D. degree are expected to choose a major area of specialization within sociology and pursue secondary interests within sociology or a related area. Areas of specialization in sociology currently stressed are: Crime, Law, and Deviance; Medical Sociology; Rural Sociology; Social Inequalities; and Work, Organizations, and Social Change. While core seminars in these specialities are offered, individual program flexibility is maintained so that a student's own interests may develop. In addition to passing the qualifying examinations in their specialization, doctoral students must demonstrate competence in theory and methods.

To aid in financing graduate education, a number of assistantships are available to qualified students. Outstanding students may compete for fellowships.

Sociologists at the University of Kentucky carry on a substantial

variety of research projects, consultative activities, extension education programs and community services. Specialized experience and training are available to graduate students in rural sociology at the Agriculture Experiment Station and opportunities for applied sociology experience are available in the Cooperative Extension Service.

Opportunities for multidisciplinary work exist in conjunction with Centers and programs such as the Appalachian Center, the Center on Aging, the Center for Prevention Research, the Center on Drug and Alcohol Research, the Women's Studies Program, and the African American Studies Program. The Department of Behavioral Science, College of Medicine, includes sociologists on its staff and conducts research and other sociological activities. Sociology graduate students with appropriate interests and training are eligible for assistantships and other appointments in these units.

Admission Requirements

A minimum combined score of 1500 on the aptitude (verbal, quantitative, and analytical) section of the Graduate Record Exam (GRE) is expected. The following additional materials are required to apply for admission to the graduate program in Sociology, and should be sent directly to the Director of Graduate Studies, Department of Sociology, 1515 Patterson Office Tower, University of Kentucky, Lexington, KY 40506-0027:

- A statement of goals and reasons for pursuing an advanced degree in sociology. It is helpful if applicants also address the field(s) of interest within sociology they may wish to pursue in their graduate studies.
- A sample of writing, preferably in the form of a term paper, an extensive essay, or a draft of a senior thesis. If the applicant has completed a master's degree, she or he may submit one or two chapters from the master's thesis. Please do not submit a copy of the entire master's thesis.
- Three letters of recommendation. The recommendation form is available on the Sociology Department's Web site.
- Application form for fellowships and assistantships, if the applicant wishes to be considered for a teaching assistantship, research assistantship, traineeship, or fellowship. This application form is available on the Sociology Department's Web site: <www.uky.edu/AS/Sociology/welcome.html>.

GRADUATE COURSES

SOC 442G SOCIOLOGY OF WORK AND OCCUPATIONS ..... (3)
SOC 451G FOUNDATIONS OF SOCIOLOGICAL THEORY ..... (3)
SOC 452G CONTEMPORARY SOCIAL THEORY ..... (3)
SOC 501 POPULATION ANALYSIS ..... (3)
SOC 509 THE U.S. FAMILY IN HISTORICAL PERSPECTIVE (SAME AS FAM 509/HIS 596) ..... (3)
SOC 517 RURAL SOCIOLOGY ..... (3)
SOC 527 SOCIETY AND HEALTH (SAME AS BSC 527) ..... (3)
SOC 533 SOCIAL ORGANIZATION ..... (3)
SOC 534 THE SOUTHERN APPALACHIANS: A SOCIOLOGICAL INTERPRETATION (SAME AS ANT 534) ..... (3)
SOC 535 STUDIES IN SOCIAL INEQUALITIES (SUBTITLE REQUIRED) ..... (3)
SOC 542 HUMAN RELATIONS IN ADMINISTRATION OF ORGANIZATIONS ..... (3)
SOC 546 SOCIAL FACTORS IN MENTAL HEALTH (SAME AS BSC 546) ..... (3)
SOC 547 SOCIAL AND PSYCHOLOGICAL ASPECTS OF APPAREL (SAME AS DMT 547) ..... (3)
SOC 555 GEOGRAPHIC INFORMATION SYSTEMS AND LANDSCAPE ANALYSIS (SAME AS LA 855/NRC 555) ..... (3)
SOC 556 ADVANCED GEOGRAPHIC INFORMATION SYSTEMS AND LANDSCAPE ANALYSIS (SAME AS LA 956/NRC 556) ..... (3)
SOC 565 SPECIAL PROBLEMS IN SOCIOLOGY ..... (1-3)
SOC 603 SEMINAR IN TEACHING SOCIOLOGY ..... (3)
SOC 610 PROSEMINAR IN COMPLEX ORGANIZATION ..... (3)
SOC 622 TOPICS AND METHODS OF EVALUATION (SAME AS ANT/EPE/EDP 620) ..... (3)
SOC 630 PROSEMINAR IN DEVIANT BEHAVIOR ..... (3)
SOC 635 SEMINAR IN SOCIAL INEQUALITIES ..... (3)
SOC 636 STRATIFICATION AND MOBILITY ..... (3)
SOC 637 SOCIOCULTURAL DIMENSIONS OF ECONOMIC DEVELOPMENT (SAME AS ANT 637) ..... (3)
SOC 638 FOOD SYSTEMS AND AGRARIAN CHANGE (SAME AS ANT 638) ... (3)
SOC 640 SCIENCE, AGRICULTURE, AND DEVELOPMENT (SAME AS ANT 640) ..... (3)
SOC 641 GENDER ISSUES IN DEVELOPMENT (SAME AS ANT 641) ..... (3)
SOC 642 THE SOCIOLOGY OF WORK, OCCUPATIONS AND LABOR MARKETS ..... (3)
SOC 645 TOPICS IN POLITICAL SOCIOLOGY ..... (3)
SOC 646 SOCIAL MOVEMENTS AND SOCIAL CHANGE ..... (3)
SOC 650 CONCEPTS AND THEORIES IN SOCIOLOGY ..... (3)
SOC 651 SOCIOLOGICAL THEORY IN TRANSITION ..... (3)
SOC 661 SOCIOLOGY OF EDUCATION (SAME AS EPE 661) ..... (3)
SOC 680 METHODS OF SOCIAL INVESTIGATION ..... (4)
SOC 681 RESEARCH DESIGN AND ANALYSIS ..... (3)
SOC 682 SPECIAL TOPICS IN ADVANCED SOCIOLOGICAL METHODS .. (1-3)
SOC 691 STRUCTURE OF U.S. AGRICULTURE (SAME AS AEC 691) ..... (3)
SOC 730 SPECIAL TOPICS IN DEVIANT BEHAVIOR ..... (1-3)
SOC 735 TOPICAL SEMINAR IN SOCIAL INEQUALITIES ..... (3)
SOC 737 CULTURE, ENVIRONMENT AND DEVELOPMENT (SAME AS ANT 736) ..... (3)
SOC 748 MASTER'S THESIS RESEARCH ..... (0)
SOC 749 DISSERTATION RESEARCH ..... (0)
SOC 750 SPECIAL TOPICS IN SOCIAL CHANGE AND DEVELOPMENT ... (1-3)
SOC 751 SEMINAR IN SOCIOLOGICAL THEORY ..... (3)
SOC 752 SEMINAR IN FAMILY THEORY CONSTRUCTION (SAME AS FAM 752) ..... (3)
SOC 766 CONCEPTS IN MEDICAL SOCIOLOGY (SAME AS BSC 766) ..... (3)
SOC 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
SOC 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
SOC 772 TOPICAL SEMINAR IN SOCIOLOGY ..... (3)
SOC 773 TOPICAL SEMINAR ..... (3)
SOC 776 SEMINAR IN DEPENDENCY BEHAVIOR (SAME AS BSC/ANT/PSY 776) ..... (3)
SOC 777 SEMINAR IN MENTAL ILLNESS CONCEPTS, RESEARCH AND POLICY (SAME AS BSC 777) ..... (3)
SOC 779 TOPICAL SEMINAR IN SOCIAL PSYCHOLOGY (SAME AS PSY 779) ..... (3)
SOC 780 SPECIAL PROBLEMS IN SOCIOLOGY ..... (1-6)
SOC 785 COMPARATIVE HEALTH CARE SYSTEMS (SAME AS BSC 785) ..... (3)
SOC 790 RESEARCH IN RURAL SOCIOLOGY ..... (1-3)
SOC 792 RESEARCH IN SOCIOLOGY ..... (1-6)
SOC 797 COMMUNITY DEVELOPMENT PRACTICUM ..... (1-9)

Soil Science

GRADUATE FACULTY
Full Members
Professors
Richard I. Barnhisel, J. W. Hendrix, A.D. Karathanasis, Morgan S. Smith.
Associate Professors
Mark S. Coyne, John H. Grove, P. J. Kalisz.
Associate Members
Extension Professors
William O. Thom, Kenneth Wells.
Extension Associate Professors
Robert C. Pearce.
Adjunct Associate Professors
Frank Sikora.
Assistant Professors
Elisa M. D'Angelo, James A. Thompson.
Emeritus Professors
Robert L. Blevins, Wilbur W. Frye, Herbert F. Massey, Ronald E. Phillips, John L. Ragland, John L. Sims, Grant W. Thomas.

The Soil Science graduate program offers graduate work leading to the Doctor of Philosophy degree with areas of specialization in morphology and classification, soil chemistry, soil fertility, soil genesis, soil management, soil microbiology, soil mineralogy, and soil physics. The Soil Science faculty also participate in the interdepartmental Plant and Soil Science graduate program, which offers programs of study leading to the Master of Science degree.

Work leading to advanced degrees must conform to the general rules and regulations of the Graduate School.

Preparation for graduate work in soil science should include some course work in biology, chemistry, mathematics, and physics. Students will be expected to make up deficiencies in any of these areas early in the course of their graduate study.

GRADUATE COURSES

PLS 450G BIOGEOCHEMISTRY (SAME AS NRC 450G) ..... (3)
PLS 455G WETLAND DELINEATION (SAME AS NRC 455G) ..... (3)
PLS 456G CONSTRUCTED WETLANDS (SAME AS NRG 456G) ..... (3)
PLS 468G SOIL USE AND MANAGEMENT ..... (3)
PLS 470G FERTILIZERS AND SOIL FERTILITY ..... (3)
PLS 477G LAND TREATMENT OF WASTE (SAME AS NRC 477G) ..... (3)
PLS 501 RECLAMATION OF DISTURBED LAND ..... (3)
PLS 502 ECOLOGY OF ECONOMIC PLANTS ..... (3)
PLS 510 FORAGE MANAGEMENT AND UTILIZATION ..... (4)
PLS 515 TURF MANAGEMENT ..... (3)
PLS 556 SEED PRODUCTION AND TECHNOLOGY ..... (3)
PLS 564 FOREST SOILS (SAME AS FOR 564) ..... (3)
PLS 566 SOIL MICROBIOLOGY ..... (3)
PLS 567 METHODS IN SOIL MICROBIOLOGY ..... (1)
PLS 573 SOIL MORPHOLOGY AND CLASSIFICATION ..... (3)
PLS 575 SOIL PHYSICS ..... (3)
PLS 576 LABORATORY IN SOIL PHYSICS ..... (1)
PLS 581 CHEMICAL ANALYSIS OF SOILS AND PLANTS ..... (4)
PLS 597 SPECIAL TOPICS IN PLANT AND SOIL SCIENCE (SUBTOPIC REQUIRED) ..... (1-3)
PLS 599 SPECIAL PROBLEMS IN PLANT AND SOILS SCIENCE ..... (1-4)
PLS 601 SPECIAL TOPICS IN MOLECULAR AND CELLULAR GENETICS (SAME AS BIO/BCH/MI/PPA 601) ..... (1)
PLS 602 PRINCIPLES OF YIELD PHYSIOLOGY ..... (3)
PLS 619 CYTOGENETICS (SAME AS BIO 619) ..... (4)
PLS 620 PLANT MOLECULAR BIOLOGY (SAME AS BIO 620) ..... (3)
PLS 622 PHYSIOLOGY OF PLANTS I (SAME AS FOR/BIO 622) ..... (3)
PLS 623 PHYSIOLOGY OF PLANTS II (SAME AS FOR/BIO 623) ..... (3)
PLS 650 SOIL-PLANT RELATIONSHIPS ..... (3)
PLS 657 SEED BIOLOGY ..... (3)
PLS 658 ADVANCED WEED SCIENCE ..... (4)
PLS 660 ADVANCED SOIL BIOLOGY ..... (2)
PLS 664 PLANT BREEDING I ..... (3)
PLS 671 SOIL CHEMISTRY ..... (4)
PLS 676 QUANTITATIVE INHERITANCE IN PLANT POPULATIONS (SAME AS STA 676) ..... (3)
PLS 697 SPECIAL TOPICS IN PLANT AND SOIL SCIENCE (SUBTITLE REQUIRED) ..... (1-3)
PLS 712 ADVANCED SOIL FERTILITY ..... (4)
PLS 721 PEDOGENIC PROCESSES ..... (4)
PLS 741 CLAY MINERALOGY (SAME AS GLY 741) ..... (3)
PLS 748 MASTER'S THESIS RESEARCH ..... (0)
PLS 749 DISSERTATION RESEARCH ..... (0)
PLS 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
PLS 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
PLS 772 PLANT AND SOIL SCIENCE SEMINAR ..... (1)
PLS 773 SEMINAR IN PLANT PHYSIOLOGY (SAME AS BIO 773) ..... (1)
PLS 799 RESEARCH IN PLANT AND SOIL SCIENCE ..... (1-4)

Spanish

GRADUATE FACULTY

Full Members

Professors

Brian Dendle, Enrico Santi, Edward Stanton.

Associate Professors

Anibal Biglieri, Susan Carvalho-Chumney, Nivia Montenegro, Diana Niebylski, Sherry Velasco.

Associate Members

Assistant Professors

Yanira Paz.

Emeritus Professors

John J. Allen, Michael H. Impey, Joseph Jones, Margaret Jones, John Lihani, Daniel Reedy, Gerardo Sáenz.

The Department of Hispanic Studies offers the Master of Arts and the Doctor of Philosophy degrees. Graduate Record Examination scores are required for admission. Supervised teaching experience within the department is a requirement for both the master's and doctoral degrees.

Master of Arts

Admission Requirements

Attainment in Spanish equivalent to that required for the undergraduate major in Spanish at the University of Kentucky.

Degree Requirements

Standard Graduate School requirements; reading knowledge of a second foreign language; successful completion of SPI 603 (Critical and Historical Perspectives on Medieval, Renaissance and Golden Age Literature), SPI 604 (Critical and Historical Perspectives on Modern Spanish Literature), SPI 605 (Critical and Historical Perspectives on Spanish American Literature); 9 credits in Hispanic Civilization and Linguistics; 12 hours of course work (Plan B) or 6 hours of course work and an acceptable thesis (Plan A), which may be selected according to a choice of options in either Hispanic Literature or Hispanic Civilization and Linguistics. The M.A. written and oral examination is designed to test the candidate's knowledge of the following areas: 1) Hispanic civilization and literary history, 2) the M.A. reading list, and 3) the candidate's composite course work. SPI 502 (Survey of the Spanish Language) is recommended but not required. For individuals who contemplate further work leading to the doctorate, SPI 651 (Bibliography and Methods of Research) is recommended but not required.

Doctor of Philosophy

Admission Requirements

In addition to the Graduate School requirements for admission listed elsewhere in this Bulletin, presentation of an acceptable writing sample and demonstration of Spanish language proficiency are required of applicants.

Degree Requirements

Standard Graduate School requirements; SPI 502 (Survey of the Spanish Language), SPI 601 (Old Spanish), SPI 651 (Bibliography and Methods of Research) are recommended but not required; a reading knowledge of two languages other than Spanish and English is required; successful completion of written and oral examinations is required for qualification for candidacy for the doctorate (see remarks below); presentation of acceptable dissertation.

Candidates are to devise a program of studies and research around the major area of specialization in which they expect to write the dissertation. A minor area and two allied fields must be selected as support divisions for the major area. Minimum graduate credit expectations are 24 credit hours in the combined Major and Minor areas and 15 credit hours in the Allied Fields; 6 graduate credits in Hispanic Linguistics and in each of the two remaining areas not chosen as Major, Minor, or Allied Fields. Two seminars (one in the major field) are required.

Specialization by area: 1) Medieval Spanish Literature; 2) Renaissance and Golden Age Spanish Literature; 3) Eighteenth and Nineteenth Century Spanish Literature; 4) Twentieth Century Spanish Literature; 5) Colonial and Nineteenth Century Spanish American Literature; 6) Twentieth Century Spanish American Literature.

Specialization by genre or Hispanic Linguistics: 1) Hispanic poetry; 2) Hispanic prose fiction; 3) Hispanic drama; 4) Hispanic Linguistics. (The term Hispanic includes both Peninsular and Spanish American Studies.)

The qualifying examination consists of a three-hour written examination over a research area in the special field with specific concentration on the topical area of the dissertation, and two six-hour examinations. The first will cover all aspects of the major and minor areas; the second will cover aspects of the major and minor areas as well as questions on the allied fields. The two-hour oral will cover the dissertation area, the major and minor areas, and the allied fields.

GRADUATE COURSES

SPI 411G ADVANCED SPANISH LANGUAGE ..... (3)
SPI 438G LITERATURE OF SOCIAL PROTEST IN SPANISH AMERICA ..... (3)
SPI 443G SURVEY OF ITALIAN LITERATURE I ..... (3)
SPI 444G SURVEY OF ITALIAN LITERATURE II ..... (3)
SPI 500 STUDIES IN HISPANIC LITERATURE, LANGUAGE AND CULTURE (SUBTITLE REQUIRED) ..... (3)
SPI 501 SPANISH PHONETICS, PRONUNCIATION AND PHONEMICS ..... (3)
SPI 502 SURVEY OF THE SPANISH LANGUAGE ..... (3)
SPI 504 ADVANCED SPANISH GRAMMAR AND COMPOSITION ..... (3)
SPI 506 INTRODUCTION TO COMPARATIVE SPANISH, PORTUGUESE, AND ITALIAN LINGUISTICS ..... (3)
SPI 512 SPANISH CULTURE THROUGH THE 17TH CENTURY ..... (3)
SPI 513 MODERN SPANISH CULTURE ..... (3)
SPI 514 STUDIES IN SPANISH AMERICAN CULTURE ..... (3)
SPI 518 HISPANIC FILM ..... (3)
SPI 522 SURVEY OF THE COMEDIA I ..... (3)
SPI 532 THE GENERATION OF 1898 ..... (3)
SPI 541 SPANISH AMERICAN SHORT STORY ..... (3)
SPI 551 TUTORIAL SEMINAR FOR MAJORS IN SPANISH ..... (1)
SPI 553 TEACHING OF SPANISH ..... (3)
SPI 563 STUDIES IN DANTE ..... (3)
SPI 566 LITERATURE OF THE ITALIAN RENAISSANCE ..... (3)
SPI 569 TOPICS IN ITALIAN LANGUAGE, LITERATURE, OR CULTURE (SUBTITLE REQUIRED) ..... (3)
SPI 603 CRITICAL AND HISTORICAL PERSPECTIVES ON MEDIEVAL, RENAISSANCE AND GOLDEN AGE SPANISH LITERATURE ..... (3)
SPI 604 CRITICAL AND HISTORICAL PERSPECTIVES ON MODERN SPANISH LITERATURE ..... (3)
SPI 605 CRITICAL AND HISTORICAL PERSPECTIVES ON SPANISH AMERICAN LITERATURE ..... (3)
SPI 611 MEDIEVAL SPANISH LITERATURE I ..... (3)
SPI 612 MEDIEVAL SPANISH LITERATURE II ..... (3)
SPI 613 SPANISH EPIC AND LONG NARRATIVE POETRY ..... (3)
SPI 615 SPANISH POETRY OF THE THIRTEENTH, FOURTEENTH, AND FIFTEENTH CENTURIES ..... (3)
SPI 616 EARLY BRIEF NARRATIVE-THIRTEENTH, FOURTEENTH, FIFTEENTH CENTURIES ..... (3)
SPI 617 SPANISH MEDIEVAL AND RENAISSANCE DRAMA ..... (3)
SPI 622 CERVANTES I ..... (3)
SPI 624 THE SPANISH NOVEL FROM CERVANTES TO ROMANTICISM ..... (3)
SPI 625 MYSTIC AND ASCETIC WRITERS OF THE SIXTEENTH AND SEVENTEENTH CENTURIES ..... (3)
SPI 626 LOPE DE VEGA AND TIRSO DE MOLINA ..... (3)
SPI 628 THE THEATRE OF CALDERON DE LA BARCA ..... (3)
SPI 629 SPANISH POETRY OF THE SIXTEENTH AND SEVENTEENTH CENTURIES ..... (3)
SPI 631 THE ROMANTIC MOVEMENT IN SPAIN ..... (3)
SPI 632 SPANISH DRAMA FROM THE GENERATION OF 1898 TO THE PRESENT ..... (3)
SPI 633 THE SPANISH NOVEL OF THE NINETEENTH CENTURY ..... (3)
SPI 634 PROSE FICTION FROM THE GENERATION OF 1898 TO THE PRESENT ..... (3)
SPI 636 SPANISH POETRY FROM THE EIGHTEENTH CENTURY THROUGH THE GENERATION OF 1898 ..... (3)
SPI 637 SPANISH POETRY FROM THE GENERATION OF 1927 TO THE PRESENT ..... (3)
SPI 641 SPANISH AMERICAN DRAMA ..... (3)
SPI 642 SPANISH AMERICAN POETRY: COLONIAL PERIOD TO INDEPENDENCE ..... (3)
SPI 643 SPANISH AMERICAN POETRY: 1800-1910 ..... (3)
SPI 644 SPANISH AMERICAN POETRY: 1910 TO PRESENT ..... (3)
SPI 645 SPANISH AMERICAN NOVEL: 1800-1910 ..... (3)
SPI 646 SPANISH AMERICAN NOVEL: 1910-1940 ..... (3)
SPI 647 SPANISH AMERICAN NOVEL: 1940 TO PRESENT ..... (3)
SPI 648 LITERARY CURRENTS IN CONTEMPORARY SPANISH AMERICAN FICTION ..... (3)
SPI 649 SPANISH AMERICAN ESSAY ..... (3)
SPI 651 BIBLIOGRAPHY AND METHODS OF RESEARCH ..... (3)
SPI 748 MASTER'S THESIS RESEARCH ..... (0)
SPI 749 DISSERTATION RESEARCH ..... (0)
SPI 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
SPI 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
SPI 770 SEMINAR IN SPANISH STUDIES ..... (3)
SPI 772 SEMINAR IN MEDIEVAL SPANISH LITERATURE ..... (3)
SPI 775 SEMINAR IN MODERN SPANISH LITERATURE ..... (3)
SPI 776 SEMINAR IN SPANISH AMERICAN LITERATURE ..... (3)
SPI 782 SPECIAL STUDIES IN SPANISH ..... (1-3)

Special Education

GRADUATE FACULTY
Full Members
Professors
William H. Berdine, Belva C. Collins, Ted Hasselbring, C. Michael Nelson, John W. Schuster, Deborah Bott Slaton.
Associate Professors
Donald P. Cross, Mary Louise Hemmeter.
Associate Members
Associate Professors
Katherine McCormick.
Adjunct Associate Professors
Harold Kleinert.
Assistant Professors
Kristine Jolivette, Elizabeth A. Lahm, Jackie Sampers, Terrance Scott.
Research Assistant Professors
Margaret Bausch.
Emeritus Professors
Edward Blackhurst, Melton Martinson.

Students may enroll for either degree or certification graduate programs in special education. Programs not leading to a degree are designed primarily for those who are seeking Kentucky Provisional, Rank II or Rank I Teacher Certification at the graduate level in the following certification areas:

1. Learning and Behavior Disorders
2. Moderate/Severe Disabilities
3. Director of Special Education
4. Interdisciplinary Early Childhood Special Education

Advanced programs of study are available in the following areas:

1. Early Childhood Special Education
2. Learning and Behavior Disorders
3. Emotional and Behavioral Disorders
4. Moderate/Severe Disabilities
5. Assistive Technology in Special Education

The degree programs that are offered lead to the Master of Science in Education, Specialist in Education and Doctor of Education degrees. Within the framework of College and University requirements, all advanced graduate degree programs are individually planned. This flexibility makes it possible to structure an appropriate program for each student, based upon previous background and career aspirations. Following are brief descriptions of the various graduate degree programs.

Minimum hours for the Master of Science in Education degree are distributed as follows:

Department of Special Education and support areas in College	30
Course work outside program area of emphasis	6
	Total 36

It should be noted that these are minimum requirements. Program deficiencies may result in programs of study that exceed the minimum. **The Director of Graduate Studies should be contacted to obtain the specific number of courses required for each program of study.**

At least half of the required semester hours must be earned in courses at the 600-700 level (excluding practica, independent study, and theses hours). All students also are required to take the following courses: Survey of Special Education, Applied Behavioral Analysis, Methods for Teaching Students with Disabilities, Single Subject Research Design, an advanced curriculum course, an advanced practicum, and 15 hours in their respective program areas. In addition, a thesis is required of all Master of Science in Education students in the Department of Special Education.

Students entering without a teaching certificate and who plan to receive an M.S. degree and teach in a Special Education certificate area must meet certificate program deficiencies, including certification requirements, as outlined by their adviser, in addition to completing the degree requirements listed above. Depending on their program of studies, students may obtain Rank II or Rank I certification concurrently with their master's degrees.

General requirements for the Specialist in Education (Ed.S.) degree have been described in a previous section of this Bulletin. Ed.S. programs are individually planned for in-depth study in an area of special education and require a research project and written product for completion.

The Doctor of Education (Ed.D.) program is designed to prepare leadership personnel for the field of special education. Primary emphasis is placed upon training persons for positions in higher education personnel preparation, technology applications in special education programs, and research in special education. Within the context of personnel preparation in special education, various program areas of emphasis can be planned. The requirements for this program are described in the Doctor of Education section of the Bulletin.

Admission Requirements

Department standards for admission to graduate work in special education are similar to those of the Graduate School. However, there are some additional requirements. All potential graduate students within the department must complete a departmental application. This application requires each student to submit (a) transcripts from each previously attended institution of higher education to the department, (b) letters of recommendation, and (c) an outline of professional goals and objectives. In addition to the above, students applying for admission to the department's doctoral program must (a) submit a sample of professional writing, (b) submit an autobiographical statement, and (c) interview with the departmental faculty. These interviews generally occur on campus but can be arranged through phone or electronic means if necessary. It should be noted that applicants who are pursuing a degree with a teaching certificate must be admitted to the College of Education's Teacher Education Program. Requirements for admission to this program vary by discipline. Potential students should contact the department's Director of Graduate Studies for additional information.

Financial assistance is available, on a competitive basis, to graduate students in special education. Students may apply for graduate assistantships at all levels of graduate study. Scholarships and assistantships are awarded from funds granted to the Department by the Office of Special Education and Rehabilitation Services, U.S. Department of Education.

GRADUATE COURSES

EDS 510 EARLY CHILDHOOD SPECIAL EDUCATION ..... (3)
EDS 511 SPEECH-LANGUAGE DEVELOPMENT AND DISORDERS FOR THE SEVERELY HANDICAPPED (SAME AS CD 511) ..... (3)
EDS 512 SPEECH-LANGUAGE DEVELOPMENT AND DISORDERS FOR THE MILDLY HANDICAPPED (SAME AS CD 512) ..... (3)
EDS 513 LEGAL ISSUES IN SPECIAL EDUCATION ..... (3)
EDS 514 INSTRUCTIONAL TECHNOLOGY IN SPECIAL EDUCATION ..... (3)
EDS 516 PRINCIPLES OF BEHAVIOR MANAGEMENT AND INSTRUCTION (3)
EDS 517 ASSISTIVE TECHNOLOGY IN SPECIAL EDUCATION ..... (3)
EDS 528 EDUCATIONAL ASSESSMENT FOR STUDENTS WITH MILD DISABILITIES ..... (3)
EDS 529 EDUCATIONAL PROGRAMMING FOR STUDENTS WITH MILD DISABILITIES ..... (3)
EDS 530 MODERATE AND SEVERE DISABILITIES ..... (3)
EDS 546 TRANSDISCIPLINARY SERVICES FOR STUDENTS WITH MULTIPLE DISABILITIES (SAME AS RC 546) ..... (3)
EDS 547 COLLABORATION AND INCLUSION IN SCHOOL AND COMMUNITY SETTINGS (SAME AS RC 547) ..... (3)
EDS 548 CURRICULUM DESIGN FOR STUDENTS WITH MODERATE AND SEVERE DISABILITIES ..... (3)
EDS 549 METHODS FOR STUDENTS WITH MODERATE AND SEVERE DISABILITIES ..... (4)
EDS 550 STUDENT TEACHING: MODERATE/SEVERE DISABILITIES ... (6-12)
EDS 558 ISSUES IN SPECIAL EDUCATION (SAME AS RC 558) ..... (1-9)
EDS 570 EMOTIONAL AND BEHAVIORAL DISABILITIES ..... (3)
EDS 589 FIELD EXPERIENCES: MILD DISABILITIES ..... (3)
EDS 600 SURVEY OF SPECIAL EDUCATION ..... (3)
EDS 601 APPLIED BEHAVIORAL ANALYSIS ..... (3)
EDS 602 ADMINISTRATION AND PROGRAMS IN SPECIAL EDUCATION ... (3)
EDS 603 BEHAVIORAL CONSULTATION IN THE SCHOOLS ..... (3)
EDS 610 ADVANCED EDUCATIONAL ASSESSMENT FOR STUDENTS WITH MILD DISABILITIES ..... (3)
EDS 611 ADVANCED EDUCATIONAL PROGRAMMING FOR STUDENTS WITH LEARNING DISABILITIES ..... (3)
EDS 612 ADVANCED PRACTICUM: SPECIAL EDUCATION ..... (1-6)
EDS 616 VOCATIONAL PROGRAMMING FOR HANDICAPPED YOUTH AND ADULTS ..... (3)
EDS 620 INSTRUCTIONAL PROGRAMMING AND ASSESSMENT IN EARLY CHILDHOOD SPECIAL EDUCATION ..... (3)
EDS 621 ISSUES IN EARLY CHILDHOOD EDUCATION OF THE HANDICAPPED ..... (3)
EDS 622 THE FAMILY'S ROLE IN EARLY CHILDHOOD EDUCATION (SAME AS FAM 622) ..... (3)
EDS 623 ADVANCED PRACTICUM: EARLY CHILDHOOD SPECIAL EDUCATION ..... (3-9)
EDS 630 METHODS FOR TEACHING STUDENTS WITH DISABILITIES ..... (3)
EDS 631 PROGRAMMING FOR STUDENTS WITH MODERATE AND SEVERE DISABILITIES ..... (3)
EDS 632 ADVANCED PRACTICUM: MODERATE AND SEVERE DISABILITIES ..... (1-12)
EDS 633 SINGLE SUBJECT RESEARCH DESIGN ..... (3)
EDS 640 ASSISTIVE TEACHING ..... (3)
EDS 641 ASSISTIVE TECHNOLOGY ASSESSMENT ..... (3)
EDS 643 TELECOMMUNICATION IN SPECIAL EDUCATION AND REHABILITATION ..... (3)
EDS 645 HYPERMEDIA DEVELOPMENT FOR SPECIAL EDUCATION ..... (3)
EDS 647 SEMINAR IN SPECIAL EDUCATION TECHNOLOGY (VARIABLE TOPIC) ..... (1-3)
EDS 648 COORDINATING SPECIAL EDUCATION TECHNOLOGY PROGRAMS ..... (3)
EDS 649 ADVANCED PRACTICUM: SPECIAL EDUCATION TECHNOLOGY ..... (1-9)
EDS 701 SEMINAR FOR SPECIAL EDUCATION LEADERSHIP PERSONNEL ..... (1)
EDS 710 SEMINAR IN MILD DISABILITIES ..... (3)
EDS 711 SEMINAR IN MODERATE AND SEVERE DISABILITIES ..... (3)
EDS 712 SEMINAR IN SPECIAL EDUCATION PROFESSIONAL SERVICES .. (3)
EDS 720 SEMINAR IN SPECIAL EDUCATION TEACHER PREPARATION .... (3)
EDS 721 PRACTICUM IN SPECIAL EDUCATION PERSONNEL PREPARATION ..... (1-9)
EDS 730 SEMINAR IN SPECIAL EDUCATION ADMINISTRATION ..... (3)
EDS 731 ADVANCED PRACTICUM: SPECIAL EDUCATION ADMINISTRATION ..... (1-9)
EDS 748 MASTER'S THESIS RESEARCH ..... (0)
EDS 749 DISSERTATION RESEARCH ..... (0)
EDS 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
EDS 769 RESIDENCE CREDIT FOR THE DOCTORAL DEGREE ..... (0-12)
EDS 779 SEMINAR IN SPECIAL EDUCATION (VARIABLE TOPIC) ..... (1-3)
EDS 789 INDEPENDENT STUDY IN SPECIAL EDUCATION ..... (1-6)
EDS 799 RESEARCH TECHNIQUES IN SPECIAL EDUCATION ..... (1)

Statistics

GRADUATE MEMBERS
Full Members
Professors
Paul Cornelius, Zakkula Govindarajulu, Richard J. Kryscio, Cidambi Srinivasan.
Associate Professors
William S. Griffith, William Rayens, Richard Stockbridge, Arnold J. Stromberg, Constance Wood, Mai Zhou.
Associate Members
Associate Professors
Kert Viele.
Assistant Professors
Arnie Bathke.
Emeritus Professors
David Allen.

The Department of Statistics offers programs of study leading to the degrees of Master of Science (Plan A or B available), and Doctor of Philosophy. The M.S. degree is professionally oriented for the student who plans a career in government, business or industry. The Ph.D. program offers a broad training in both statistical theory and methods while affording options to suit the student's interests. The statistics Ph.D. is well-suited for academic, business, government and industrial positions. In addition to formal course work and research training, the advanced student has opportunities to gain valuable practical experience by participating in consulting activities under faculty supervision.

Course work is available in areas associated with statistics such as biological modelling, computer science, control theory, econometrics, mathematics and operations research.

A student intending to pursue a master's degree in statistics should have one course each in advanced calculus (equivalent of MA 432 or 471) and matrix algebra (equivalent of MA 462) for the first year's graduate courses. A graduate level course in real analysis (equivalent of MA 571) is a prerequisite for the Ph.D. core curriculum. If possible, mathematical deficiencies should be corrected during the summer prior to entering the Graduate School.

The University of Kentucky is represented on the Committee on Statistics of the Southern Regional Education Board.

Admission Requirements

Students with an undergraduate major in any of the mathematical, physical, biological, social or applied sciences are encouraged to apply.

The minimum GRE and GPA admissions requirements for the M.S. and Ph.D. programs in Statistics are the same as for the Graduate School, however, the number of admissions is limited and admissions decisions are made on a competitive basis. All M.S. applicants should have at least five semesters of calculus and a course in linear algebra. In addition, all Ph.D. applicants must have an introduction to real analysis course. Students wishing to apply for teaching assistantships and/or fellowships must have three letters of recommendation sent to: Director of Admissions, Department of Statistics, University of Kentucky, 817 Patterson Office Tower, Lexington, KY 40506-0027. Applicants wishing to be admitted directly to the Ph.D. program must have an M.S. in Statistics or the permission of the Director of Admissions.

Master's Program

The Department offers the degree of Master of Science with (Plan A) or without (Plan B) a thesis. The core curriculum expected of all master's degree students consists of the following courses:

STA 503 Introduction to Statistical Methods	4
STA 531 Theory of Probability	3
STA 532 Theory of Statistical Inference I	3
STA 601 Theory of Statistical Inference II	3
STA 603 Introduction to Linear Models and Experimental Design	4
STA 624 Applied Stochastic Processes	3

Programs of study for Plan B require a total of at least 35 semester hours, which should include the equivalent of the six courses in the core curriculum and at least 15 additional credit hours. Of these 15 credit hours, at least 6 should be from the following list of statistics courses:

STA 612 Sequential Analysis	3
STA 616 Design And Analysis of Sample Surveys	3
STA 621 Nonparametric Inference	3
STA 643 Advanced Experimental Design	3
STA 644 Advanced Linear and Nonlinear Models	3
STA 661 Multivariate Analysis I	3
STA 665 Analysis of Categorical Data	3

Programs of study for Plan A (with thesis) require a total of at least 29 semester hours, which should include the core curriculum and at least two courses from the previous list. Candidates should also satisfy the requirements that at least 18 hours for Plan B and 15 hours of non-thesis courses for Plan A must be at the 600 level or higher. The free electives courses can be selected from a variety of courses both within and outside the Department of Statistics. Before the end of the second semester, the M.S. candidate must present a proposed plan of study for approval by the Director of Graduate Studies. There are no formal minor requirements.

All master's candidates are required to take a departmental written examination on the core curriculum. These exams are normally administered in August.

Doctoral Program

The doctorate is a research degree that demonstrates independent and comprehensive scholarship and is granted on the basis of broad statistical competence and the exhibition of creative ability. There are thus two components to the doctoral program: 1) a comprehensive program of probability, statistics and related courses, and 2) in-depth research in a particular area and the preparation, under faculty supervision, of a dissertation.

The core curriculum consists of the following courses:

STA 503 Introduction to Statistical Methods	4
STA 531 Theory of Probability	3
STA 532 Theory of Statistical Inference I	3
STA 601 Theory of Statistical Inference II	3
STA 603 Introduction to Linear Models and Experimental Design	4
STA 701 Advanced Statistical Inference I	3
STA 702 Advanced Statistical Inference II	3
STA 703 Advanced Probability	3
STA 704 Advanced Probability - Stochastic Processes	3

and an additional two courses selected by the Director of Graduate Studies.

A student will normally require two years of study to complete the core requirements. Beyond the core, the student must take at least 18 credit hours at the 600-700 level of which at least 9 hours must be in statistics courses including 3 hours of STA 690 but excluding STA 692.

A student must pass the master's examination at a Ph.D. level of performance to be eligible for the doctoral qualifying examination. The qualifying examination consists of two parts: Part I is an exam designed by the student's Advisory Committee and covers areas of core plus special topics the Committee deems appropriate for the student's research area. Part II is an oral examination

administered to each student individually by the student's Advisory Committee.

When a student passes the qualifying examination the Advisory Committee, under the leadership of the student's major professor, supervises the subsequent specialized program of study that culminates in the preparation of the doctoral dissertation.

Areas of current research interest are:

a) mathematical statistics including statistical inference, categorical data analysis, nonparametric models, asymptotic theory, sequential analysis, decision theory;
b) statistical analysis and design including the design of experiments, variance components models, linear and non-linear models;
c) stochastic processes including applications of probability in biology, queueing and storage systems, reliability.

All students, master's and doctoral, will be required to take part in an internship program. This will usually consist of teaching (three or six semester hours) or an equivalent amount of work in the Statistics Consulting Laboratory or the Biostatistics Consulting Unit.

GRADUATE COURSES

STA 417G PRINCIPLES OF OPERATIONS RESEARCH II (SAME AS MA 417G) ..... (3)
STA 422G BASIC STATISTICAL THEORY II ..... (4)
STA 424G BASIC PROBABILITY AND DISTRIBUTION THEORY ..... (3)
STA 503 INTRODUCTION TO STATISTICAL METHODS ..... (4)
STA 515 MATHEMATICAL PROGRAMMING AND EXTENSIONS (SAME AS MA 515) ..... (3)
STA 524 PROBABILITY (SAME AS OR 524) ..... (3)
STA 525 INTRODUCTORY STATISTICAL INFERENCE (SAME AS OR 525) ... (3)
STA 531 THEORY OF PROBABILITY ..... (3)
STA 532 THEORY OF STATISTICAL INFERENCE I ..... (3)
STA 570 BASIC STATISTICAL ANALYSIS ..... (4)
STA 600 COMMUNICATING IN STATISTICS ..... (0)
STA 601 THEORY OF STATISTICAL INFERENCE II ..... (3)
STA 603 INTRODUCTION TO LINEAR MODELS AND EXPERIMENTAL DESIGN ..... (4)
STA 612 SEQUENTIAL ANALYSIS ..... (3)
STA 616 DESIGN AND ANALYSIS OF SAMPLE SURVEYS ..... (3)
STA 619 PROBLEMS SEMINAR IN OPERATIONS RESEARCH (SAME AS EE 619/MA 613) ..... (3)
STA 621 NONPARAMETRIC INFERENCE ..... (3)
STA 624 APPLIED STOCHASTIC PROCESSES (SAME AS OR 624) ..... (3)
STA 626 TIME SERIES ANALYSIS (SAME AS ECO 790) ..... (3)
STA 635 SURVIVABILITY AND LIFE TESTING ..... (3)
STA 641 DESIGN AND ANALYSIS FOR VARIANCE COMPONENT MODELS (3)
STA 643 ADVANCED EXPERIMENTAL DESIGN ..... (3)
STA 644 ADVANCED LINEAR AND NONLINEAR MODELS ..... (3)
STA 661 MULTIVARIATE ANALYSIS I ..... (3)
STA 665 ANALYSIS OF CATEGORICAL DATA ..... (3)
STA 671 REGRESSION AND CORRELATION ..... (2)
STA 672 DESIGN AND ANALYSIS OF EXPERIMENTS ..... (2)
STA 673 DISTRIBUTION-FREE STATISTICAL INFERENCE AND ANALYSIS OF CATEGORICAL DATA ..... (2)
STA 675 SURVEY SAMPLING ..... (2)
STA 676 QUANTITATIVE INHERITANCE IN PLANT POPULATIONS (SAME AS PLS 676) ..... (3)
STA 677 APPLIED MULTIVARIATE METHODS ..... (3)
STA 679 DESIGN AND ANALYSIS OF EXPERIMENTS II ..... (3)
STA 690 SEMINAR IN STATISTICS ..... (1)
STA 691 SPECIAL TOPICS IN THE PLANNING AND ANALYSIS OF EXPERIMENTS (SUBTITLE REQUIRED) ..... (1-3)
STA 692 STATISTICAL CONSULTING ..... (3)
STA 695 SPECIAL TOPICS IN STATISTICAL THEORY (SUBTITLE REQUIRED) ..... (1-3)
STA 701 ADVANCED STATISTICAL INFERENCE I ..... (3)
STA 702 ADVANCED STATISTICAL INFERENCE II ..... (3)
STA 703 ADVANCED PROBABILITY ..... (3)
STA 704 ADVANCED PROBABILITY-STOCHASTIC PROCESSES ..... (3)
STA 715 READINGS IN STATISTICS AND PROBABILITY (SUBTITLE REQUIRED) ..... (1-6)
STA 748 MASTER'S THESIS RESEARCH ..... (0)
STA 749 DISSERTATION RESEARCH ..... (0)
STA 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
STA 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)

Theatre

GRADUATE FACULTY
Full Members
Professors
Rhoda-Gale Pollack, James W. Rodgers.
Associate Professors
Geraldine Maschio.
Associate Members
Associate Professors
Russell A. Henderson, John R. Holloway.
Assistant Professors
Nelson Fields, Robert Haven.

Theatre lives at the moment of contact between actor and audience. This department expects its graduate students to approach that moment from several points: historical, critical, practical, theoretical and experimental. Within this framework, each candidate for a master of arts degree must complete a minimum of 30 semester hours. A maximum of six of these may be taken in allied subjects. Graduate students are encouraged to concentrate in one of the following areas: performance or design/technology.

Admission Requirements

It is assumed that a student who seeks a master's degree in the Department of Theatre will have had courses approximating those required for a B.A. degree with a major in theatre arts. If not, the student must remove the deficiency by taking (without graduate credit) courses in addition to those normally specified for the master's degree.

The department offers the master's degree according to both Plan A and Plan B.

GRADUATE COURSES

TA 516 PLAYWRITING ..... (3)
TA 524 DIALECTS FOR THE STAGE ..... (3)
TA 525 VOCAL PRODUCTION FOR THE STAGE II ..... (3)
TA 530 THEATRE DIRECTING III ..... (3)
TA 570 ADVANCED STUDIO IN DESIGN AND TECHNOLOGY ..... (3)
TA 590 PRODUCTION PRACTICUM ..... (1)
TA 591 PERFORMANCE PRACTICUM ..... (1)
TA 596 SUMMER THEATRE ..... (1-6)
TA 600 READINGS IN THEATRE ..... (3)
TA 610 CRITICAL THEORIES AND PERFORMANCE ..... (3)
TA 620 APPLIED RESEARCH IN THEATRE (SUBTITLE REQUIRED) ..... (3)
TA 625 ADVANCED STYLES OF ACTING ..... (3)
TA 650 TOPICS IN AMERICAN THEATRE (SUBTITLE REQUIRED) ..... (3)
TA 660 STUDIES IN TECHNICAL THEATRE: PRODUCTION ..... (3)
TA 661 STUDIES IN TECHNICAL THEATRE: LIGHTING ..... (3)
TA 692 STUDIES IN DIRECTING ..... (1-3)
TA 748 MASTER'S THESIS RESEARCH ..... (0)
TA 768 RESIDENCE CREDIT FOR MASTER'S DEGREE ..... (1-6)
TA 770 SEMINAR IN THEATRE ..... (3)
TA 780 INDEPENDENT STUDY IN THEATRE ..... (1-3)

Toxicology

GRADUATE FACULTY
Full Members
Professors
Wesley J. Birge, Robert Blouin, Gilbert Boissonneault, Subbarao Bondada, Geza Bruckner, Lisa Cassis, Ching K. Chow, Donald Cohen, Peter Crooks, Alan Daugherty, Linda Dwoskin, James W. Flesher, Vincent Gallicchio, Howard Glauert, Ramesh Gupta, Bernhard Hennig, Louis B. Hersh, Davy Jones, Alan Kaplan, Hartmut H. Malluche, Patrick J. McNamara, William N. O'Connor, Peter R. Oeltgen, Vivek Rangnekar, Larry Robertson, John Slevin, Charles Snow, Brett Spear, Daret St. Clair, Thomas Tobin, Mary Vore, Robert A. Yokel, Stephen Zimmer.
Adjunct Professors
Craig J. McClain.
Associate Professors
C. Gary Gairola, Edward J. Kasarskis, Joseph P. McGillis, Daniel Noonan, Brent D. Palmer, Ok-Kyong Park-Sarge, L. Creed Pettigrew, Todd D. Porter, Steven Shedlofsky, H. Peter Spielmann, Hollie Swanson, Roy A. Smith, Zhigang Wang, Peter Wedlund.

Associate Members
Associate Professors
John Hunsaker, Guo-Min Li, William Maragos, Jeff Moscow.
Assistant Professors
Isabel Mellon, Richard T. Miller, David Orren, Ginell Post.
Research Assistant Professors
Hans Lehmler.
Emeritus Professors
David M. Allen, Douglas L. Dahlman, George A. Digenis.

Toxicology is the science of poisons and their interactions with living systems. The University of Kentucky Graduate Center for Toxicology trains individuals to use the biological, physical, and mathematical sciences in the study of the causes, mechanisms, and evaluation of toxic agents as well as the sources, identification and quantitation of toxicants. The center has 10 core and fifty jointly-appointed faculty, who are drawn from several departments and colleges including Agriculture, Biological Sciences, Chemistry, Medicine, Pharmacy, Pharmacology, Preventive Medicine and Radiation Medicine. The program offers both Ph.D. and M.S. degrees in Toxicology. The Center's primary toxicologic emphases are in the areas of Environmental Toxicology, Immunotoxicology, Molecular Mechanisms of Toxicology, and Neurotoxicology with areas of special study available to students in arthropod toxins, behavioral toxicology, clinical and forensic toxicology, environmental medicine and chemistry, equine toxicology, genetic and biochemical toxicology, mechanisms of carcinogenesis, nutritional toxicology, pesticide toxicology, radiation toxicology, and reproductive toxicology.

The University of Kentucky Graduate Center for Toxicology (G.C.T.) has been in existence for more than twenty years and has awarded more than 100 graduate degrees. Many G.C.T. graduates have gone on to take important positions in academia, government and business.

The current student body consists of over thirty predoctoral fellows, and eight postdoctoral fellows. The average entering class size is seven. The Center provides National Institute of Environmental Health Sciences Pre-doctoral Fellowships, Research Challenge Trust Fund Fellowships and research assistantships. Outstanding candidates may also qualify for Academic Excellence Supplements which offer stipends over and above regular fellowship support.

The G.C.T. is located in the new Health Sciences Research Building in the Medical Center within easy walking distance of all major research units and colleges. Excellent research support facilities are available, including hybridoma, transgenic mouse, macromolecular structure, mass spectrometry, nuclear magnetic resonance, and electron microscopy facilities.

Admission Requirements

Applicants should have strong undergraduate preparation in chemistry, biology and mathematics. Applicants should be graduates of accredited colleges with an appropriate baccalaureate degree (e.g., chemistry, biological sciences, etc.), hold a minimum grade point average of 3.0 on a 4.0 scale and have a combined Graduate Record Examination score (verbal and quantitative) of 1100 or more.

Those interested should direct inquiries to:
The Graduate Center for Toxicology
University of Kentucky
306 Health Sciences Research Building
Lexington, KY 40536-0305
Telephone: (859) 257-3760
Fax: (859) 323-1059
E-mail: gctinfo@uky.edu
www.mc.uky.edu/toxicology/

GRADUATE COURSES

TOX 508 RESEARCH METHODS IN TOXICOLOGY ..... (1-3)
TOX 509 BIOCHEMICAL AND ENVIRONMENTAL TOXICOLOGY ..... (3)
TOX 560 ENVIRONMENTAL PHYSIOLOGY AND TOXICOLOGY (SAME AS BIO 560) ..... (4)
TOX 600 ETHICS IN SCIENTIFIC RESEARCH (SAME AS VS 600) ..... (1-2)
TOX 645 NEUROTOXICOLOGY ..... (2)
TOX 649 ADVANCED MOLECULAR PHARMACOLOGY (SAME AS PHA/PHR 649) ..... (2)
TOX 650 CELLULAR AND HISTOTOXICOLOGY (SAME AS VS 650) ..... (2)
TOX 663 DRUG METABOLISM AND DISPOSITION (SAME AS PHA 663) ..... (2)
TOX 670 CHEMICAL CARCINOGENESIS (SAME AS PHA 670) ..... (3)
TOX 680 MOLECULAR MECHANISMS IN TOXICOLOGY ..... (5)
TOX 690 PRACTICAL ANALYTICAL TOXICOLOGY (SAME AS VS 690) ..... (3)
TOX 748 MASTER'S THESIS RESEARCH ..... (0)
TOX 749 DISSERTATION RESEARCH ..... (0)
TOX 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
TOX 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)
TOX 770 TOXICOLOGY SEMINAR ..... (0-1)
TOX 780 SPECIAL PROBLEMS IN TOXICOLOGY ..... (2)
TOX 790 RESEARCH IN TOXICOLOGY ..... (1-12)

Veterinary Science

GRADUATE FACULTY
Full Members
Professors
George P. Allen, Ernest Bailey, Charles J. Issel, Eugene T. Lyons, William H. McCollum, Thomas W. Swerczek, John F. Timoney, Peter J. Timoney, Thomas Tobin.
Research Professors
Ernest Gus Cothran Jr..
Associate Professors
Thomas M. Chambers, Barry P. Fitzgerald, Karen J. McDowell, Roy A. Smith.
Assistant Professors
Daniel Howe.
Associate Members
Professors
James M. Donahue, Ralph Giles, Lenn R. Harrison, C.B. Hong, Kochanda B. Poonacha.
Extension Professors
David G. Powell.
Associate Professors
Robert Tramontin, Mary. L. Vickers, Neil M. Williams.
Assistant Professors
David Bolin, Roberta M. Dwyer, M.B. Petrites-Murphy.
Research Assistant Professors
Frank Cook, Kathryn Trembicki Graves, Teri Lear.
Emeritus Professors
John T. Bryans.

The Department of Veterinary Science offers a program of study and research leading to the Master of Science (Plan A only) and Doctor of Philosophy degrees. Possible areas of concentration are comparative pathology, immunogenetics, parasitology, reproductive physiology, pharmacology and toxicology, microbiology and virology. Individuals electing pathology as their area of concentration must be graduate veterinarians. Individual programs of study must conform with the general rules and regulations of the Graduate School.

Students pursuing an M.S. degree in Veterinary Science are required to take CHE 550 and CHE 552 (graduate-level chemistry) and STA 570 (graduate-level, general statistics) or demonstrate that they have previously taken equivalent courses.

A limited number of research assistantships and fellowships are available.

Admission Requirements

1) This Department's deadline for applications for Fall semester enrollment is May 16. This includes receipt of supporting material (transcripts, GRE and TOEFL scores).
2) We request that 3 letters of recommendation, and a personal essay from the applicant describing his/her career goals and

particular research interests, be sent directly to this Department's Director of Graduate Studies.

3) Review of applications begins in February and most acceptances are extended during March/April.

4) This Department does not conduct separate recruiting for Spring enrollment, and only in exceptional cases will an applicant be accepted for Spring enrollment. Applicants for Spring enrollment are advised to first contact this Department's Director of Graduate Studies during the normal application review period.

GRADUATE COURSES

VS 600 ETHICS IN SCIENTIFIC RESEARCH (SAME AS TOX 600) ..... (1-2)
VS 650 CELLULAR AND HISTOTOXICOLOGY (SAME AS TOX 650) ..... (2)
VS 690 PRACTICAL ANALYTICAL TOXICOLOGY (SAME AS TOX 690) ..... (3)
VS 748 MASTER'S THESIS RESEARCH ..... (0)
VS 749 DISSERTATION RESEARCH ..... (0)
VS 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE ..... (1-6)
VS 769 RESIDENCE CREDIT FOR DOCTOR'S DEGREE ..... (0-12)
VS 770 VETERINARY SCIENCE SEMINAR ..... (1)
VS 781 CORRELATIVE PATHOLOGY ..... (1-3)
VS 782 ADVANCED VIROLOGY (SAME AS BIO 782) ..... (3)
VS 785 ADVANCED VETERINARY PARASITOLOGY ..... (3)
VS 786 ADVANCED VETERINARY PATHOLOGY ..... (3)
VS 791 TECHNIQUES IN VETERINARY MICROBIOLOGY ..... (1-9)
VS 792 TECHNIQUES IN GENERAL VETERINARY PATHOLOGY ..... (1-9)

Vocational Education

GRADUATE FACULTY
Full Members
Professors
Charles Byers.
Associate Professors
Joyce P. Logan, Rosetta F. Sandidge, Douglas C. Smith, Rodney Tulloch.
Emeritus Professors
Herbert Bruce, Sandra Miller, Clayton Omvig.

The Colleges of Agriculture and Human Environmental Sciences offer the Master of Science in Vocational Education, emphasizing Agricultural Education and Home Economics Education. This advanced degree program is designed to prepare candidates for leadership positions in vocational education in such areas as: administration, curriculum, teacher education, research, and vocational guidance.

In addition, programs are offered for: 1) the professional certification for supervision and coordination of vocational education, and certification for vocational school principal, 2) Rank II classification for Kentucky teachers through the Planned Fifth-Year Program, and 3) Rank I classification for Kentucky teachers, and 4) initial teacher certification.

Admission Requirements

Students seeking admission to the Vocational Education Masters Program must hold a baccalaureate degree from a fully accredited institution of higher learning. An overall undergraduate grade point average of 2.75 and 3.0 on all graduate work is required.

All applicants for admission to degree programs in the Graduate School must submit official scores on the verbal, quantitative and analytical portions of the Graduate Record Examination (GRE).

Master's in Vocational Education

The focus of the master's degree program in vocational education is the further development of competencies needed as a teacher. However, provisions are made to accommodate a wide variety of individuals from diverse settings such as administration, curriculum, corporate or military training, or cooperative extension.

The master's degree in vocational education requires 24 graduate course hours for a Plan A thesis option and 30 hours for the Plan B non-thesis option. Half of the total hours must be taken in AED courses, of which at least 3/4 must be at the 600-700 level. A minimum of half of the total hours must be at the 600-700 level.

Teachers seeking a Standard Certificate must meet the above criteria and the university's approved certification program requirements which specify work in professional education and course work related to the individual's teaching specialty. (Certification requirements are available from the Director of Graduate Studies.)

Doctor of Education in Vocational Education

The Doctor of Education (Ed.D.) degree in Vocational Education is not presently accepting new applicants.

Certification

For information concerning certification, please contact the Director of Graduate Studies.

GRADUATE COURSES

AED 501 PRACTICUM IN VOCATIONAL EDUCATION (SAME AS HEE 501) ..... (1-12)
AED 535 PRINCIPLES AND PHILOSOPHY OF VOCATIONAL EDUCATION (SAME AS HEE 535) ..... (3)
AED 580 METHODS OF TEACHING VOCATIONAL EDUCATION I (SAME AS HEE 580) ..... (3)
AED 586 METHODS IN TEACHING VOCATIONAL EDUCATION II (SAME AS HEE 586) ..... (3)
AED 590 PROBLEMS IN VOCATIONAL EDUCATION (SAME AS HEE 590) .. (3)
AED 670 ADVANCED METHODS IN TEACHING VOCATIONAL EDUCATION (SAME AS HEE 670) ..... (3)
AED 671 YOUTH ORGANIZATIONS IN VOCATIONAL EDUCATION (SAME AS HEE 671) ..... (3)
AED 678 SELECTING TEACHING MATERIALS (SAME AS HEE 678) ..... (3)
AED 679 ADULT EDUCATION IN VOCATIONAL EDUCATION (SAME AS HEE 679) ..... (3)
AED 684 CURRENT TRENDS IN VOCATIONAL EDUCATION (SAME AS HEE 684) ..... (3)
AED 686 EVALUATION IN VOCATIONAL EDUCATION (SAME AS HEE 686) ..... (3)
AED 693 SUPERVISION IN VOCATIONAL EDUCATION (SAME AS HEE 693) ..... (3)
AED 694 THE ADMINISTRATION OF VOCATIONAL EDUCATION (SAME AS HEE 694/EDA 694) ..... (3)
AED 695 SPECIAL PROBLEMS IN VOCATIONAL EDUCATION (SAME AS HEE 695) ..... (3)
AED 748 MASTER'S THESIS RESEARCH (SAME AS HEE 748) ..... (0)
AED 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE (SAME AS HEE 768) ..... (1-6)
AED 779 SEMINAR IN VOCATIONAL EDUCATION (SAME AS HEE 779) ... (1-3)
AED 789 INDEPENDENT WORK IN VOCATIONAL EDUCATION (SAME AS HEE 789) ..... (1-3)
AED 799 RESEARCH IN VOCATIONAL EDUCATION (SAME AS HEE 799) (1-3)

EDV 516 PROBLEMS OF THE COORDINATOR IN VOCATIONAL EDUCATION ..... (2-3)
EDV 517 DETERMINING TEACHING CONTENT IN MARKETING AND DISTRIBUTIVE EDUCATION ..... (2-3)
EDV 528 TECHNIQUES OF TEACHING MARKETING AND DISTRIBUTIVE EDUCATION ..... (2-3)
EDV 583 EXPERIENCE PROGRAMS IN VOCATIONAL AGRICULTURE ..... (3)
EDV 615 PROBLEMS IN BUSINESS EDUCATION ..... (3)
EDV 702 CAREER DEVELOPMENT: RESEARCH, THEORIES AND PRACTICES (SAME AS EDP 702) ..... (2-3)
EDV 749 DISSERTATION RESEARCH ..... (0)
EDV 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE ..... (0-12)

OTHER GRADUATE COURSES

A&S 500 SPECIAL COURSE (SUBTITLE REQUIRED) ..... (1-6)
AAS 417G SURVEY OF SUB-SAHARAN POLITICS (SAME AS PS 417G) ..... (3)
AAS 431G CULTURES AND SOCIETIES OF SUB-SAHARAN AFRICA (SAME AS ANT 431G) ..... (3)
AAS 585 THE AGE OF JIM CROW, 1880-1930 (SAME AS HIS 585) ..... (3)
AAS 586 THE IMAGES OF BLACKS IN AMERICAN SOCIETY (SAME AS HIS 586) ..... (3)
AAS 587 AFRICAN AMERICAN CIVIL RIGHTS MOVEMENT (SAME AS HIS 587) ..... (3)
AAS 600 THE INTELLECTUAL HISTORY OF AFRICAN AMERICANS (SAME AS HIS 600) ..... (3)
AAS 616 MULTICULTURAL PSYCHOLOGY (SAME AS EDP 616) ..... (3)
AAS 656 BLACK AMERICAN LITERATURE (SAME AS ENG 656) ..... (3)
AAS 657 RACE RELATIONS IN THE UNITED STATES (SAME AS HIS 657) . (3)
ACE 501 PRINCIPLES OF COOPERATIVE EXTENSION ..... (3)
AT 660 DIRECTED STUDY IN ATHLETIC TRAINING ..... (3)
AT 670 RESEARCH AND SPECIAL TOPICS IN ATHLETIC TRAINING ..... (2-3)
AT 695 ADVANCED SEMINAR IN ATHLETIC TRAINING ..... (4)
CPC 501 PERSPECTIVES IN RELIGION AND HEALTH ..... (3)
EDU 645 FOUNDATIONS OF PEDAGOGICAL THEORY AND PRACTICE IN THE SECONDARY SCHOOL ..... (0-9)
EDU 745 INTERDISCIPLINARY INSTRUCTION IN THE SECONDARY SCHOOL ..... (0-3)
ES 600 ENVIRONMENTAL SYSTEMS SEMINAR ..... (1)
ES 610 ENGINEERING AND PHYSICAL SCIENCES IN ENVIRONMENTAL SYSTEMS ..... (3)
ES 620 NATURAL, BIOLOGICAL AND MEDICAL SCIENCES IN ENVIRONMENTAL SYSTEMS ..... (3)
ES 630 LEGAL, SOCIAL AND ECONOMIC SCIENCES IN ENVIRONMENTAL SYSTEMS ..... (3)
EXP 500 INTRODUCTION TO SERVICE-LEARNING (SAME AS MC 500) ... (3)
HDI 600 INTERDISCIPLINARY APPROACHES TO THE NEEDS OF PERSONS WITH DEVELOPMENTAL DISABILITIES AND SPECIAL HEALTH CARE NEEDS ..... (2)
HDI 601 INTERDISCIPLINARY APPROACHES TO THE NEEDS OF ERSONS WITH DEVELOPMENTAL DISABILITIES AND SPECIAL HEALTH CARE NEEDS: PRACTICUM ..... (2)
HDI 602 INTERDISCIPLINARY SUPPORTS ..... (2)
HDI 603 INTERDISCIPLINARY SUPPORTS PRACTICUM ..... (2)
HDI 604 INTERDISCIPLINARY LEADERSHIP SEMINAR ..... (2)
HDI 605 INTERDISCIPLINARY LEADERSHIP PRACTICUM ..... (2)
HEE 501 PRACTICUM IN VOCATIONAL EDUCATION (SAME AS AED 501) ..... (1-12)
HEE 535 PRINCIPLES AND PHILOSOPHY OF VOCATIONAL EDUCATION (SAME AS AED 535) ..... (3)
HEE 580 METHODS OF TEACHING VOCATIONAL EDUCATION I (SAME AS AED 580) ..... (3)
HEE 586 METHODS IN TEACHING VOCATIONAL EDUCATION II (SAME AS AED 586) ..... (3)
HEE 590 PROBLEMS IN VOCATIONAL EDUCATION (SAME AS AED 590) (3)
HEE 670 ADVANCED METHODS IN TEACHING VOCATIONAL EDUCATION (SAME AS AED 670) ..... (3)
HEE 671 YOUTH ORGANIZATIONS IN VOCATIONAL EDUCATION (SAME AS AED 671) ..... (3)
HEE 678 SELECTING TEACHING MATERIALS (SAME AS AED 678) ..... (3)
HEE 679 ADULT EDUCATION IN VOCATIONAL EDUCATION (SAME AS AED 679) ..... (3)
HEE 684 CURRENT TRENDS IN VOCATIONAL EDUCATION (SAME AS AED 684) ..... (3)
HEE 686 EVALUATION IN VOCATIONAL EDUCATION (SAME AS AED 686) ..... (3)
HEE 693 SUPERVISION IN VOCATIONAL EDUCATION (SAME AS AED 693) ..... (3)
HEE 694 THE ADMINISTRATION OF VOCATIONAL EDUCATION (SAME AS AED 694/EDA 694) ..... (3)
HEE 695 SPECIAL PROBLEMS IN VOCATIONAL EDUCATION (SAME AS AED 695) ..... (3)
HEE 748 MASTER'S THESIS RESEARCH (SAME AS AED 748) ..... (0)
HEE 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE (SAME AS AED 768) ..... (1-6)
HEE 779 SEMINAR IN VOCATIONAL EDUCATION (SAME AS AED 779) (1-3)
HEE 789 INDEPENDENT WORK IN VOCATIONAL EDUCATION (SAME AS AED 789) ..... (1-3)
HEE 799 RESEARCH IN VOCATIONAL EDUCATION (SAME AS AED 799) ..... (1-3)
HES 596 SPECIAL PROBLEMS IN HUMAN ENVIRONMENTAL SCIENCES ..... (1-3)
HES 600 RESEARCH METHODOLOGY IN HUMAN ENVIRONMENTAL SCIENCES (SAME AS DMT 600) ..... (3)
HES 786 ADVANCED PROBLEMS IN HUMAN ENVIRONMENTAL SCIENCES ..... (1-3)
HSE 502 PERFORMANCE EVALUATION IN THE CLINIC AND LABORATORY ..... (3)
HSE 510 OLDER WOMEN AND THEIR HEALTH (SAME AS NUR 510) ..... (3)
HSE 595 DIRECTED STUDIES ..... (1-3)
HSE 660 ADVANCED CLINICAL PRACTICUM IN ALLIED HEALTH ..... (1-6)
INF 401G INFORMATICS FUNDAMENTALS ..... (3)
INF 520 BIOINFORMATICS (SAME AS BIO 520) ..... (3)
ISP 599 STUDY ABROAD ..... (1)
JPN 400G TOPICS IN JAPAN STUDIES (SUBTITLED REQUIRED) ..... (3)
JPN 420G PRE-MODERN LITERARY AND VISUAL ARTS OF JAPAN ..... (3)
JPN 421G CONTEMPORARY LITERARY AND VISUAL ARTS OF JAPAN .... (3)
JPN 451G SOCIAL MOVEMENTS IN MODERN JAPAN ..... (3)
JPN 461G JAPANESE COLONIALISM AND ITS LEGACIES ..... (3)
JPN 491G JAPANESE LANDSCAPES ..... (3)
JPN 551 JAPANESE MULTINATIONAL CORPORATIONS (SAME AS GEO 551) ..... (3)
LIN 510 AMERICAN ENGLISH (SAME AS ENG 510) ..... (3)
LIN 512 MODERN ENGLISH GRAMMAR (SAME AS ENG 512) ..... (3)
LIN 513 TEACHING ENGLISH AS A SECOND LANGUAGE (SAME AS ENG/EDC 513) ..... (3)
LIN 514 TESL MATERIALS AND METHODS (SAME AS ENG/LIN 514) ..... (3)
LIN 515 PHONOLOGICAL ANALYSIS (SAME AS ANT/ENG 515) ..... (3)
LIN 516 GRAMMATICAL ANALYSIS (SAME AS ANT/ENG 516) ..... (3)
LIN 517 SPECIAL TOPICS IN LINGUISTICS (SUBTITLE REQUIRED) ..... (3)
LIN 519 HISTORICAL LINGUISTICS (SAME AS ANT 519) ..... (3)
LIN 520 SANSKRIT I ..... (3)
LIN 521 SANSKRIT II ..... (3)
LIN 617 STUDIES IN LINGUISTICS (SUBTITLE REQUIRED) (SAME AS ENG 617) ..... (3)
MB 749 DISSERTATION RESEARCH (SAME AS MI 749) ..... (0)
MB 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE (SAME AS MI 768) ..... (1-6)
MB 769 RESIDENCE CREDIT FOR THE DOCTOR'S DEGREE (SAME AS MI 769) ..... (0-12)
MC 500 INTRODUCTION TO SERVICE-LEARNING (SAME AS EXP 500) ... (3)
MED 616 BIOLOGY AND THERAPY OF CANCER (SAME AS MI 616) ..... (3)
NEU 605 PRINCIPLES OF NEUROBIOLOGY (SAME AS ANA/PGY/BCH/PHA 605) ..... (4)
NEU 606 MECHANISMS OF NEUROLOGIC DISEASE (SAME AS ANA/PHA 606) ..... (4)
NRC 420G TAXONOMY OF VASCULAR PLANTS ..... (4)
NRC 450G BIOGEOCHEMISTRY (SAME AS PLS 450G) ..... (3)
NRC 455G WETLAND DELINEATION (SAME AS PLS 455G) ..... (3)
NRC 456G CONSTRUCTED WETLANDS (SAME AS PLS 456G) ..... (3)
NRC 477G LAND TREATMENT OF WASTE (SAME AS PLS 477G) ..... (3)
NRC 555 GEOGRAPHIC INFORMATION SYSTEMS AND LANDSCAPE ANALYSIS (SAME AS SOC/LA 855) ..... (3)
NRC 556 ADVANCED GEOGRAPHIC INFORMATION SYSTEMS AND LANDSCAPE ANALYSIS (SAME AS LA 956/SOC 556) ..... (3)
OR 515 MATHEMATICAL PROGRAMMING AND EXTENSIONS ..... (3)
OR 524 PROBABILITY (SAME AS STA 524) ..... (3)
OR 525 INTRODUCTORY STATISTICAL INFERENCE (SAME AS STA 525) (3)
OR 563 SIMULATION OF MINE PRODUCTION SYSTEMS ..... (3)

OR 616 NUMERICAL TECHNIQUES FOR NONLINEAR OPTIMIZATION . (3)
OR 617 MARKOVIAN DECISION PROBLEMS ..... (3)
OR 618 COMBINATORICS AND NETWORKS ..... (3)
OR 619 PROBLEMS SEMINAR IN OPERATIONS RESEARCH ..... (3)
OR 624 APPLIED STOCHASTIC PROCESSES (SAME AS STA 624) ..... (3)
OR 674 HEURISTICS ALGORITHMS ..... (3)
PAT 598 CLINICAL MICROBIOLOGY (SAME AS MI 598) ..... (3)
PAT 665 THE FORENSIC APPLICATION OF DNA TYPING METHODS ..... (3)
RAE 400G SEMINAR ON SPECIAL TOPICS IN RUSSIAN ..... (3)
RAE 430G BUSINESS RUSSIAN ..... (3)
RAE 460G TOLSTOY (IN ENGLISH) ..... (3)
RAE 495G ADVANCED INDEPENDENT WORK IN RUSSIAN AND EASTERN STUDIES ..... (1-3)

ST 500 INTRODUCTION TO SOCIAL THEORY ..... (3)
ST 600 MULTIDISCIPLINARY PERSPECTIVES IN SOCIAL THEORY (SUBTITLE REQUIRED) ..... (3)
ST 610 "disCLOSURE" EDITORIAL COLLECTIVE ..... (1)
ST 690 TRANSDISCIPLINARY PERSPECTIVES IN SOCIAL THEORY ..... (3)
WS 595 ISSUES IN WOMEN'S STUDIES (SUBTITLE REQUIRED) ..... (3)
WS 600 TOPICS IN WOMEN'S STUDIES (SUBTITLE REQUIRED) ..... (3)
WS 616 COLONIALISM/POST-COLONIALISM AND GENDER ..... (3)
WS 650 FEMINIST THEORY ..... (3)
WS 675 ADVANCED FEMINIST THEORY ..... (3)
WS 690 GRADUATE RESEARCH IN WOMEN'S STUDIES ..... (3)
WS 750 READINGS IN WOMEN'S STUDIES ..... (1)

GRADUATE CERTIFICATES

A Graduate Certificate is an integrated group of courses that is designed to have a very clear and focused academic topic or competency as its subject area. Often, a Graduate Certificate may meet a clearly defined educational need of a constituency group, such as continuing education or accreditation for a particular profession; respond to a specific state mandate; or provide a basic competency in an emerging, usually interdisciplinary, area. A Certificate is not a graduate degree program (it is typically between 9 and 15 credits), but it does provide the student formal credential of the mastery of a clearly defined academic topic.

Graduate Certificates are becoming an increasingly important component of the total range of graduate educational opportunities offered by a modern, comprehensive research university. Often, Certificates are pursued by students who are also pursuing a graduate degree in a traditional discipline, or who may already have earned one or more graduate degrees. Programs or groups of faculty who wish to establish a new Graduate Certificate at the University of Kentucky should consult the Guidelines for Graduate Certificate Curricula via the Graduate School home page at <www.rgs.uky.edu/gs/gradhome.html>.

The University of Kentucky currently offers Graduate Certificates in the following areas:

Developmental Disabilities
Environmental Systems
German Studies
Gerontology
Informatics
Health Communication
Latin Studies
Middle and Secondary School Reading
Music Theory Pedagogy
Orff Schulwerk
Reproductive Laboratory Science
Sensing Technologies
Social Theory
Women's Studies

Although formal admission to a specific Graduate Certificate is handled by the Director of the Certificate, a student seeking to pursue a Graduate Certificate must also apply to and be enrolled as a graduate student at the University of Kentucky. For most Certificates, the student may be enrolled either as a degree-seeking student in an academic program or in post-baccalaureate (non-degree) status. More information on admission requirements and specific plans of study for a particular Graduate Certificate can be obtained via the contacts below.

Note that admission to or completion of a Graduate Certificate does not guarantee subsequent admission to a graduate degree program; that is a separate process, and different criteria prevail.

Developmental Disabilities

The Graduate Certificate in Developmental Disabilities prepares professionals from a broad range of disciplines to play a leadership role in providing services and supports for people with developmental disabilities and their families. An emphasis is placed on developing skills in the field of disability research. The course work emphasizes a life span and interdisciplinary perspective with an emphasis on promoting self-determination, community integration and inclusion. In addition to a broad, interdisciplinary perspective, students acquire a basic foundation in a number of specific, topical areas such as specialized health care services and financing, inclusive education, behavioral supports, employment and community living options, advocacy, legislation, assistive technology, organizational development and theory, group facilitation, and research proposal development.

All courses are taught by an interdisciplinary faculty. Students have the opportunity to participate in a practicum and work directly with individuals with developmental disabilities and their families. Students also complete a research project under faculty supervision. Three didactic courses (HDI 600, 602 and 604) and one practicum course (HDI 603) are required for the certificate. In addition to the required courses, two or three hours of elective course work is also required; either HDI 601, HDI 605 or one elective from outside HDI courses and those courses required in the student's degree program.

For more information, contact:

Dr. Barney Fleming
Interdisciplinary Human Development Institute
121 Mineral Industries Building
University of Kentucky
Lexington, KY 40506-0051
(859) 257-7225
bflemin@uky.edu
www.ihdi.uky.edu/ddcertificate

Environmental Systems

The Environmental Systems Certificate is administered by a committee of faculty consisting of representatives from the Colleges of Agriculture, Arts and Sciences, Engineering, Law, Medicine; the Gatton College of Business and Economics; the Graduate School; the Kentucky Environmental Protection Cabinet; and the private sector. Each Environmental Systems course is coordinated by a faculty member, and course instructors are representatives of their respective disciplines.

The Environmental Systems Certificate consists of a core of three survey courses and a seminar course. Students are expected to take two Environmental Systems courses and the seminar twice. The content of the courses and seminars is the responsibility of the coordinator.

Individuals desiring a certificate must submit an application for admission to the Environmental Systems Committee along with an outline of their graduate degree program or their experience.

For more information, contact:

Dr. James A. Kipp
233 Mining & Minerals Resources Building
University of Kentucky
Lexington, KY 40506-0107
(859) 257-1832
kipp@uky.edu
www.uky.edu/WaterResources/uk-esc.html

German Studies

The German Studies Graduate Certificate is designed to enable substantial exposure to the historical and contemporary study of German culture, society, and politics in an interdisciplinary setting. Students may earn the certificate while making normal progress towards attainment of an M.A. or a Ph.D. degree or while enrolled in post-baccalaureate status.

For more information, contact:

Dr. Michael Jones
1065 Patterson Office Tower
University of Kentucky
Lexington, KY 40506-0027
(859) 257-7011
mjones@uky.edu
www.uky.edu/AS/German/Grad/gergrafr.html

Gerontology

The Graduate Certificate in Gerontology is an interdisciplinary curriculum offered by the Sanders-Brown Center on Aging. The Certificate is a part of Sanders-Brown's complete range of research and educational activities that prepare both graduate students and practicing professionals from many disciplines to assume key roles in improving the quality of life for older adults and furthering our understanding of the aging process. Its interdisciplinary focus makes it possible for students to tailor their course work to support their own fields of interest.

For more information, contact:

Dr. Diana S. Lockridge
Educational Services Coordinator
Sanders-Brown Center on Aging
Ligon House, 658 S. Limestone
University of Kentucky
Lexington, KY 40506-0442
(859) 257-8301
Fax: (859) 323-4940
dlock3@uky.edu
www.rgs.uky.edu/aging/geriatriceducation/

Health Communication

The Graduate Program in Communication offers a Certificate in Health Communication that is available to (a) students in the Ph.D. and M.A. Programs in Communication, (b) students in other doctoral programs at the university and (c) post baccalaureate students. The Certificate Program is aimed primarily at individuals interested in developing specialized knowledge and research expertise in health communication that could be applied within both academic and nonacademic settings. Students are expected to have a background in social or behavioral science prior to entering the program. To earn the certificate, students must complete CJT 671 and 771 and either CJT 780 (section focusing on a health communication topic) or a graduate course in medical informatics, for a total of 12 credit hours.

For more information, contact:

Dr. Roy L. Moore
College of Communication and Information Studies
133 Grehan Journalism Building
University of Kentucky
Lexington, KY 40506-0042
(859) 257-7805
moore@uky.edu
www.uky.edu/CommInfoStudies/GRAD/Health%20Certificate

Informatics

The objective of the Graduate Certificate in Informatics is to educate a cadre of researchers and professionals with multidisciplinary backgrounds and with substantial understanding of the principles and applications of computational technology.

This curriculum will train graduate and professional-degree students in the uses of computational and information processing technology in their own fields. The students will be able to use this enrichment to become more productive professionals, to further research in their own areas, and to engage in multidisciplinary research relying on computer and information-processing techniques.

For more information, contact:

Dr. Raphael Finkel
Department of Computer Science
305 Mining Laboratory
University of Kentucky
Lexington, KY 40506-0046
(859) 257-3416
raphael@cs.engr.uky.edu
grendl.rch.uky.edu/informatics/

Latin Studies

The Latin Studies certificate curriculum, consisting of a sequence of four courses in Latin language and literature, aims at two groups of students in particular.

First, it is aimed at graduate students who need strong Latin skills for any academic discipline in which Latin is important, including not only classics, but also history, philosophy, theology, etc., and who are already engaged in, or hope to undertake advanced study in one or more of these fields. The certificate curriculum will offer to such students an interdisciplinary opportunity to gain a superior command of Latin in a highly concentrated format, but in a relatively brief period of time.

Second, it is aimed at the training of new Latin teachers for the high school level and even pre-high school instruction. The Latin Studies certificate curriculum will be highly useful for those interested in teaching Latin, because it will provide a much deeper immersion in Latin language and literature than what has so far been usual for students seeking careers as Latin teachers, and will ensure that all who complete it acquire not merely reading skills, but also considerable active command of the language.

For more information, contact:

Dr. Terence Tunberg
Classics Department
1015 Patterson Office Tower
University of Kentucky
Lexington, KY 40506-0027
(859) 257-3386
clatot@uky.edu

Middle and Secondary School Reading

The Graduate Certificate in Middle and Secondary School Reading is designed to provide both new and experienced teachers with a solid foundation in modern theories of literacy and in techniques that are most effective in improving the reading of middle- and secondary-school students across the entire curriculum. It provides a highly focused curriculum that may be of particular interest and usefulness to teachers and administrators who are already fully certified, and who do not seek a full certification or degree program.

The Certificate curriculum is composed of five courses: A twelve-credit core of four courses (EDC 618, 619, 620, and 641 or 642) and one three-credit literacy-related elective course approved by the Certificate Director. All participants must hold a current state teaching certificate. In order to ensure that the course work required for the Certificate can be delivered in a timely and programmed manner, the Certificate is offered only at the request of local school districts. The district must commit to enrolling a minimum number of teachers and/or administrators to move through the curriculum as a cadre of students. This approach provides a self-supporting and highly interactive group that benefits both the participants and the school system as a whole. Learning is enhanced for the participants, and direct application of both theory and practical techniques within the school district is facilitated.

For more information, contact:

Dr. Douglas C. Smith
Curriculum and Instruction
305b Dickey Hall
University of Kentucky
Lexington, KY 40506-0017
(859) 257-1634
Fax: (859) 257-1602
dcsmit1@uky.edu

Music Theory Pedagogy

The Graduate Certificate in Music Theory Pedagogy is intended primarily for D.M.A. (Doctor of Musical Arts degree) students who wish to gain experience and expertise in theory pedagogy in order to strengthen their background for increased marketability in higher education.

Students desiring admission into this certificate curriculum will be interviewed by a committee consisting of members of the theory faculty and a music faculty member outside of theory. The interview will include an appraisal of the student's keyboard proficiency, sight-singing and aural skills, and understanding of theoretical concepts. The student's scores on graduate entrance exams in music theory will also be assessed. It is assumed that any student granted admission into the certificate curriculum would have been accepted as a student in the Graduate School.

For more information, contact:

Dr. Kate Covington
School of Music
105 Fine Arts Bldg.
Lexington, KY 40506-0022
(859) 257-8197
Fax: (859) 257-9576
kcov@uky.edu
www.uky.edu/FineArts/Music

Orff Schulwerk

Orff Schulwerk is the music approach created by composers Carl Orff and Gunild Keetman. The Schulwerk is a way to teach and learn music using poems, rhymes, games, songs, and dances as basic materials. The University of Kentucky offers Schulwerk Teacher Training courses, mostly in the summers, taught by Orff experts. Training is given at Levels 1, 2, 3 and advanced master's courses in different topics such as curriculum design, and composition. The Graduate Certificate in Orff Schulwerk is a twelve-hour curriculum in four components:

1. Orff Teacher Training Level One
   MUS 560/561 — 2-4 cr.
2. Orff Teacher Training Level Two
   MUS 560/561 — 2-4 cr.

3. Orff Teacher Training Level Three
MUS 560/561 2-4 cr.
or Orff Master Courses
(Prerequisite: Orff Teacher Training Level 2)
4. Certificate Project
MUS 767 1-3 cr.
(Prerequisite: Orff Teacher Training Level 2)

Each student must take all four of the components, each at two credits minimum, for a total of 12 credit hours. Each component is offered at variable credits. All credits earned in this certificate may be applicable towards the Master of Music in Music Education degree (M.M.M.E.) or the Rank I in Music Education Program. Admission requirements are the same as those in effect for Post-baccalaureate status, and approval of the Certificate Director. The Certificate is awarded upon completion of the certificate curriculum within five years, and with a minimum of 3.0 GPA.

For more information, contact:

Dr. Cecilia Wang
School of Music
203 Wessels House
University of Kentucky
Lexington, KY 40506-0022
(859) 257-8203
cecilia@uky.edu
www.uky.edu/~cecilia/Orff/OrffGradCert.html

Reproductive Laboratory Science

The Graduate Certificate in Reproductive Laboratory Science (RLS) prepares graduates for entry-level technologist positions in assisted reproductive technology (ART) laboratories and related fields in research, industry and marketing. The curriculum consists of 12-14 credit hours in RLS courses, including 2 credit hours of clinical practicum in clinical andrology and embryology laboratories. In addition to the five RLS core faculty, lecturers throughout the United States contribute to the curriculum by instructing in their areas of expertise. These professionals are ART and clinical laboratorians, laboratory managers, researchers, ethicists, attorneys and policy analysts. Directors and supervisors in andrology laboratories and ART laboratories, appointed as clinical faculty by the University, supervise RLS students in the clinical practica. Entrance into the program requires a Bachelor's degree in Clinical Laboratory Science (Medical Technology) or a Bachelor's degree in science with acceptable laboratory experience.

For more information contact:

Dr. Doris J. Baker
Dept. of Clinical Sciences
CAHP Building 112B
121 Washington Avenue
Lexington, KY 40536-0003
(859) 323-1100 ext. 274
dbake0@uky.edu

Sensing Technologies

The Sensing Technologies Certificate is a cross-disciplinary curriculum in Sensors and Sensing Architectures. As the field of sensing development is an inherently multidisciplinary endeavor, the Certificate will yield scientists and engineers with the ability to transcend traditional boundaries in their professional careers.

For more information, contact:

Dr. Leonidas Bachas
Department of Chemistry
207 Chemistry-Physics Building
University of Kentucky
Lexington, KY 40602-0055
(859) 257-6350
Fax: (859) 323-1069
bachas@uky.edu
www.chem.uky.edu/igert/
Sensing%20Techn%20certificate

Social Theory

This Certificate offers students systematic multidisciplinary training in social theory. It augments, and is pursued concurrently with, the regular M.A and Ph.D. degree programs of participating departments. In total, the Certificate requires ten hours of course work, can be pursued in tandem with regular degree programs, and is open to all graduate students at the University of Kentucky.

For more information, contact:

Dr. Wolfgang Natter
Committee on Social Theory
1455 Patterson Office Tower
University of Kentucky
Lexington, KY 40506-0027
(859) 257-6035
wnatter@uky.edu
www.uky.edu/ArtsSciences/SocTheo/hpgcert.htm

Women's Studies

The Graduate Certificate in Women's Studies is intended to complement students' disciplinary programs. Its aim is to provide students with a coherent, interdisciplinary grounding in current women's studies scholarship and to create an intellectual community among faculty and graduate students who share a scholarly interest in women's studies.

For more information, contact:

Dr. Joan Callahan
112 Breckinridge Hall
University of Kentucky
Lexington, KY 40506-0056
(859) 257-1388
womenst@uky.edu
www.uky.edu/ArtsSciences/WomenStudies/
Certificate.htm

RESIDENCY POLICY

13 KAR 2:045.

DETERMINATION OF RESIDENCY STATUS FOR ADMISSION AND TUITION ASSESSMENT PURPOSES.

RELATES TO: KRS CHAPTER 13B, 164.020, 164.030, 164A.330(9)

STATUTORY AUTHORITY: KRS 164.020(8)

NECESSITY, FUNCTION, AND CONFORMITY: KRS 164.020(8) requires the Council on Postsecondary Education to determine tuition and approve the minimum qualifications for admission to a state-supported postsecondary education institution and authorizes the Council to set different tuition amounts for residents of Kentucky and for nonresidents. This administrative regulation establishes the procedure and guidelines for determining the residency status of a student who is seeking admission to, or who is enrolled at, a state-supported postsecondary education institution.

Section 1. Definitions.

(1) "Academic term" means a division of the school year during which a course of studies is offered, and includes a semester, quarter, or single consolidated summer term as defined by the institution.

(2) "Continuous enrollment" means enrollment in a state-supported postsecondary education institution at the same degree level for consecutive terms, excluding summer term, since the beginning of the period for which continuous enrollment is claimed unless a sequence of continuous enrollment is broken due to extenuating circumstances beyond the student's control, including serious personal illness or injury, or illness or death of a parent.

(3) "Degree level" means enrollment in a course or program which could result in the award of a:

(a) Certificate, diploma or other program award at an institution;
(b) Baccalaureate degree or lower including enrollment in a course by a nondegree-seeking postbaccalaureate student;
(c) Graduate degree or graduate certification other than a first-professional degree in law, medicine, dentistry or "Pharm. D"; or
(d) Professional degree in law, medicine, dentistry, or "Pharm. D".

(4) "Demonstration of Kentucky domicile and residency" means the presentation of documented information and evidence sufficient to prove by a preponderance of the evidence that a person is domiciled in Kentucky and is a resident of Kentucky.

(5) "Dependent person" means a person who cannot demonstrate financial independence from parents or persons other than a spouse and who does not meet the criteria established in Section 5 of this administrative regulation.

(6) "Determination of residency status" means the decision of a postsecondary education institution that may include a formal hearing that results in the classification of a person as a Kentucky resident or as a nonresident for admission and tuition assessment purposes.

(7) "Domicile" means a person's true, fixed, and permanent home and is the place where the person intends to remain, and to which the person expects to return if absent without intending to establish a new domicile elsewhere.

(8) "Full-time employment" means continuous employment for at least forty-eight (48) weeks at an average of at least thirty (30) hours per week.

(9) "Independent person" means a person who demonstrates financial independence from parents or persons other than a spouse and who can meet the criteria established in Section 5 of this administrative regulation.

(10) "Institution" means an entity defined in KRS 164.001(10) if the type of institution is not expressly stated and includes the Kentucky Commonwealth Virtual University.

(11) "Kentucky residency" or "Kentucky resident" means the result of a determination by an institution that a person is a resident of Kentucky as determined by this administrative regulation.

(12) "Nonresident" means a person who is domiciled outside of Kentucky or who currently maintains legal residence outside Kentucky or who has not met the criteria for Kentucky residency established in this administrative regulation.

(13) "Preponderance of the evidence" means the greater weight of evidence, or evidence which is more credible and convincing to the mind.

(14) "Parent" means one (1) of the following:

(a) A person's father or mother; or
(b) A court-appointed legal guardian if:
1. The guardianship is recognized by an appropriate court within the United States;
2. There was a relinquishment of the rights of the parents; and
3. The guardianship was not established primarily to confer Kentucky residency on the person.

(15) "Residence" or "residency" means the place of abode of a person and the place where the person is physically present most of the time for a noneducational purpose in accordance with Section 3 of this administrative regulation.

(16) "Student financial aid" means all forms of payments to a student if one (1) condition of receiving the payment is the enrollment of the student at the institution.

(17) "Sustenance" means living expenses including room, board, maintenance, transportation, and also may include educational expenses including tuition, fees, books, and supplies.

Section 2. Scope.

(1) State-supported postsecondary education institutions were established and are maintained by the Commonwealth of Kentucky primarily for the benefit of qualified residents of Kentucky. The substantial commitment of public resources to postsecondary education is predicated on the proposition that the state benefits significantly from the existence of an educated citizenry. As a matter of policy, access to postsecondary education shall be provided so far as feasible at reasonable cost to an individual who is domiciled in Kentucky and who is a resident of Kentucky.

(2) The Council on Postsecondary Education requires a student who is neither domiciled in nor a resident of Kentucky to meet higher admission standards and to pay a higher level of tuition than resident students.

(3) This administrative regulation applies to all student residency determinations regardless of circumstances, including the Southern Regional Education Board contract spaces; reciprocity agreements, where appropriate; the Kentucky Commonwealth Virtual University and academic common market programs.

Section 3. Determination of Residency Status; General Rules.

(1) A determination of residency shall include:

(a) An initial determination of residency status by an institution during the admission process or upon enrollment in an institution for a specific academic term or for admission into a specific academic program;
(b) A reconsideration of a determination of residency status by an institution based upon a changed circumstance; and
(c) A formal hearing conducted by an institution upon request of a student after other administrative procedures have been completed.

(2) An initial determination of residency status shall be based upon:

(a) The facts in existence when the credentials established by an institution for admission for a specific academic term have been received and during the period of review by the institution;
(b) Information derived from admissions materials;
(c) Other materials required by an institution and which are consistent with this administrative regulation; or
(d) Other information available to the institution from any source.

(3) An individual seeking a determination of Kentucky residency status shall demonstrate that status by a preponderance of the evidence.

(4) A determination of residency status shall be based upon verifiable circumstances or actions.

(5) Evidence and information cited as the basis for Kentucky domicile and residency shall accompany the application for a determination of residency status.

(6) A student classified as a nonresident shall retain that status until the student is officially reclassified by an institution.

(7) A student may apply for a review of a determination of residency status once for each academic term.

(8) If an institution has information that a student's residency status may be incorrect, the institution shall review and determine the student's correct residency status.

(9) If the Council on Postsecondary Education has information that an institution's determination of residency status for a student may be incorrect, it may require the institution to review the circumstances and report the results of that review.

(10) An institution shall impose a penalty or sanction against a student who gives incorrect or misleading information to an institutional official, including payment of nonresident tuition for each academic term for which resident tuition was assessed based on an improper determination of residency status. The penalty may also include:

(a) Student discipline by the institution through a policy written and disseminated to students; or

(b) Criminal prosecution.

Section 4. Presumptions Regarding Residency Status.

(1) In making a determination of residency status, it shall be presumed that a person is a nonresident if:

(a) A person is, or seeks to be, an undergraduate student and admissions records show the student to be a graduate of an out-of-state high school;

(b) A person's admissions records indicate the student's residence to be outside of Kentucky at the time of application for admission;

(c) A person moves to Kentucky primarily for the purpose of enrollment in an institution;

(d) A person moves to Kentucky and within twelve (12) months enrolls at an institution more than half time; or

(e) A person has a continuous absence of one (1) year from Kentucky.

(2) A presumption arising from subsection (1) of this section shall be overcome by a demonstration of Kentucky domicile and residency.

Section 5. Determination of Whether a Student is Dependent or Independent.

(1) In a determination of residency status, an institution shall first determine whether a student is dependent or independent. This provision is predicated on the assumption that a dependent person lacks the financial ability to live independently of the person upon whom the student is dependent and therefore lacks the ability to form the requisite intent to establish domicile.

(2) In determining the dependent or independent status of a person, the following information shall be considered as well as other relevant information available at the time the determination is made:

(a) 1. That the person has not been claimed as a dependent on the federal or state tax returns of a parent or other person for the year preceding the date of application for a determination of residency status; or

2. That the person is no longer claimed by a parent or other person as a dependent or as an exemption for federal and state tax purposes; and

(b) That the person has financial earnings and resources independent of a person other than an independent spouse necessary to provide for the person's own sustenance.

(3) An individual who enrolls at an institution immediately following graduation from high school and remains enrolled shall be presumed to be a dependent person unless the contrary is evident from the information submitted.

(4) Domicile may be inferred from the student's permanent address, parent's mailing address, or location of high school of graduation.

(5) Marriage to an independent person domiciled in and who is a resident of Kentucky shall be a factor considered by an institution in determining whether a student is dependent or independent.

(6) Financial assistance from or a loan made by a parent or family member other than an independent spouse, if used for sustenance of the student:

(a) Shall not be considered in establishing a student as independent; and

(b) Shall be a factor in establishing that a student is dependent.

Section 6. Effect of a Determination of Dependent or Independent Status on a Determination of Residency Status.

(1) The effect of a determination that a person is dependent shall be as follows:

(a) The domicile and residency of a dependent person shall be the same as either parent. The domicile and residency of the parent shall be determined in the same manner as the domicile and residency of an independent person.

(b) The domicile and residency of a dependent person whose parents are divorced, separated, or otherwise living apart shall be Kentucky if either parent is domiciled in and is a resident of Kentucky regardless of which parent has legal custody or is entitled to claim that person as a dependent pursuant to Kentucky income tax provisions.

(c) 1. If the parent or parents of a dependent person are Kentucky residents and are domiciled in Kentucky but subsequently move from the state, the dependent person shall be considered a resident of Kentucky while in continuous enrollment at the degree level in which currently enrolled.

2. If continuous enrollment is broken or the current degree level is completed, the dependent person's residency status shall be reassessed when the circumstances detailed in subparagraph 1 of this paragraph are present.

(2) If the sole parent or both parents of a dependent person moves out of state, Kentucky domicile and residency, having been previously established, shall be retained until steps are taken to establish domicile and residency elsewhere.

Section 7. Member of Armed Forces of the United States, Spouse and Dependents; Effect on a Determination of Residency Status.

(1) A member, spouse, or dependent of a member whose domicile and residency was Kentucky at the time of induction into the Armed Forces of the United States, and who maintains Kentucky as home of record and permanent address, shall be entitled to Kentucky residency status:

(a) During the time of active service; or

(b) If the member, spouse, or dependent returns to this state within six (6) months of the date of the member's discharge from active duty.

(2) (a) A member, spouse or dependent of a member of the Armed Forces of the United States stationed in Kentucky on active military orders shall be considered a Kentucky resident while the member is on active duty in this state pursuant to those orders if the member is not:

1. Stationed in Kentucky for the purpose of enrollment at an institution; or

2. On temporary assignment of less than one (1) year.

(b) A member, spouse or dependent of a member, shall not lose Kentucky residency status if the member is thereafter transferred on military orders while the member, spouse or dependent requesting the status is in continuous enrollment at the degree level in which currently enrolled.

(3) Membership in the National Guard or civilian employment at a military base alone shall not qualify a person for Kentucky residency status under the provisions of subsections (1) and (2) of this section.

(4) A person's residency status established pursuant to this section shall be reassessed if the qualifying condition is terminated.

Section 8. Status of Nonresident Aliens; Visas and Immigration.

(1) (a) A person holding a permanent residency visa or classified as a political refugee shall establish domicile and residency in the same manner as another person.

(b) Time spent in Kentucky and progress made in fulfilling the conditions of domicile and residency prior to obtaining permanent residency status shall be considered in establishing Kentucky domicile and residency.

(2) A person holding a nonimmigrant visa with designation A, E, G, H, I, L, N, O, P, R, S, TD or TN shall establish domicile and residency the same as another person.

(3) (a) An independent person holding a nonimmigrant visa with designation B, C, D, F, J, K, M, or Q shall not be classified as a Kentucky resident, because that person does not have the capacity to remain in Kentucky indefinitely and therefore cannot form the requisite intent necessary to establish domicile within the meaning of this administrative regulation.

(b) A dependent person holding a visa as described in paragraph (a) of this subsection, but who is a dependent of a parent holding a visa as described in subsection (2) of this section, shall be considered as holding the visa of the parent.

(c) A dependent person holding a visa described in subsection (2) of this section or paragraph (a) of this subsection, if a parent is a citizen of the United States and is a resident of and domiciled in Kentucky, shall be a resident of Kentucky for the purposes of this administrative regulation.

Section 9. Beneficiaries of a Kentucky Educational Savings Plan Trust.

A beneficiary of a Kentucky Educational Savings Plan Trust shall be granted residency status if the beneficiary meets the requirements of KRS 164A.330(9).

Section 10. Criteria Used in a Determination of Residency Status.

(1) A determination of Kentucky domicile and residency shall be based upon verifiable circumstances or actions. A single fact shall not be paramount, and each situation shall be evaluated to identify those facts essential to the determination of domicile and residency.

(2) The following facts, although not conclusive, shall have probative value in their entirety and shall be individually weighted, appropriate to the facts and circumstances in each determination of residency:

(a) Acceptance of an offer of full-time employment or transfer to an employer in Kentucky or contiguous area while maintaining residence and domicile in Kentucky;

(b) Continuous physical presence in Kentucky while in a nonstudent status for the twelve (12) months immediately preceding the start of the academic term for which a classification of Kentucky residency is sought;

(c) 1. Filing of Kentucky resident income tax return for the calendar year preceding the date of application for a change in residency status; or

2. Payment of Kentucky withholding taxes while employed during the calendar year for which a change in classification is sought;

(d) Full-time employment of at least one (1) year while living in Kentucky;

(e) Attendance as a full-time, nonresident student at an out-of-state institution based on a determination by that school that the person is a resident of Kentucky;

(f) Abandonment of a former domicile or residence and establishing domicile and residency in Kentucky with application to or attendance at an institution following and incidental to the change in domicile and residency;

(g) Obtaining licensing or certification for a professional and occupational purpose in Kentucky;

(h) Payment of real property taxes in Kentucky;

(i) Ownership of real property in Kentucky, if the property was used by the

student as a residence preceding the date of application for a determination of residency status;

(j) Long-term lease of at least twelve (12) consecutive months of noncollegiate housing;

(k) Marriage of an independent student to a Kentucky resident;

(l) Continued presence in Kentucky during academic breaks; and

(m) The extent to which a student is dependent on student financial aid in order to provide basic sustenance.

(3) Except as provided in subsection (4) of this section, the following facts, because of the ease and convenience in completing them, shall have limited probative value in a determination that a person is domiciled in and is a resident of Kentucky:

(a) Kentucky automobile registration;

(b) Kentucky driver's license; and

(c) Registration as a Kentucky voter.

(4) The absence of a fact contained in subsection (3) of this section shall have significant probative value in determining that a student is not domiciled in or is not a resident of Kentucky.

(5) Kentucky residency status shall not be conferred by the performance of an act which is incidental to fulfilling an educational purpose or by an act which is performed as a matter of convenience. Mere physical presence in Kentucky, including living with a relative or friend, shall not be sufficient evidence of domicile and residency.

Section 11. Effect of a Change in Circumstances on Residency Status.

(1) If a person becomes independent or if the residency status of a parent or parents of a dependent person changes, an institution shall reassess residency either upon a request by the student or a review initiated by an institution.

(2) Upon transfer to a Kentucky institution, a student's residency status shall be reassessed by the receiving institution.

(3) A reconsideration of a determination of residency status for a dependent person shall be subject to the provisions for continuous enrollment, if applicable.

Section 12. Student Responsibilities.

(1) A student shall register under the proper residency classification which includes the following actions:

(a) Raising a question in a timely manner concerning residency classification;

(b) Making application for change of residency classification in a timely manner with the designated office or person at the institution; and

(c) Notifying the designated office or person at the institution immediately upon a change in residency.

(2) If a student fails to notify an institutional official of a change in residency, an institutional official may investigate and evaluate the student's current residency status.

(3) (a) If a student fails to provide, by the date specified by the institution, information required by an institution in a determination of residency status, the student shall be notified by the institution that the review has been canceled and that a determination has been made.

(b) Notification shall be made by registered mail, return receipt requested.

(c) Notification shall be made within ten (10) calendar days after the deadline for receipt of materials has passed.

(4) A student shall not be entitled to appeal a determination of residency status if the determination made by an institution is because a student has failed to meet published deadlines for the submission of information as set forth in subsection (3) of this section. A student may request a review of a determination of residency status in a subsequent academic term.

Section 13. Institutional Responsibilities.

Each institution shall:

(1) Provide for an administrative appeals process that includes a residency appeals officer to consider student appeals of an initial residency determination and which shall include a provision of fourteen (14) days for the student to appeal the residency appeals officer's determination.

(2) Establish a residency review committee to consider appeals of residency determinations by the residency appeals officer. The residency review committee shall make a determination of student residency status and notify the student in writing within forty-five (45) days after receipt of the student appeal.

(3) Establish a formal hearing process as described in Section 14 of this administrative regulation.

(4) Establish written policies and procedures for administering the responsibilities established in subsections (1), (2), and (3) of this section and that are:

(a) Approved by the institution's governing board;

(b) Made available to all students; and

(c) Filed with the council.

Section 14. Formal Institutional Hearing.

(1) A student who appeals a determination of residency by a residency review committee shall be granted a formal hearing by an institution if the request is made by a student in writing within fourteen (14) calendar days after notification of a determination by a residency review committee.

(2) If a request for a formal hearing is received, an institution shall appoint a hearing officer to conduct a formal hearing. The hearing officer:

(a) Shall be a person not involved in determinations of residency at an institution except for formal hearings; and

(b) Shall not be an employee in the same organizational unit as the residency appeals officer.

(3) An institution shall have written procedures for the conduct of a formal hearing that have been adopted by the board of trustees or regents, as appropriate, and that provide for:

(a) A hearing officer to make a recommendation on a residency appeal;

(b) Guarantees of due process to a student that include:

1. The right of a student to be represented by legal counsel; and
2. The right of a student to present information and to present testimony and information in support of a claim of Kentucky residency.

(c) A recommendation to be issued by the hearing officer.

(4) An institution's formal hearing procedures shall be filed with the Council on Postsecondary Education and shall be available to a student requesting a formal hearing.

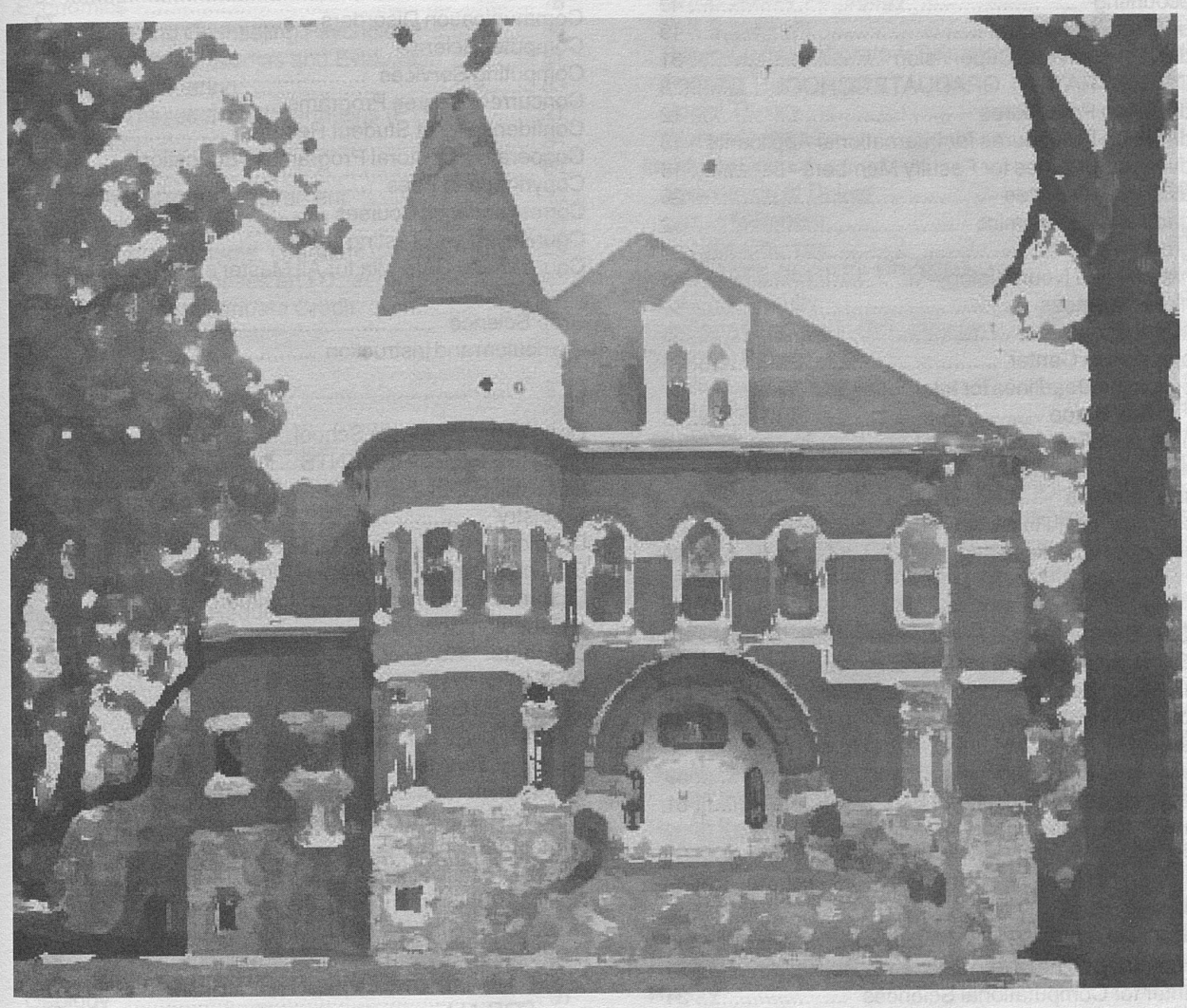
Section 15. Cost of Formal Hearings.

(1) An institution shall pay the cost for all residency determinations including the cost of a formal hearing.

(2) A student shall pay for the cost of all legal representation in support of the student's claim of residency. (17 Ky.R. 2557; eff. 4-5-91; Am. 22 Ky.R. 1656; 1988; eff. 5-16-96; 23 Ky.R. 3380; 3797; 4099; eff. 6-16-97; 24 Ky.R. 2136; 2705; 25 Ky.R. 51; eff. 7-13-98; 25 Ky.R. 2177; 2577; 2827; eff. 6-7-99.)

Revised Effective June 7, 1999

For further information about residency, please contact the Registrar's Office, Funkhouser Bldg., University of Kentucky, Lexington, KY 40506-0054.



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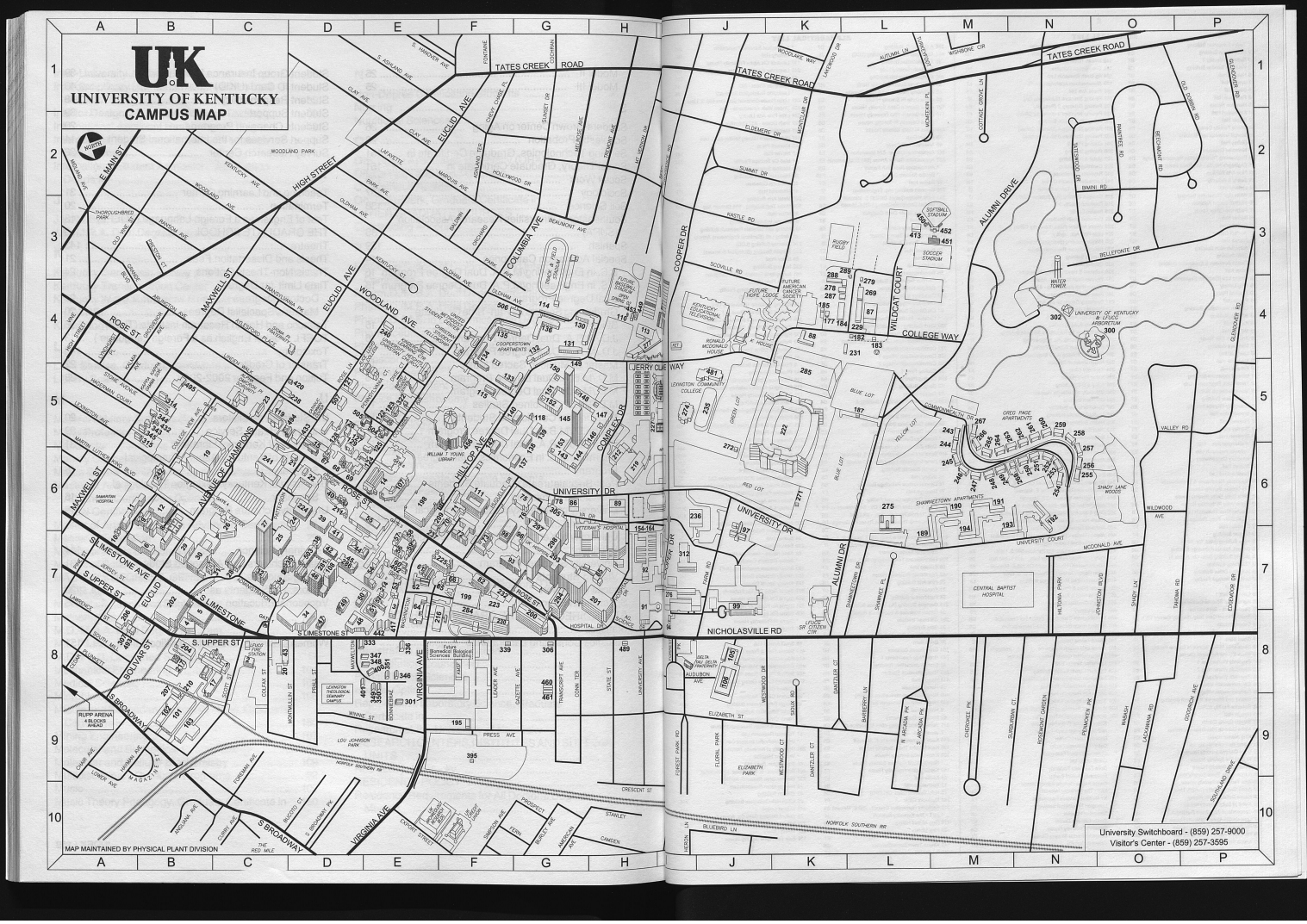
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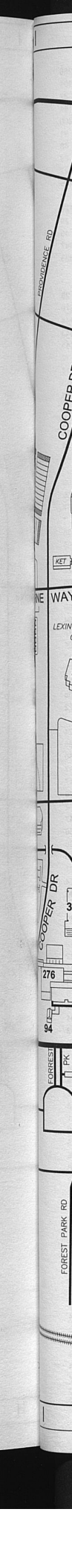

UK
UNIVERSITY OF KENTUCKY
CAMPUS MAP
TATES CREEK ROAD
EUCLID AVE
HIGH STREET
WOODLAND AVE
ROSE ST
MAXWELL ST
S LIMESTONE
S. UPPER ST
SOLMAR ST
S BROADWAY
VIRGINIA AVE
COLUMBIA AVE
HILLTOP AVE
COMBS DR
JERRY CUE WAY
UNIVERSITY DR
AVENUE OF CHAMPIONS
COOPER DR
WILDCAT COURT
ALUMNI DRIVE
COLLEGE WAY
NICHOLASVILLE RD
RUPP ARENA & BLOCK AHEAD
MAP MAINTAINED BY PHYSICAL PLANT DIVISION
University Switchboard - (859) 257-9000
Visitor's Center - (859) 257-3595

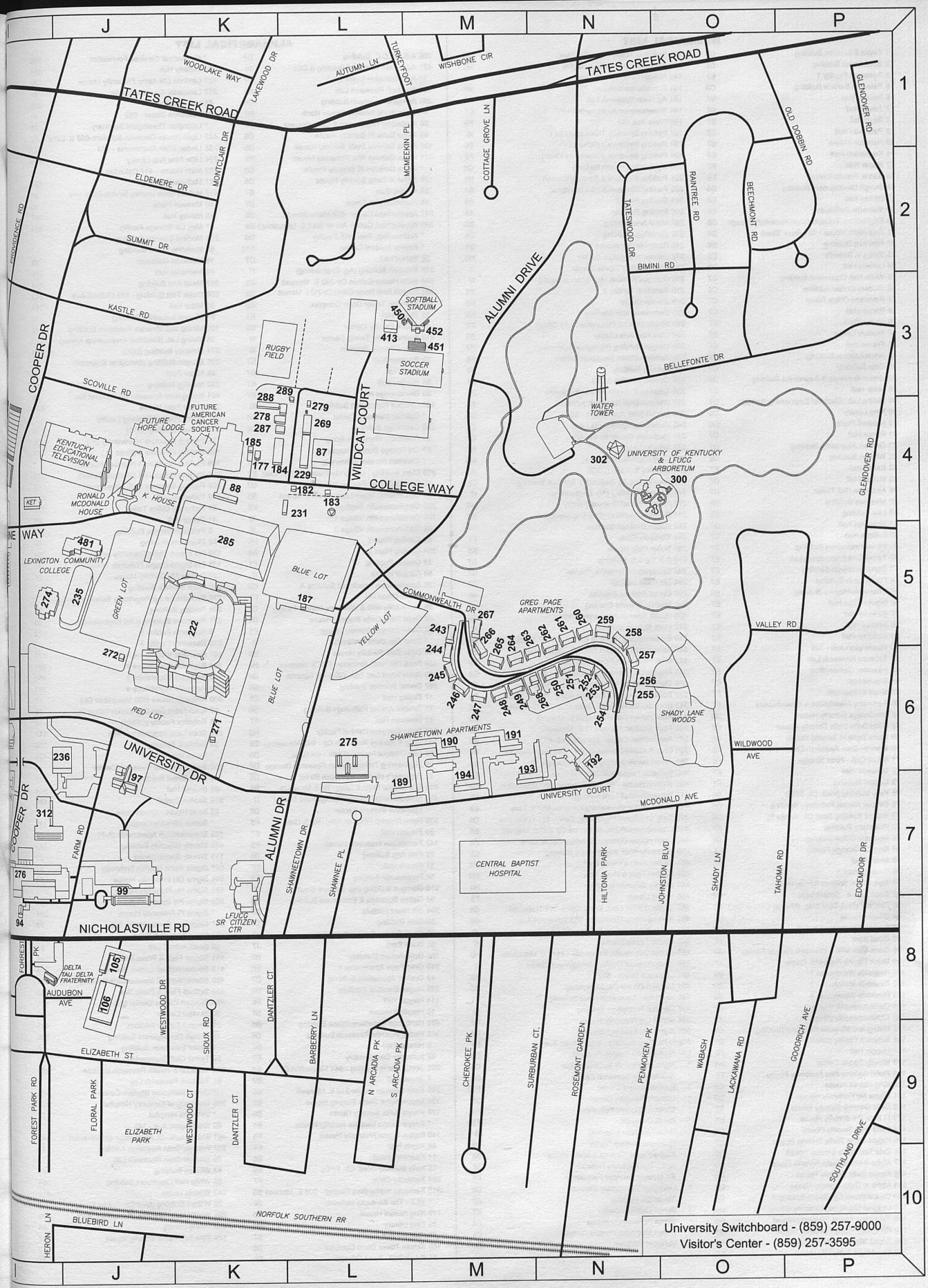
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1	Taylor Education Building	C8
2	Scott Street Building	C8
3	Research Facility 1	E7
5	Peterson Service Building	C8
6	Holmes Hall	B7
7	Jewell Hall	B7
8	Boyd Hall	B7
9	Patterson Hall	B6
10	Hamilton House	B7
11	Keeneland Hall	B6
12	Blazer Hall	B7
14	Boone Faculty Center	E6
15	Sturgill Development Building	D5
17	Dickey Hall	C8
19	Memorial Coliseum	C6
20	Engineering Transportation Research Garage	D8
21	Engineer's House - 421 Rose Street	D6
22	Fine Arts Building	D6
23	Safety & Security	C5
24	Lafferty Hall	D6
25	White Hall Classroom Building	D7
26	Student Center Addition	C6
27	Patterson Office Tower	C7
28	Barker Hall	C7
29	Alumni Gym	B7
30	Student Center	B7
31	Frazee Hall	C7
32	Administration Building	C7
33	Gillis Building	C7
34	Gatton Business & Economics Building	D8
35	Miller Hall	D7
38	Mining Lab (Electrical Engineering Annex)	D7
39	King Library	D6
40	Maxwell Place	D6
41	Pence Hall	D7
42	Grehan Journalism Building	D7
43	Whalen Building	D8
44	Kastle Hall	E7
45	McVey Hall	D7
46	Anderson Hall Tower	D7
47	Mathews Building	D8
48	Law Building	E8
49	Memorial Hall	D7
50	Erikson Hall	E7
51	Mineral Industries Building	E7
52	Terrell Civil Engineering Lab	E7
53	Slone Research Building	E7
54	Funkhouser Building	E7
55	Chemistry-Physics Building	E6
56	Breckinridge Hall	E7
57	Kinkead Hall	E7
58	Bradley Hall	E7
59	Bowman Hall	E7
60	Washington Ave - 149	E7
61	Tobacco Research Lab	E7
62	Insectary Conservatory	E7
64	Scovell Hall	E7
65	Small Animal Lab	F7
66	Agronomy Headhouse & Greenhouses	F7
67	Chi Omega Sorority House	D6
68	Delta Delta Delta Sorority House	D6
69	Alpha Delta Pi Sorority House	D6
70	Wenner-Gren Research Lab	F6
71	K-Lair Grill - Food Storage	F6
72	Donovan Hall	F7
73	Cooper Building	F7
75	Kelly Building (Med. Ctr. PPD)	G6
76	Dimock Animal Pathology Building	G6
78	Wilford Building (Med Ctr. Annex 5)	G6
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86	Medicine Office Building	G6
87	Med Ctr Storage Facility	L4
88	Motor Pool	K4
89	Cooling Plant 1	H6
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92	Seed House - Greenhouse	H7
93	Roach Patient Care Bldg. (Markey Cancer Ctr.)	G7
94	Cooper House	I7
96	Combs Cancer Research Building	G7
97	Good Barn	J7
98	Davis-Mills MRI & Woman's Cancer Facility	G7
99	Gluck Equine Research Center	J7
101	Reynolds Warehouse 1	B9
102	Reynolds Warehouse 2	B9
103	Reynolds Warehouse 3	B9
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123	Pi Beta Phi Sorority House	E5
124	Delta Zeta Sorority House	E6
125	Kappa Alpha Theta Sorority House	E5
126	Zeta Tau Alpha Sorority House	D5
127	Alpha Gamma Delta Sorority House	D5
128	Kappa Delta Sorority House	D5
129	Alpha Xi Delta Sorority House	D5
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137	Lambda Chi Alpha Fraternity House	G6
138	Phi Sigma Kappa Fraternity House	G5
139	Phi Kappa Alpha Fraternity House	G5
140	Kappa Sigma Fraternity House	F5
142	Farmhouse Fraternity House	F5
145	Blanding Tower Dorm Complex	G5
147	Dorm Complex Central Facility	H5
149	Kirwan Tower Dorm Complex	G5
154	Greenhouse Complex	H7
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197	Parking Structure 1(University Dr.)	I6
198	Parking Structure 2 (Rose St.)	E6
199	Parking Structure 3 (Kentucky Clinic)	F7
200	Aging/Allied Health Building	G8
201	Parking Structure 4 (Medical Center)	H7
202	Parking Structure 5 (S. Limestone)	B7
204	Cooling Plant 2	B8
206	Printing Building	A8
207	Metal Arts Building	B8
209	Centrifuge Building	E6
210	Reynolds Warehouse 4	B8
212	Lancaster Aquatics Center	H6
213	Boone Indoor Tennis Center	I5
215	Garrigus Building (Ag. Science South)	I7
216	Research Facility 3	E8
219	Seaton Center	H6
222	Commonwealth Stadium	K5
223	Wright Medical Plaza (Kentucky Clinic)	F7
224	Little Fine Arts Library	D6
225	Morgan Building (Biological Sciences)	F7
230	Sanders-Brown Research Center	F8
232	Nursing Building	F7
235	Oswald Building (LCC)	J5
236	Tobacco & Health Research Institute	J6
237	Wenner-Gren Research Addition	E6
238	Linden Walk Apartments - 404	D5
240	Rose Lane Apartments - 468	E4
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243	Greg Page Apartments 1	M5
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294	Gill Heart Institute	G7
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298	Medical Science Building	G7
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343	Bingham Davis House-Gaines Ctr-218 E. Maxwell	E6
344	Betts House-Gaines Ctr-232 E. Maxwell	B5
345	Kade German House-212 E. Maxwell	B5
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351	Jessie Harris Building - 644 Maxwelton Ct	E8
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417	Mathews House-Learning Services-660 S. Lime	E8
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442	Ligon House-Donovan Scholars-658 S. Lime	E8
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506	Meter Test Building - 515 Oldham Ave	F4
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*	Alpha Omicron Pi Sorority House	C5
*	Archaeology Research Facility	D8
*	Baptist Student Center	F10
*	Catholic Newman Center	D5
*	Christian Student Fellowship	F4
*	Credit Union UK	F10
*	Delta Tau Delta Fraternity	I8
*	Episcopal Student Center	D6
*	Kappa Kappa Gamma Sorority House	B5
*	KET - The Kentucky Network	J4
*	KY Medical Services Foundation	F8
*	Lexington Theological Seminary	D8
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*	Senior Citizen's Center	K7
*	Sigma Pi Fraternity House	C4
*	United Methodist Student Center	F4
*	Veterans Hospital	H7

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32	Administration Building	C7
184	Ag Mach Research Lab	K4
200	Aging/Allied Health Building	G8
91	Agricultural Science Center North	H7
66	Agronomy Headhouse & Greenhouses	F7
69	Alpha Delta Pi Sorority House	D6
127	Alpha Gamma Delta Sorority House	D5
115	Alpha Gamma Rho Fraternity House	F5
*	Alpha Omicron Pi Sorority House	C5
129	Alpha Xi Delta Sorority House	D5
29	Alumni Gym	B7
46	Anderson Hall Tower	D7
347	Appalachian Center -624 Maxwelton Ct.	E8
333	Appalachian Center Annex (641 S. Limestone)	E8
*	Archaeology Research Facility	D8
*	Baptist Student Center	F10
28	Barker Hall	C7
276	Barnhart Building (Ag. Engineering)	I7
344	Betts House-Gaines Ctr-232 E. Maxwell	B5
343	Bingham Davis House-Gaines Ctr-218 E. Maxwell	E6
145	Blanding Tower Dorm Complex	G5
12	Blazer Hall	B7
14	Boone Faculty Center	E6
213	Boone Indoor Tennis Center	I5
485	Boone Tennis Stadium	I5
59	Bowman Hall	E7
8	Boyd Hall	B7
58	Bradley Hall	E7
56	Breckinridge Hall	E7
497	Campus Recreation Building	I6
*	Catholic Newman Center	D5
209	Centrifuge Building	E6
55	Chemistry-Physics Building	E6
67	Chi Omega Sorority House	D6
*	Christian Student Fellowship	F4
336	Clark Building - University Press - 663 S. Lime	E8
96	Combs Cancer Research Building	G7
432	Commonwealth House-Gaines Ctr 226 E. Maxwell	B5
222	Commonwealth Stadium	K5
106	Commonwealth Village 1	J8
105	Commonwealth Village 2	J8
89	Cooling Plant 1	H6
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72	Donovan Hall	F7
147	Dorm Complex Central Facility	H5
350	Drug & Alcohol Research Ctr - 643 Maxwelton	E8
420	Early Childhood Psychology Serv. - 424 Euclid	D5
20	Engineering Transportation Research Garage	D8
21	Engineer's House - 421 Rose Street	D6
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490	Environmental Quality Management Center	I7
*	Episcopal Student Center	D6
339	Equine Research Fd./Ctr on Aging - 805 S. Lime.	F8
50	Erikson Hall	E7
142	Farmhouse Fraternity House	F5
22	Fine Arts Building	D6
31	Frazee Hall	C7
54	Funkhouser Building	E7
215	Garrigus Building (Ag. Science South)	I7
34	Gatton Business & Economics Building	D8
294	Gill Heart Institute	G7
33	Gillis Building	C7
99	Gluck Equine Research Center	J7
97	Good Barn	J7
154	Greenhouse Complex	H7
243	Greg Page Apartments 1	M5
42	Grehan Journalism Building	D7
283	Hagan Baseball Stadium	H4
111	Haggin Hall	F6
10	Hamilton House	B7
495	Hardymon Communications Building	B5
305	Health Science Research Building	G6
6	Holmes Hall	B7
62	Insectary Conservatory	E7
351	Jessie Harris Building - 644 Maxwelton Ct	E8
7	Jewell Hall	B7
345	Kade German House-212 E. Maxwell	B5
125	Kappa Alpha Theta Sorority House	E5
128	Kappa Delta Sorority House	D5
*	Kappa Kappa Gamma Sorority House	B5
140	Kappa Sigma Fraternity House	F5
44	Kastle Hall	E7
11	Keeneland Hall	B6
75	Kelly Building (Med. Ctr. PPD)	G6
284	Kentucky Clinic	F7
315	Kentucky Humanities Council - 206 E. Maxwell	B5
*	KET - The Kentucky Network	J4
119	King Alumni House	C5
39	King Library	D6
57	Kinkead Hall	E7
149	Kirwan Tower Dorm Complex	G5
71	K-Lair Grill - Food Storage	F6
*	KY Medical Services Foundation	286
24	Lafferty Hall	481
137	Lambda Chi Alpha Fraternity House	32
212	Lancaster Aquatics Center	184
48	Law Building	200
493	Lawrence Street - 622	91
*	Lexington Theological Seminary	66
442	Ligon House-Donovan Scholars-658 S. Lime	69
238	Linden Walk Apartments - 404	127
224	Little Fine Arts Library	115
322	Math House - 417 Columbia Ave	*
47	Mathews Building	129
417	Mathews House-Learning Services-660 S. Lime	29
40	Maxwell Place	46
45	McVey Hall	347
87	Med Ctr Storage Facility	333
298	Medical Science Building	*
86	Medicine Office Building	*
19	Memorial Coliseum	28
49	Memorial Hall	276
207	Metal Arts Building	344
506	Meter Test Building - 515 Oldham Ave	343
35	Miller Hall	145
51	Mineral Industries Building	12
107	Mining and Minerals Research Building	14
38	Mining Lab (Electrical Engineering Annex)	213
274	Moloney Building (LCC)	485
225	Morgan Building (Biological Sciences)	59
88	Motor Pool	8
232	Nursing Building	58
461	Nursing Home Research - 153 Transcript Ave.	56
285	Nutter Field House	497
277	Nutter Football Training Facility	*
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198	Parking Structure 2 (Rose St.)	67
199	Parking Structure 3 (Kentucky Clinic)	*
201	Parking Structure 4 (Medical Center)	336
202	Parking Structure 5 (S. Limestone)	96
9	Patterson Hall	432
27	Patterson Office Tower	222
41	Pence Hall	106
5	Peterson Service Building	105
82	Pharmacy Building	89
139	Phi Kappa Alpha Fraternity House	204
138	Phi Sigma Kappa Fraternity House	73
123	Pi Beta Phi Sorority House	94
312	Plant Science Building	-137
275	Poundstone Ag Regulatory Services Building	*
206	Printing Building	98
281	Raymond Building (Civil Engineering)	68
3	Research Facility 1	122
216	Research Facility 3	*
101	Reynolds Warehouse 1	124
102	Reynolds Warehouse 2	489
103	Reynolds Warehouse 3	460
210	Reynolds Warehouse 4	297
400	Richards House (630 Maxwelton Ct.)	17
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219	Seaton Center	490
92	Seed House - Greenhouse	*
*	Senior Citizen's Center	339
189	Shawneetown Apartments (A-F)	50
453	Shively Grounds Building	142
113	Shively Sports Center	22
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504	Sigma Chi Fraternity House	54
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1	Taylor Education Building	6
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236	Tobacco & Health Research Institute	351
61	Tobacco Research Lab	7
*	United Methodist Student Center	345
293	University of Kentucky Hospital	125
*	Veterans Hospital	128
60	Washington Ave - 149	*
401	Weldon House - St. Agnes House -655 Maxwelton	140
237	Wenner-Gren Research Addition	44
70	Wenner-Gren Research Lab	11
43	Whalen Building	75
25	White Hall Classroom Building	284
242	Wildcat Lodge	315
78	Wilford Building (Med Ctr. Annex 5)	*
223	Wright Medical Plaza (Kentucky Clinic)	119
456	Young Library	39
126	Zeta Tau Alpha Sorority House	57
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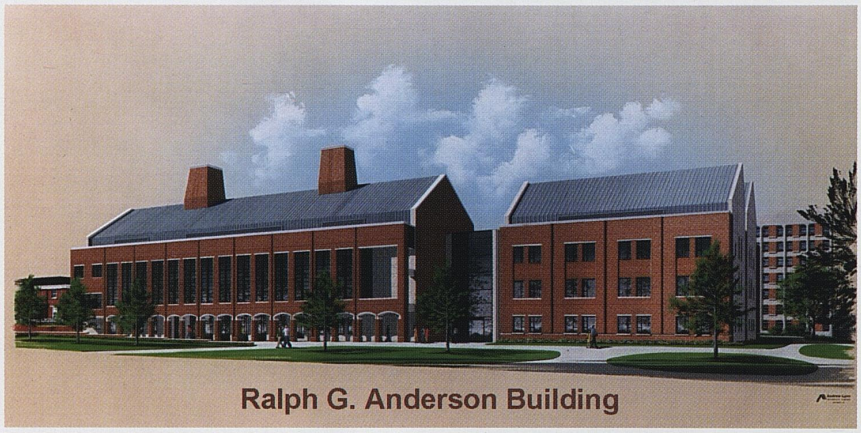
NUMERICAL LIST

1	Taylor Education Building	C8
2	Scott Street Building	C8
3	Research Facility 1	E7
5	Peterson Service Building	C8
6	Holmes Hall	B7
7	Jewell Hall	B7
8	Boyd Hall	B7
9	Patterson Hall	B6
10	Hamilton House	B7
11	Keeneland Hall	B6
12	Blazer Hall	B7
14	Boone Faculty Center	E6
15	Sturgill Development Building	D5
17	Dickey Hall	C8
19	Memorial Coliseum	C6
20	Engineering Transportation Research Garage	D8
21	Engineer's House - 421 Rose Street	D6
22	Fine Arts Building	D6
23	Safety & Security	C5
24	Lafferty Hall	D6
25	White Hall Classroom Building	D7
26	Student Center Addition	C6
27	Patterson Office Tower	C7
28	Barker Hall	C7
29	Alumni Gym	B7
30	Student Center	B7
31	Frazee Hall	C7
32	Administration Building	C7
33	Gillis Building	C7
34	Gatton Business & Economics Building	D8
35	Miller Hall	D7
38	Mining Lab (Electrical Engineering Annex)	D7
39	King Library	D6
40	Maxwell Place	D6
41	Pence Hall	D7
42	Grehan Journalism Building	D7
43	Whalen Building	D8
44	Kastle Hall	E7
45	McVey Hall	D7
46	Anderson Hall Tower	D7
47	Mathews Building	D8
48	Law Building	E8
49	Memorial Hall	D7
50	Erikson Hall	E7
51	Mineral Industries Building	E7
52	Terrell Civil Engineering Lab	E7
53	Slone Research Building	E7
54	Funkhouser Building	E7
55	Chemistry-Physics Building	E6
56	Breckinridge Hall	E7
57	Kinkead Hall	E7
58	Bradley Hall	E7
59	Bowman Hall	E7
60	Washington Ave - 149	E7
61	Tobacco Research Lab	E7
62	Insectary Conservatory	E7
64	Scovell Hall	E7
65	Small Animal Lab	F7
66	Agronomy Headhouse & Greenhouses	F7
67	Chi Omega Sorority House	D6
68	Delta Delta Delta Sorority House	D6
69	Alpha Delta Pi Sorority House	D6
70	Wenner-Gren Research Lab	F6
71	K-Lair Grill - Food Storage	F6
72	Donovan Hall	F7
73	Cooper Building	F7
75	Kelly Building (Med. Ctr. PPD)	G6
76	Dimock Animal Pathology Building	G6
78	Wilford Building (Med Ctr. Annex 5)	G6
82	Pharmacy Building	F7
86	Medicine Office Building	G6
87	Med Ctr Storage Facility	L4
88	Motor Pool	K4
89	Cooling Plant 1	H6
91	Agricultural Science Center North	H7
92	Seed House - Greenhouse	H7
93	Roach Patient Care Bldg. (Markey Cancer Ctr.)	G7
94	Cooper House	I7
96	Combs Cancer Research Building	G7
97	Good Barn	J7
98	Davis-Mills MRI & Woman's Cancer Facility	G7
99	Gluck Equine Research Center	J7
101	Reynolds Warehouse 1	B9
102	Reynolds Warehouse 2	B9
103	Reynolds Warehouse 3	B9
105	Commonwealth Village 2	J8
106	Commonwealth Village 1	J8
107	Mining and Minerals Research Building	E6
108	Robotics Facility (CRMS)	D7
111	Haggin Hall	F6
113	Shively Sports Center	H4
115	Alpha Gamma Rho Fraternity House	F5
119	King Alumni House	C5
121	Sigma Nu Fraternity House	D5
122	Delta Gamma Sorority House	E5
123	Pi Beta Phi Sorority House	E5
124	Delta Zeta Sorority House	E6
125	Kappa Alpha Theta Sorority House	E5
126	Zeta Tau Alpha Sorority House	D5
127	Alpha Gamma Delta Sorority House	D5
128	Kappa Delta Sorority House	D5
129	Alpha Xi Delta Sorority House	D5
130-136	Cooperstown Apartment Building A	G4
137	Lambda Chi Alpha Fraternity House	G6
138	Phi Sigma Kappa Fraternity House	G5
139	Phi Kappa Alpha Fraternity House	G5
140	Kappa Sigma Fraternity House	F5
142	Farmhouse Fraternity House	F5
145	Blanding Tower Dorm Complex	G5
147	Dorm Complex Central Facility	H5
149	Kirwan Tower Dorm Complex	G5
154	Greenhouse Complex	H7
184	Ag Mach Research Lab	K4
189	Shawneetown Apartments (A-F)	L7
195	Press Ave 744	F9
197	Parking Structure 1(University Dr.)	I6
198	Parking Structure 2 (Rose St.)	E6
199	Parking Structure 3 (Kentucky Clinic)	F7
200	Aging/Allied Health Building	G8
201	Parking Structure 4 (Medical Center)	H7
202	Parking Structure 5 (S. Limestone)	B7
204	Cooling Plant 2	B8
206	Printing Building	A8
207	Metal Arts Building	B8
209	Centrifuge Building	E6
210	Reynolds Warehouse 4	B8
212	Lancaster Aquatics Center	H6
213	Boone Indoor Tennis Center	I5
215	Garrigus Building (Ag. Science South)	I7
216	Research Facility 3	E8
219	Seaton Center	H6
222	Commonwealth Stadium	K5
223	Wright Medical Plaza (Kentucky Clinic)	F7
224	Little Fine Arts Library	D6
225	Morgan Building (Biological Sciences)	F7
230	Sanders-Brown Research Center	F8
232	Nursing Building	F7
235	Oswald Building (LCC)	J5
236	Tobacco & Health Research Institute	J6
237	Wenner-Gren Research Addition	E6
238	Linden Walk Apartments - 404	D5
240	Rose Lane Apartments - 468	E4
241	Singletary Center for the Arts	C6
242	Wildcat Lodge	B6
243	Greg Page Apartments 1	M5
274	Moloney Building (LCC)	I5
275	Poundstone Ag Regulatory Services Building	L6
276	Barnhart Building (Ag. Engineering)	I7
277	Nutter Football Training Facility	H4
281	Raymond Building (Civil Engineering)	D7
283	Hagan Baseball Stadium	H4
284	Kentucky Clinic	F7
285	Nutter Field House	K5
286	A.S.T.e.C.C. Building	D7
293	University of Kentucky Hospital	G7
294	Gill Heart Institute	G7
297	Dental Science Building	G6
298	Medical Science Building	G7
305	Health Science Research Building	G6
312	Plant Science Building	I7
314	Environmental Health & Safety - 252 E. Maxwell St	B5
315	Kentucky Humanities Council - 206 E. Maxwell	B5
322	Math House - 417 Columbia Ave	E5
333	Appalachian Center Annex (641 S. Limestone)	E8
336	Clark Building - University Press - 663 S. Lime	E8
339	Equine Research Fd./Ctr on Aging - 805 S. Lime.	F8
343	Bingham Davis House-Gaines Ctr-218 E. Maxwell	E6
344	Betts House-Gaines Ctr-232 E. Maxwell	B5
345	Kade German House-212 E. Maxwell	B5
347	Appalachian Center -624 Maxwelton Ct.	E8
350	Drug & Alcohol Research Ctr - 643 Maxwelton Ct	E8
351	Jessie Harris Building - 644 Maxwelton Ct	E8
400	Richards House (630 Maxwelton Ct.)	E8
401	Weldon House - St. Agnes House -655 Maxwelton	D8
413	Soccer/Softball Locker Rooms	L3
417	Mathews House-Learning Services-660 S. Lime	E8
420	Early Childhood Psychology Serv. - 424 Euclid Ave	D5
432	Commonwealth House-Gaines Ctr 226 E. Maxwell	B5
442	Ligon House-Donovan Scholars-658 S. Lime	E8
450	Soccer/Softball Maintenance Building	L3
451	Soccer Field & Press Box	M3
452	Softball Field & Press Box	M3
453	Shively Grounds Building	H4
456	Young Library	F5
460	Dental School Cont. Educ. Office-149 Transcript	G8
461	Nursing Home Research - 153 Transcript Ave.	G8
481	Academic Technical Building (LCC)	J5
485	Boone Tennis Stadium	I5
489	Dental Oral Health Residence - 1117 S. Limestone	H8
490	Environmental Quality Management Center	I7
493	Lawrence Street - 622	A8
494	Stuckert Career Center Building	D5
495	Hardymon Communications Building	B5
497	Campus Recreation Building	I6
504	Sigma Chi Fraternity House	D7
505	Sigma Phi Epsilon Fraternity	D5
506	Meter Test Building - 515 Oldham Ave	F4
507	Sigma Alpha Epsilon Fraternity	D5
*	Alpha Omicron Pi Sorority House	C5
*	Archaeology Research Facility	D8
*	Baptist Student Center	F10
*	Catholic Newman Center	D5
*	Christian Student Fellowship	F4
*	Credit Union UK	F10
*	Delta Tau Delta Fraternity	I8
*	Episcopal Student Center	D6
*	Kappa Kappa Gamma Sorority House	B5
*	KET - The Kentucky Network	J4
*	KY Medical Services Foundation	F8
*	Lexington Theological Seminary	D8
*	Samaritan Hospital	A6
*	Senior Citizen's Center	K7
*	Sigma Pi Fraternity House	C4
*	United Methodist Student Center	F4
*	Veterans Hospital	H7

ALPHABETICAL LIST

286	A.S.T.e.C.C. Building	D7
481	Academic Technical Building (LCC)	J5
32	Administration Building	C7
184	Ag Mach Research Lab	K4
200	Aging/Allied Health Building	G8
91	Agricultural Science Center North	H7
66	Agronomy Headhouse & Greenhouses	F7
69	Alpha Delta Pi Sorority House	D6
127	Alpha Gamma Delta Sorority House	D5
115	Alpha Gamma Rho Fraternity House	F5
*	Alpha Omicron Pi Sorority House	C5
129	Alpha Xi Delta Sorority House	D5
29	Alumni Gym	B7
46	Anderson Hall Tower	D7
347	Appalachian Center -624 Maxwelton Ct.	E8
333	Appalachian Center Annex (641 S. Limestone)	E8
*	Archaeology Research Facility	D8
*	Baptist Student Center	F10
28	Barker Hall	C7
276	Barnhart Building (Ag. Engineering)	I7
344	Betts House-Gaines Ctr-232 E. Maxwell	B5
343	Bingham Davis House-Gaines Ctr-218 E. Maxwell	E6
145	Blanding Tower Dorm Complex	G5
12	Blazer Hall	B7
14	Boone Faculty Center	E6
213	Boone Indoor Tennis Center	I5
485	Boone Tennis Stadium	I5
59	Bowman Hall	E7
8	Boyd Hall	B7
58	Bradley Hall	E7
56	Breckinridge Hall	E7
497	Campus Recreation Building	I6
*	Catholic Newman Center	D5
209	Centrifuge Building	E6
55	Chemistry-Physics Building	E6
67	Chi Omega Sorority House	D6
*	Christian Student Fellowship	F4
336	Clark Building - University Press - 663 S. Lime	E8
96	Combs Cancer Research Building	G7
432	Commonwealth House-Gaines Ctr 226 E. Maxwell	B5
222	Commonwealth Stadium	K5
106	Commonwealth Village 1	J8
105	Commonwealth Village 2	J8
89	Cooling Plant 1	H6
204	Cooling Plant 2	B8
73	Cooper Building	F7
94	Cooper House	I7
130-136	Cooperstown Apartment Building A	G4
*	Credit Union UK	F10
98	Davis-Mills MRI & Woman's Cancer Facility	G7
68	Delta Delta Delta Sorority House	D6
122	Delta Gamma Sorority House	E5
*	Delta Tau Delta Fraternity	I8
124	Delta Zeta Sorority House	E6
489	Dental Oral Health Residence - 1117 S. Limestone	H8
460	Dental School Cont. Educ. Office-149 Transcript	G8
297	Dental Science Building	G6
17	Dickey Hall	C8
76	Dimock Animal Pathology Building	G6
72	Donovan Hall	F7
147	Dorm Complex Central Facility	H5
350	Drug & Alcohol Research Ctr - 643 Maxwelton Ct	E8
420	Early Childhood Psychology Serv. - 424 Euclid	D5
20	Engineering Transportation Research Garage	D8
21	Engineer's House - 421 Rose Street	D6
314	Environmental Health & Safety - 252 E. Maxwell St	B5
490	Environmental Quality Management Center	I7
*	Episcopal Student Center	D6
339	Equine Research Fd./Ctr on Aging - 805 S. Lime.	F8
50	Erikson Hall	E7
142	Farmhouse Fraternity House	F5
22	Fine Arts Building	D6
31	Frazee Hall	C7
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215	Garrigus Building (Ag. Science South)	I7
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294	Gill Heart Institute	G7
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99	Gluck Equine Research Center	J7
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154	Greenhouse Complex	H7
243	Greg Page Apartments 1	M5
42	Grehan Journalism Building	D7
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Ralph G. Anderson Building

The Graduate School
351 Patterson Office Tower
University of Kentucky
Lexington, KY 40506-0027
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