

WESTERN KENTUCKY UNIVERSITY BULLETIN
GRADUATE COLLEGE ISSUE
1978-1979



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WESTERN KENTUCKY UNIVERSITY

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TITLE IX EDUCATION AMENDMENTS OF 1972

Title IX of the Education Amendments of 1972 requires that Western Kentucky University not discriminate on the basis of sex in its education programs, admissions, employment practices, and activities which it operates. It is the policy of Western Kentucky University to comply with this requirement.

Any person having inquiries concerning Western Kentucky University's compliance with Title IX may contact the following persons who have been designated by the University President to coordinate Western's effort to comply with Title IX:

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Inquiries about Title IX requirements may also be made to the Director, Office for Civil Rights, U.S. Department of Health, Education and Welfare, Washington, D.C. 20201.

All statements in this publication are announcements of present policy only and are subject to change at any time without prior notice.

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THE UNIVERSITY

Historical Sketch

Western Kentucky State Normal School, located in Bowling Green, was established by an act of the 1906 Kentucky General Assembly. Prior to 1906, there had existed in Bowling Green the Southern Normal School and Bowling Green Business University, whose president was Dr. Henry Hardin Cherry. In 1907 the Southern Normal School was transferred to the state, and Dr. Cherry was selected as the first president of Western Kentucky State Normal School. In 1922 the Kentucky Legislature changed the school's name to Western Kentucky State Normal School and Teachers College and empowered the College to award degrees to its graduates. In 1930 the school's name was changed to Western Kentucky State Teachers College, and in 1948 to Western Kentucky State College. The Kentucky General Assembly in 1966 designated Western as a University and changed the name to Western Kentucky University.

In 1964 the Bowling Green College of Commerce was organized into an academic division of Western, and the Graduate Division was changed to the Graduate School. In 1965 Western's Board of Regents approved the formation of three new colleges: the College of Education, the Potter College of Liberal Arts, and the Ogden College of Science and Technology. In 1969 the name of the Graduate School was changed to the Graduate College, and the College of Applied Arts and Health was added, creating a total of six colleges in the structure of Western. In 1972 the Bowling Green College of Commerce was renamed the Bowling Green College of Business and Public Affairs, and the Potter College of Liberal Arts was renamed Potter College of Arts and Humanities.

THE GRADUATE COLLEGE

History

Western began offering the Master of Arts Degree in 1931. This program was discontinued in 1936 but was resumed in 1941 and has enjoyed continuous growth since that time. The granting of university status in 1966 gave the Graduate School (renamed the Graduate College in 1969) increased opportunity both to strengthen existing programs and to offer an even wider choice of program areas.

Organization

The Dean of the Graduate College is charged with the administration of policies regulating and relating to graduate studies. It is his/her responsibility to certify that candidates have fulfilled requirements for advanced degrees.

The Graduate Faculty consists of faculty members recommended by department heads and college deans, and approved by the Graduate Council.

The Graduate Council, which represents the Graduate Faculty, recommends and reviews policies pertinent to the operation of the Graduate College. In addition, it reviews and makes recommendations regarding new graduate programs and alteration of existing programs.

CULTURAL, RELIGIOUS AND RECREATIONAL OPPORTUNITIES

Music

The Department of Music sponsors a number of musical presentations including seasonal concerts. In addition, many faculty and student recitals are given throughout the year.

Communication and Theatre

The Department of Communication and Theatre and the Western Players present a series of programs during the academic year. Summer Theatre programs are scheduled during the summer sessions. A small fee is charged for admission to major productions; however, there is no admission charge for one-act plays produced by the Department.

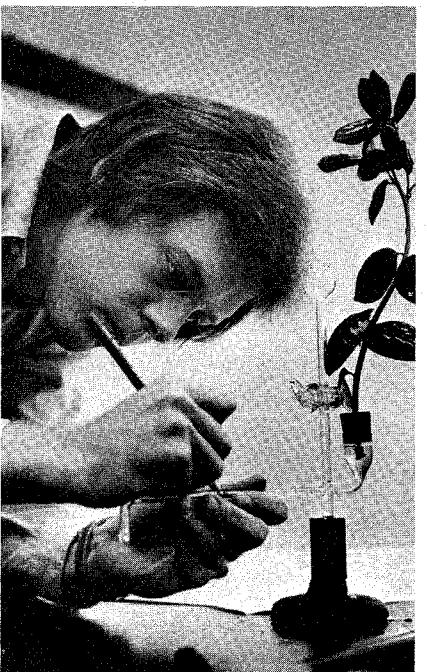
Art

The Department of Art has a gallery in the Ivan Wilson Fine Arts Building where a display is usually on exhibit.

Foreign Languages

The Department of Foreign Languages sponsors an annual International Film Series, an auxiliary event of the Fine Arts Festival. The series, consisting of twelve films from twelve different countries, is shown in the original language with English subtitles. This event exposes the WKU and Bowling Green communities to acclaimed motion pictures which cannot be seen in local theatres or on commercial television.

Each year one graduate student is permitted to go to Montpellier, France, on a University Workshop. While there, the student may take courses for transfer to Western and will serve as advisor to Western undergraduates who are attending the University Paul Valery on the Western-in-France program. In order to have the experience needed for this advisory function, the graduate student must have spent his/her junior year in Montpellier.



LIBRARIES, RESOURCE CENTERS AND INSTRUCTIONAL MEDIA

Lecture Series

The Rodes-Helm Lecture Series was endowed in 1961 by Mr. and Mrs. Harold Helm of Montclair, New Jersey. The lecture series is named in honor of the late Judge John B. Rodes, father of Mrs. Helm, and in honor of Miss Margie Helm, sister of Mr. Helm and former Director of Library Services at Western. The endowment fund is to be kept intact and the income from it devoted to bringing distinguished lecturers to the Western campus.

The University Lecture Series brings to the campus three or four nationally known lecturers each school year. Students, faculty, and the general public are admitted to all lectures free of charge.

Planetarium

The Hardin Planetarium, a circular unit adjacent to the Thompson Science Complex, contains a Projection Hemisphere Room and a roof-top observatory which houses a 12½-inch Cassegrain reflector and associated photoelectric equipment.

Recreational Activities

Students and faculty are encouraged to use the Athletic Complex facilities. Swimming, dancing, tumbling, gymnastics, table tennis, judo, karate, wrestling, basketball, volleyball, badminton, tennis, weight training, conditioning, handball, squash, tennis, and archery facilities are available. Equipment is made available on a non-charge basis to students, faculty, and staff.

Religious Life

Since Western Kentucky University is a state-supported institution, it is non-denominational. Religious activities are, however, available to students. The Western Religious Council serves as the coordinating organization for religious activity on campus.

Support to the Research and Instructional Program of the University is provided through the activities and programs of the Division of Library Services, Media Services, and the University Archives. These programs provide services for the acquisition, utilization, and dissemination of all types of instructional resources.

Library Services

Seven library and resources centers serve the academic community at Western Kentucky University. They are: (1) the Margie Helm Library, (2) the Raymond L. Cravens Graduate Center and Library, (3) Kentucky Library and Museum, (4) Science Library, (5) the Education Resources Center, (6) Wilson Hall Study Center, and (7) Jones-Jaggers Laboratory School Library. These libraries and study centers provide a seating capacity of 3,175 and a book capacity of 1,000,000 volumes.

Library resources are organized into divisional collections. This arrangement allows maximum benefits for reference and research activities among its 665,000 volumes; 3,300 journal holdings; 250,000 microform units within the libraries. An on-line computerized resources management system with remote video display terminals provides the library user with immediate data on the availability and status of library resources.

Individual carrels are provided for students engaged in thesis or research projects, and rooms are provided for graduate seminars. The library offers aid to researchers through extensive bibliographies, indexing and abstracting services, and interlibrary loans. The library is a depository for federal, state, and selected United Nations documents. Significant collections of research materials in several fields are available in various forms of micro-reproductions. Under the terms of a cooperative agreement between the University and the Warren County Bar Association, the Warren County Law Library is housed in the library. Various computer based research services are available, and the retrieval of these primary resources is accom-

plished through cooperation with the University Computer Center and the Kentucky Educational Computer Network.

A special research collection is housed in the Kentucky Building. These resources consist of both printed materials and museum collections relating to all phases of Kentuckiana. There are 22,000 books, a large number of early newspapers and periodicals, state documents, broadsides, photographs, maps, microfilm, original cartoons, oral tapes, and art prints. Also available are church records, clippings, sheet music, and scrap books. The manuscript division includes collections such as the Lewis-Starling papers, the Joseph R. Underwood papers, the Proctor Knott Collection, the Calvert-Youngglove Collection, the Frank Chelf Collection, the Helm-Carson Family Papers, and the Janice Holt Giles Manuscripts. The Courtney Ellis River Collection, the H. O. Potter Daviess County Collection, and the Lilly Bland Carter Poetry Collection are other notable collections housed in the manuscript division. The Kentucky Library also houses the Gordon Wilson Linguistic Study of the Mammoth Cave, the Allan Trout Collection, and the South Union Shaker Materials.

Museum holdings include items of natural history, Civil War relics, furniture, art, musical instruments, toys, jewelry, and textiles as well as pioneer relics, early types of lighting, tools and weapons, and models of Kentucky forts and homes.

Media Services

The Division of Media Services is a service organization consisting of two units: (1) the Audio Visual Service Center and (2) Educational Television. The staff, facilities, and equipment of the Audio Visual Service Center provides both audio visual resources and utilization assistance for the entire campus. The Division is also responsible for the administration of the film library and photographic darkrooms. Educational Television provides instructional support in the planning, development, production, and campus distribution of these types of instructional resources.

NON-ACADEMIC SERVICES

Archives

The University Archives is housed in the Helm Library. The purpose of the Archives is to collect, preserve, and organize for appropriate use the records of the University which are required for administrative functions and are essential for the historic study of the institution and its genealogical antecedents. Such records include correspondence, reports, minutes, photographs, scrap books, publications, as well as clippings and articles about the University and its personnel. Reference service is available.

Research and Computing Services

Computing and consultation services for research and instructional application are provided for faculty and students by the Area of Research and Computing Services in the Office of Institutional Research. Most computing for research and instructional application, with the exception of data processing and computer science classes, is done on a batch terminal connected to the Kentucky Education Computing Network. The University maintains a small business-type computer and a time-sharing system which are used primarily for instructional programs in data processing and computer science. The University's central computer facilities are used mainly for administrative applications.

The wide variety of computer programs and statistical packages that are maintained will satisfy most data analysis requirements. Although the primary responsibility for research design and data analysis rests with the individual researcher, the Area assists students and faculty by providing methodological programming, and other services related to the use of computer facilities. Academic and research computing facilities are operated on an open lab basis during periods that approximate normal library hours.

Counseling Services Center

The Center, located in Room 408 of the College of Education Building, provides counseling services and is responsible for the administration of national testing programs. Contact the Center for appointments and for test information.

Housing Facilities

Residence hall applications (with advance payment) should be sent to Director of Housing, Western Kentucky University, Bowling Green, Kentucky 42101.

Residence halls are assigned according to student preference and availability of space. Graduate student floors are located in Bemis Lawrence Hall for women and Pearce-Ford Tower for men. Telephones and compact refrigerators are provided.

Food Services

The variety of food services maintained on campus include the Garrett Conference Center Cafeteria, which offers a voluntary board plan, and the Downing University Center Cafeteria. A Snack Bar and Grill are also housed in the Garrett Conference Center and the Downing University Center, respectively. Vending and self-service facilities are available in all dormitories.

FINANCIAL ASSISTANCE

Loans

National Direct Student Loan. This long-term loan is designed to assist the student whose family income and total assets place limitations upon other sources (bank loan, family savings, etc.) of educational funds. The loan is interest free while the student is in school and charges only a three percent interest rate during the repayment period. In addition to the interest-rate advantage, the borrower may discount 15 percent of the loan each year, up to 100 percent of the total loan, by teaching in an elementary or secondary school in an economically deprived area.

Federally Insured Bank Loan. This long-term loan may be secured through the student's local bank. Student applicants who do not qualify for interest subsidy begin paying interest at a rate of seven to ten percent upon receipt of the loan.

College Heights Foundation Loan. This loan permits borrowing with a low-interest rate and usually requires repayment on a short-term basis.

Workshops

The University participates in both a work-study and a regular program of employment whereby a student may work 15 hours per week during the regular term of study, providing such work is needed to balance the college expense budget. The work-study program offers summer employment which permits the student to work 40 hours per week. Eligibility to participate is based on family income. Assistance in obtaining off-campus employment is also available.

Application Information. Application forms for financial assistance are available in:

Office of Student Financial Aid
Western Kentucky University
Bowling Green, Kentucky 42101

For maximum consideration, apply before March 15 for fall and spring semesters combined, fall semester only, or summer session only. Apply before December 1 for spring semester only.

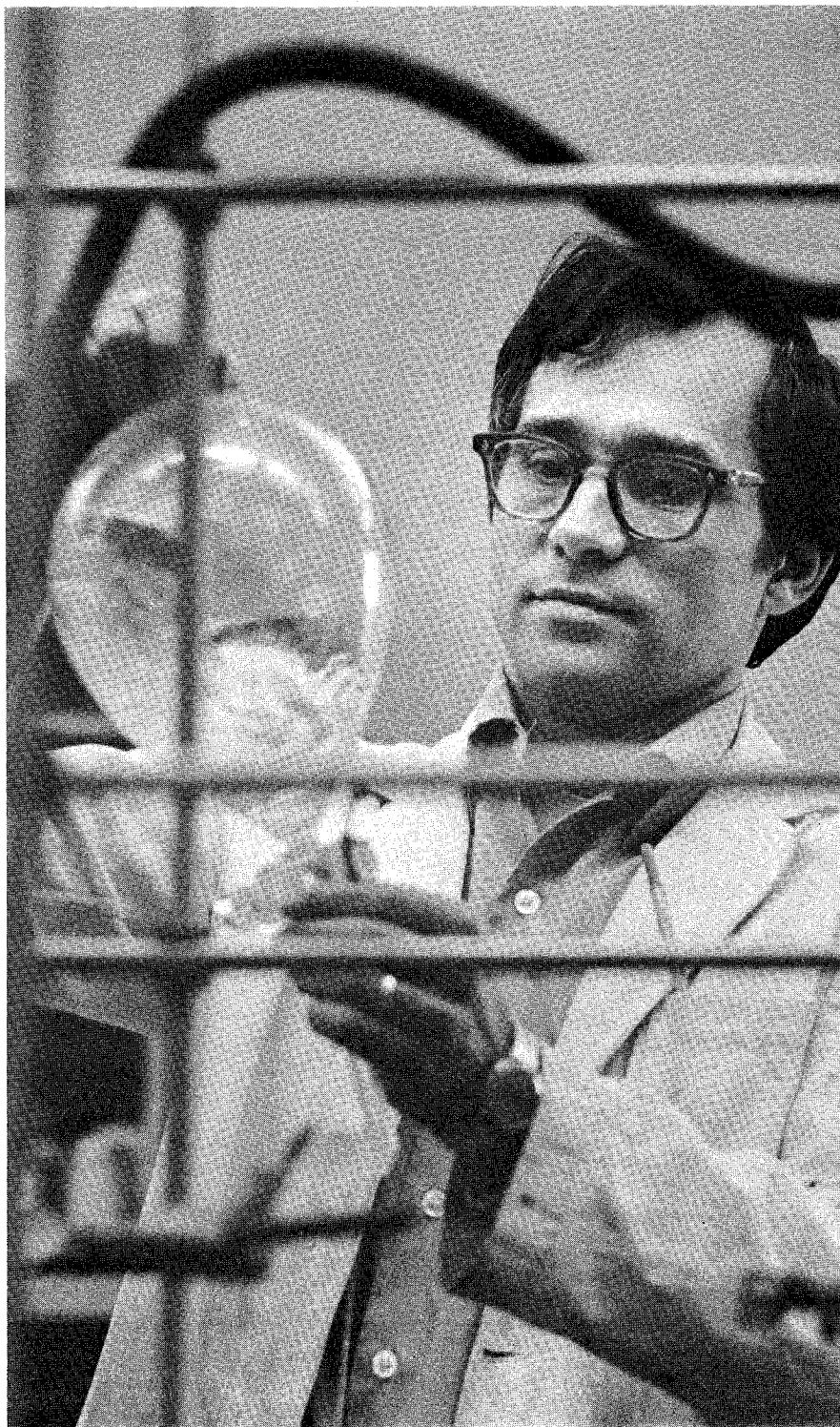
Research Grants

Graduate students are invited to submit proposals for University research grants. Information as to application deadline and required proposal form may be obtained from the Graduate College.

For maximum consideration, the applicant for a graduate assistantship should exceed minimum Graduate College admission requirements and should apply prior to February 1. The assistantship application and three letters of recommendation (to be requested by the student, not the Graduate College), must be submitted to the Dean of the Graduate College. Appointments are based upon the recommendation and approval of the head of the department and the dean of the college in which the assistantship is granted.

Veterans Administration Benefits

G. I. Bill. Students who have had more than 180 days of active service with the Armed Forces after January 31, 1955, or have served less than 181 days but received an honorable discharge for service-connected disability are eligible for educational assistance under the Veterans Readjustment Benefits Act of 1966. Applications are made directly to the Veterans Administration, 600 Federal Place, Louisville, Kentucky. Application forms are available in the Student Financial Aid Office. War Orphans and Widows of Deceased Veterans and Children and Wives of Disabled Veterans should contact the Veterans Administration nearest their hometowns for determination of eligibility for educational assistance.



Graduate Assistantships

Graduate assistantships are available in various departments and service areas to well-qualified students. Stipends vary depending upon the student's qualifications and duties assigned. In addition to the stipend, the out-of-state portion of the graduate assistant's fees is awarded in the form of a scholarship.

Graduate assistants are permitted to carry a maximum of 12 hours per semester. Some departments require their assistants to attend seminars in teaching. Since graduate assistants have professional responsibilities to the University, they are expected to familiarize themselves with University policies and responsibilities and to fulfill their obligation in this respect. Stipends are paid at the middle of each working month.

GENERAL INFORMATION

Academic Year

The University provides a year-round instructional program consisting of the fall and spring semesters, May term, and summer term. A wide

offering of graduate courses is available to students during the regular semesters and summer term, with a limited offering during the May term.

Graduate Fees

Full-time Students

Term	Resident	Non-Resident
Spring or Fall semester	275.00	700.00
Summer term	138.00	350.00

Part-time Students (per credit hour)

Term	Resident	Non-Resident
Spring or Fall semester	31.00	78.00
Summer term	31.00	78.00

Note: Fees are subject to change without advance notice.

A minimum of nine hours during a regular semester and five hours during a summer session is required in order to be classified as a full-time student.

Registration Procedures

The computer is utilized to facilitate registration for Western students. Spring semester, fall semester, and summer term registration packets will be prepared without request for all students who have applied for admission for that term. Registration packets shall be made for all graduate students who have been enrolled during the year prior to the registration for which packets are being made. For a specific registration, a packet will be prepared for every graduate student who was enrolled in any one term during the preceding year, as follows:

Specific Registration	Previous Terms of Enrollment
Spring	Spring, May Term, Summer, Fall
Summer	Summer, Fall, Spring, May Term
Fall	Fall, Spring, May Term, Summer

Students who were previously admitted but were not enrolled during the preceding year must complete a packet request form, obtained from and returned to the Graduate College.

Registration packets are not prepared in advance for the May term registration. May term registration may be completed by mail or in the

Office of the Registrar and is usually held in mid-April.

Registration for extended campus classes is usually accomplished at the first class meetings. Contact the Office for Extended Campus Programs, 116 Van Meter Hall, for information.

Schedule Changes. The University reserves the privilege of cancelling any course which has insufficient enrollment to justify its continuation. Other adjustments in the schedule may be made when necessary.

Withdrawal From Class. A student who finds it necessary to withdraw from a course should notify the Office of Registrar.

Course Numbering System

500-700: Courses numbered 500 and above are open only to graduate students. At least 15 hours of the master's degree program and at least 21 hours of the specialist degree program must be earned in courses open only to graduate students.

400G: Upper division undergraduate courses which are numbered at the 400-level and have a "G" designation (e.g., Eng. 401G) may be taken for graduate credit. In these courses, graduate students are expected to complete additional course requirements as prescribed by the instructor.

300: Courses numbered at the 300-level are for undergraduate credit and can be taken for graduate credit only in exceptional cases when permission is granted prior to enrollment in the course. Any request to take a 300-level course for graduate credit must be accompanied by a letter of justification from the department head and must be approved by the college dean and the graduate dean.



GRADUATE COLLEGE REGULATIONS

Course Load

In general, the number of semester hours of credit which may be earned during a given term may not exceed the number of weeks of instruction.

A full-time graduate student may earn a maximum of 15 hours during a regular semester. Graduate assistants are limited to 12 hours per semester. Maximum hour limitation includes all courses taken — whether they are for graduate or undergraduate credit or audited.

The fully employed, part-time student should attempt no more than 6 hours per semester.

Time Limitation for Completion of Degree

All requirements for the master's degree must be completed within five years from the date first course is taken.

All requirements for the specialist degree must be completed within four years.

Transfer Credit

Twelve hours of transfer work from an accredited institution may be accepted toward meeting course requirements for the master's or the specialist degree. These courses must be properly designated as having been taken for graduate credit and must carry a grade of "B" or above. Credits earned during a given term must not exceed the number of weeks of instruction. The coursework must meet the specified time limit for the degree.

The hours to be transferred must be appropriate for the degree program being followed and must be approved by the student's graduate advisor(s) and by the graduate dean.

At least six (6) hours in the minor area and at least twelve (12) hours in the major area must be taken at Western.

Correspondence Study

Courses taken through correspondence study cannot be used as a part of any graduate program.

Graduate Record Examination

All degree-seeking graduate students (excluding MBA students, who must submit GMAT scores) must submit scores on the aptitude section of the Graduate Record Examination, regardless of the undergraduate grade point average. These scores must be on file in the Graduate College prior to the completion of 12 hours of graduate coursework. Registration materials for the GRE and GMAT are available in the Graduate College or from the Counseling Services Center.

Program of Study

All degree-seeking students are required to submit to the Graduate College a planned degree program, developed with the help of the advisor(s) assigned at the time of admission and outlined on the proper form, during the first term of full-time enrollment or (for part-time students) prior to the completion of twelve (12) hours toward the program of study.

Students entering planned fifth- or sixth-year (Rank II or Rank I) non-degree professional education programs should also submit planned programs prior to the completion of the first 12 hours. The student's program must be on file in the Graduate College before a letter certifying completion of hours toward the program can be sent to the local Board of Education.

All degree and non-degree programs must be reviewed and approved by the Graduate Dean.

Course Substitutions

Any change in the approved program of study — the addition or deletion of a course, the substitution of a transfer course or of another Western course for a course on the program — must be outlined on a "course change" form, approved by the advisor and submitted to the Graduate College for final approval. This approval should be gained prior to enrollment in the course to be substituted.

Program of Study Change

Students who wish to change from one program of study to another must apply on a "Change of Program" form. Admission to the desired program must be gained and such admission constitutes a new date of admission. The advisor(s) assigned to the new program will evaluate any previously-taken courses for their applicability to the new program. All Graduate College regulations must be followed.

Grades

Candidates for graduate degrees are required to have an average of "B" in all courses used to meet degree requirements and in courses used to meet the research tool requirement of the Master of Arts and Master of Science degrees.

Grades lower than "C" do not contribute any quality points and may not be used to meet degree requirements. The repeating of a course by a graduate student does not remove the previous grade.

The grade of "X" (incomplete) becomes "F" on the student's transcript if the work is not completed within one calendar year. Thereafter, the grade point average will include the "F." In the case of theses and specialist projects, the incomplete may remain until the research and writing are completed.

Admission to Candidacy

Degree-seeking students must apply for and be admitted to candidacy. For the master's degree students candidacy status must be gained prior to enrollment in the final nine (9) hours of the degree program and requires the completion of at least 12 but not more than 21 hours toward the degree, removal of any deficiencies or conditions of admission, completion of research tool requirements (MA and MS students), attainment of a GPA of at least 3.0, and approval of the major department and of the Graduate College.

For the specialist degree student, candidacy status must be gained prior to enrollment in the final twelve (12) hours of the degree program and

ADMISSION REQUIREMENTS

requires the completion of at least 9 but not more than 18 hours toward the degree, attainment of a GPA of at least 3.0, and approval of the major department and of the Graduate College.

Comprehensive Examination

All graduate degree programs require that either a written or an oral examination be satisfactorily completed during the final period of enrollment. A written examination is required by some programs within the Master of Arts in Education degree and by the Administration option of the Master of Public Service degree. Most other programs, including specialist degree programs, require an oral examination. The student's committee for the oral examination consists of the graduate committee appointed by the major department or, in the case of the Master of Arts in Education, the committee consists of the major and minor advisors and one additional member selected by the major advisor from the major department.

Students should contact their major advisors for scheduling the examination.

Second Master's Guidelines

The student who wishes to earn a second master's degree from Western Kentucky University must apply for and gain admission to the new program and must satisfy all requirements (specific coursework, research tool, thesis, etc.) for the new degree, completing at least 18 additional hours of coursework or 12 hours of new coursework plus the thesis. No more than 12 hours of previous coursework, whether transferred from another university or from the previous master's degree at Western (or a combination of the two), may be used to fulfill program and research tool requirements.

Seniors Earning Graduate Credit

Seniors at Western or one of the cooperating consortium colleges may enroll in graduate coursework during their final undergraduate se-

mester provided they (1) have an undergraduate grade point average of at least 2.5, (2) make formal application to graduate study (Form A should be submitted to the Graduate College at least four weeks prior to the beginning of the semester), (3) carry a final-semester course load of no more than 15 hours (combined undergraduate and graduate hours), and (4) do not, in any way, attempt to apply the graduate course(s) to the undergraduate degree.

Thesis or Specialist Project

The program of a student pursuing the master's thesis or specialist project must contain six (6) hours of credit in 599 — Thesis Research and Writing or in 699 — Specialist Project, respectively. If the thesis or project is not completed during the period of registration for this credit, the student must maintain matriculation until said thesis or project has been submitted and approved. Therefore, if not enrolled in thesis/project credit or for graduate coursework, the student must register for 599c (thesis) or 699c (project) during any semester or summer term in which he/she will be actively pursuing the thesis or project or will be submitting it for approval. Enrollment in 599c or 699c does not result in a grade or in credit toward any degree or non-degree program requirements.

The thesis or project must be submitted to the Graduate College, in final form and approved by the student's committee members, at least three weeks prior to the date of graduation.

Application for Degree

The degree candidate must complete a degree application (available in the Graduate College and in the Registrar's Office) and return it with the graduation fee to the Registrar's Office by October 15 for fall completion, March 1 for spring completion, and June 15 for summer completion of the degree.

Initial Procedures

Degree students seeking admission must obtain from the Graduate College Form A (Application for Admission). The completed form must be returned well in advance of the expected date of matriculation. Graduates of accredited institutions other than Western Kentucky University must request two official transcripts indicating the completed degree. These transcripts must be forwarded from the college or university Registrar directly to the Graduate College. Applicants who have not yet completed the undergraduate degree submit one official transcript at the time of application and two official transcripts after the degree is completed.

Transient students (working toward a degree at other institutions) must complete Form A but are not required to submit transcripts. Instead, they must obtain Form H from the Graduate College. This completed form must be returned to the Dean of the Graduate College at Western prior to enrollment.

Unclassified students (not seeking an advanced degree) must complete Form A and, if not a Western graduate, submit one official undergraduate transcript to the Graduate College.

Requirements: Master's Degree Applicants

To be admitted to the Graduate College and be considered for admission to a master's degree program the applicant must:

- A. Hold a bachelor's degree from a college or university of recognized standing. (Applicants from non-accredited institutions see below)
- B. Have adequate preparation in the field of specialization.
- C. Have (1) an overall grade point average of not less than 2.5, or (2) a grade point average of 2.5 on the last sixty semester hours of undergraduate work, or (3) a score of not less than 700 on the Aptitude (verbal and quantitative combined) section of the Graduate Record Examination. Requirements for admission to some programs are higher than these minimum standards.

D. Applicants for the Master of Business Administration program must submit scores on the Graduate Management Admissions Test in lieu of GRE scores, regardless of grade point average. All other applicants must submit GRE aptitude scores, regardless of undergraduate grade point average, by the completion of 12 semester hours.

Requirements: Specialist Degree Applicants

Applicants for a specialist degree program must:

- A. Hold a master's degree from an accredited college or university.
- B. Have adequate preparation in the proposed field of specialization.
- C. Score not less than 800 on the Aptitude (verbal and quantitative combined) section of the Graduate Record Examination.
- D. Have a grade point average of not less than 3.25 on the first 30 semester hours of graduate work.
- E. Present to the Graduate College three letters of recommendation from graduate faculty and professional associates.

Applicants From Non-regionally Accredited Institutions

Graduates of non-regionally accredited, four-year educational institutions may be conditionally admitted to the Graduate College and considered for admission to a master's degree program with a minimum GRE Aptitude (verbal and quantitative combined) score of 800, a minimum undergraduate grade point average of 2.5/4.0, and adequate preparation in the field of specialization, and one of the following:

- A. The undergraduate institution is a candidate for regional accreditation.
- B. The undergraduate degree is accepted as preparation for graduate study by that state's reporting institution.
- C. The student's GRE verbal score is at least 550 and the undergraduate transcript indicates completion of a minimum of 40 hours of

general education coursework including:

- a. at least 6 semester hours (or the equivalent) in each of the areas of communication, humanities, and natural science.
- b. at least 12 semester hours (or the equivalent) in social and behavioral studies, including history.
- c. at least 3 semester hours (or the equivalent in mathematics or logic).

Completion of 12 hours of graduate credit with a grade point average of at least 3.00 removes the conditional status.

A student with a combined verbal and quantitative GRE score of at least 1000 or a verbal score of at least 600 may request individual consideration by the Graduate Council.

International Students: Requirements

Applicants who are not U.S. citizens must submit (1) a properly completed application for admission, (2) an official transcript indicating completion of the baccalaureate degree (or the equivalent), (3) evidence (grades, test scores) of ability to communicate in English and of the academic aptitude necessary for success in Western's graduate program, and (4) evidence of the needed financial resources. After the file is complete with these credentials, evaluation is made within the department administering the degree program and admission is based upon adequate undergraduate preparation, academic aptitude, English ability, etc.

International students must arrive on campus three days prior to the beginning of registration for classes for orientation and testing of English proficiency. Students found to be deficient in English skills must take remedial coursework.

Health insurance must be purchased upon arrival at the University.

Master of Arts. Programs leading to the M.A. degree are offered in the following fields: child development and family living, economics, English, folk studies, government, history, humanities, psychology, sociology, Spanish, and speech.

Master of Arts in Education. This degree program permits majors in the following fields: agriculture, art, biology, business education and office administration, chemistry, counseling (school), economics, elementary education, English, English and allied language arts area, early childhood education, French, general education, German, government, health, health and safety, history, home economics, industrial education, library science, mathematics, math-science area, music, physical education, psychology, reading, school business administration, science area, secondary education, social science area, Spanish, special education, speech, and student personnel services in higher education.

The secondary education degree program permits minors in the following areas: agriculture, art, biology, business education and office administration, chemistry, distributive education, drama, economics, English, folk studies, French, geography, German, government, health, health and safety, history, home economics, industrial education, library science, mathematics, music, physical education, physics, psychology, secondary education, sociology, Spanish, and speech.

Master of Science. Programs leading to the M.S. degree are offered in the following fields: agriculture, biology, chemistry, geography, health, library science, mathematics, physical education, physics, recreation, and textiles and clothing.

Master of Business Administration**Master of Music**

Master of Public Service. Program options leading to the M.P.S. degree are offered in the following fields: administration, agriculture, city and regional planning, counseling, and regional development.

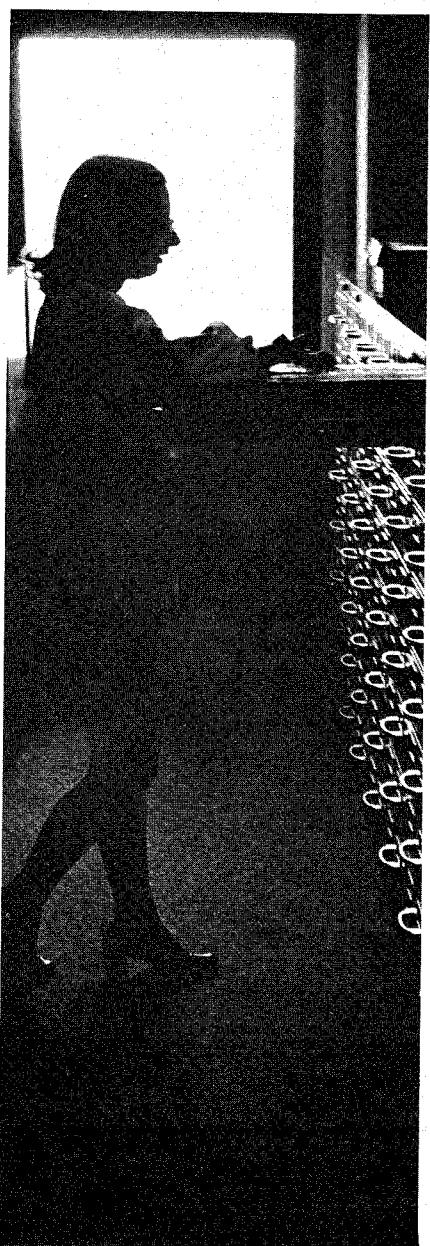
Master of Science in Engineering Physics

OUTLINE OF DEGREE REQUIREMENTS

Specialist in Education. The Specialist Degree in Education is available in counseling, elementary education, school administration, and secondary education.

Specialist in College Teaching. The Specialist Degree in College Teaching is offered in English and history.

Joint Doctoral. Western participates in joint-doctoral programs in education with the University of Kentucky and in a cooperative doctoral program in aquatic biology and in chemistry of free radicals with the University of Louisville.



The requirements outlined below are minimum requirements for the specific degrees. Some programs leading to the degree have requirements which exceed these minimums.

Master of Arts in Education Degree

Admission. In addition to meeting Graduate College requirements for admission, if applying for a program which involves teacher certification the applicant must meet certification requirements for that specific program.

Coursework. A minimum of 30 hours of graduate level coursework (or 24 hours plus thesis) is required, with at least 15 hours in courses open only to graduate students. All students pursuing this degree must complete Education 500 — Research Methods — and must meet coursework requirements for any certification being pursued.

Research Tool. No research tool other than Education 500, taken within the 30-hour program, is required.

Thesis. Some departments offer both Plan A (thesis) and Plan B (non-thesis). For Plan A, the thesis credit (6 semester hours) must be included in the hours (usually a minimum of 30) required for the degree. The thesis topic must be approved by the student's major advisor and department head. Students must maintain matriculation until the thesis is approved (see Thesis and Specialist Project").

Admission to Candidacy. Graduate College requirements must be met.

Final Examination. A final examination over coursework, thesis (under plan A), and related materials must be satisfactorily completed.

Master of Public Service Degree

Admission. The applicant must meet Graduate College requirements and must submit evidence of sufficient background in the chosen area of study.

Coursework. A minimum of 30 hours of graduate level coursework (or 24 hours plus thesis) is required, of which 9-12 must be selected from the MPS core area. At least 15 hours must be taken in courses open only to graduate students.

Research Tool. No research tool is required.

Thesis. The thesis is not required. Only the City and Regional Planning option and the Regional Development option have a thesis plan available.

Admission to Candidacy. Graduate College requirements must be met.

Final Examination. A final examination over the coursework (and thesis, if chosen) must be satisfactorily completed.

Other Master's Degrees

Specific information and requirements for all degree programs are given under the administrative departments.

Specialist in College Teaching and Specialist in Education

Admission. Applicants must hold the master's degree (or the equivalent), must have a minimum grade average of 3.25 on the first 30 hours of graduate work and a combined score of at least 800 on the aptitude (verbal and quantitative combined) section of the Graduate Record Examination, and must submit three letters of recommendation (sent directly to the Graduate College) from professors and professional colleagues.

Coursework. A minimum of 30 semester hours of graduate credit, 21 of which must be in courses open only to graduate students, must be completed.

Residency. A minimum of 15 hours must be earned within two periods of required full-time residency on campus. The student may meet this requirement by spending two summer terms, two semesters, or one semester and one summer term as a full-time student on campus at Bowling Green. Within these 15 hours, 12 hours must be earned through traditional coursework (i.e., courses which may not be completed through independent study).

Admission to Candidacy. Admission to candidacy must be accomplished prior to the completion of the final 12 hours of credit. Graduate College requirements must be met.

Specialist Project. The project is an integral part of the specialist program and is planned with reference to the student's field of specialization and professional goals. It may take the form of a field project, a creative study, or a more formal research study and shall culminate in a written, scholarly report. Students must maintain matriculation until the project is approved (see "Thesis and Specialist Project").

Final Examination. An oral and/or written examination covering the coursework and project must be satisfactorily completed.

Cooperative-Doctoral (Ph.D.) with the University of Louisville

The cooperative-doctoral is limited to the Ph.D. program with emphasis in aquatic biology or in chemistry of free radicals. Admission requires concomitant admission to the Graduate School of the University of Louisville and the Graduate College of Western Kentucky University. Admission requires completion of the appropriate application forms at each institution and the payment of a non-refundable application fee of five dollars (\$5.00) to the University of Louisville, the transmission of one official transcript indicating adequate preparation and copies of two letters of recommendation to each Graduate College office, achievement of a combined score of at least 1,000 on the aptitude (verbal and quantitative) section of the Graduate Record Examination and a score at or above 40 on the Miller Analogies Test (to be sent to the University of Louisville), and approval by the graduate faculty members in biology at both institutions.

The degree requires the equivalent of at least three years of full-time graduate study, at least two years of which must be spent on the cooperative campus (Western Kentucky University and/or the University of Louisville). A minimum of one year of full-time residence must be spent on the

university campus on which the student's major professor resides.

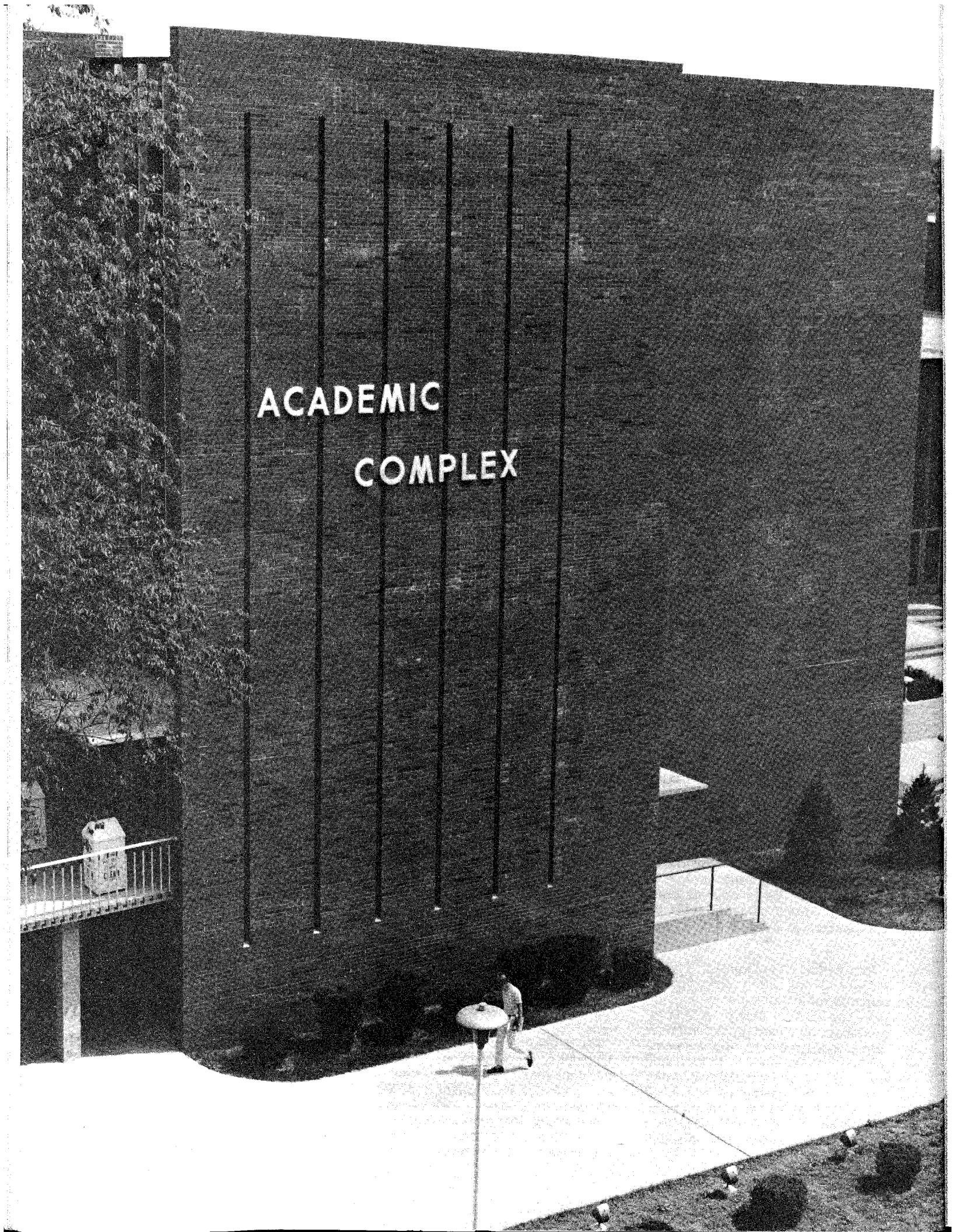
The student's graduate committee will consist of at least five members, with at least two each from the University of Louisville and Western Kentucky University.

Requirements include an entry examination over material from the broad field of biology and a preliminary oral and/or written examination after completion of the major portion of the prescribed coursework. A reading knowledge of at least one modern foreign language must be demonstrated before admission to candidacy.

The final oral examination consists of a defense of the dissertation and a demonstration of the candidate's mastery of the field of study.

Joint-Doctoral with the University of Kentucky

Admission requires concomitant admission to the Graduate College at Western and to the Graduate School and doctoral program at the University of Kentucky. Application forms are available in the Graduate College at Western and, upon completion, are to be returned to the Dean of the Graduate College, Western Kentucky University. If fully qualified, the applicant's credentials will be forwarded to the University of Kentucky. Requirements for admission include a combined score of at least 1,000 on the aptitude section of the Graduate Record Examination, completion of the Miller Analogies Test if the GRE verbal score is below 600, personal references, transcripts of previous academic work, a statement of educational goals, and a brief autobiography.



ACADEMIC
COMPLEX

COLLEGE OF APPLIED ARTS AND HEALTH

DEPARTMENTS

Health and Safety

Home Economics and Family Living

Library Science and Instructional Media

DEGREES OFFERED

Master of Arts (Child Development and Family Living)

**Master of Science (Library Science, Health,
Textiles and Clothing)**

Majors and Minors Offered Under the Master of Arts in Education Degree

Health

Health and Safety

Home Economics Education

Library Science

Major Offered Under the Specialist in Education Degree

Vocational Home Economics

DEPARTMENT OF HEALTH AND SAFETY

SCIENCE AND TECHNOLOGY HALL ROOM 412 (502) 745-4797

J. David Dunn, Head

Graduate Faculty

Professor: D. Dunn

**Associate Professors: H. Baughman, R. Baum,
B. Goodrow, M. Lockwood, G. Lohr, N. Schira**

Assistant Professors: D. Lohrisch, J. Price

Degrees Offered: Master of Arts in Education (Health major and minor, Health and Safety major and minor), Master of Science in Health.

The program leading to the Master of Arts in Education with a major or minor in health is designed to prepare students for positions as: (1) health educators in junior and senior high schools, (2) coordinators of school health program, (3) administrators and supervisors of school health programs, and (4) health educators in community health agencies. The program leading to the Master of Arts in Education with a major or minor in health and safety is designed to prepare students for positions as: (1) teachers of driver education and health in high schools, (2) coordinators of health and safety programs, and (3) administrators of health and driver education programs. The applicant must hold a valid teaching certificate and have a minimum of a minor in health and safety. Applicants who hold a valid teaching certificate but have not completed a recognized minor in health and safety may be conditionally admitted if they have completed a minimum of 12 semester hours of undergraduate coursework in health and safety and/or related courses.

The program leading to a Master of Science in Health is designed to meet the needs of a wide range of professionals (e.g., public health educators, nurses, sanitarians and administrators, industrial health personnel, nutritionists, dental hygienists, and other allied health professionals) who desire graduate education in health. The flexibility of the program allows for individual consideration of student needs, expectations, and career objectives. To pursue the

Master of Science in Health, each applicant must submit at least a minor in health or adequate preparation in the sciences basic to health.

Master of Arts in Education (Health major or minor)

Students pursuing a major in health must complete 18 to 21 hours in health — including Health and Safety 520, 545, and 567. Both Plan A (thesis) and Plan B (non-thesis) are available. For a minor in health students must complete 12 to 15 hours in health, including Health and Safety 545 and 567. The additional hours in health must be chosen in consultation with the graduate advisor. The remaining coursework will be taken in professional education.

Master of Arts in Education (Health and Safety major or minor)

Students pursuing a major in health and safety must complete 18 to 21 hours in health and safety including Health and Safety 520, 545, and 567; 9 hours in safety and driver education, chosen in consultation with the graduate advisor; and 9 to 12 hours in professional education. Both Plan A (thesis) and Plan B (non-thesis) are available. For a minor in health and safety, students must complete 12 to 15 hours in health and safety — including Health and Safety 545, 567, 570, and 471G — and 15 to 18 hours in professional education. The additional hours in health and safety (for a major or minor) must be chosen in consultation with the graduate advisor.

Master of Science in Health

Students pursuing the Master of Science in Health must complete Health and Safety 501, 520, 567, 582, and either 599 (Thesis) or 546 (Public Health Internship). The additional 12 hours of coursework will be chosen in consultation with the candidate's graduate committee and may be selected from the health and safety curriculum as well as related disciplines. The research tool requirements may be met by demonstrating (1) competency in research techniques or (2) reading proficiency in a foreign language.

Graduate Courses in Health and Safety

501	Analysis of Research in Health and Safety. 3 hours. Review of literature related to methods, materials, techniques, and planning of research studies used and conducted by the profession.	545	The Health Education Curriculum. 3 hours. Prerequisite: Ed 580. For health educators and administrators. Review of health curriculum guides and curriculum studies in health education. Laboratory work in construction of curriculum guides.	567	Administration and Supervision of Health and Safety Programs. 3 hours. Responsibilities, activities, and problems of administering and supervising health and safety programs within and among the school and other community agencies.
520	Vital and Medical Statistics. 3 hours. Application of statistical techniques to health and safety data. Emphasizes basic principles and techniques in designing and analyzing health problems.	546	Field Work in Community Health Programs. 3 hours. The philosophy, organization, and services of community health organization. Includes observation of, and participation in, local community health programs. May be repeated once.	570	School and Community Safety Programs. 3 hours. Responsibilities, activities, and problems of school and community safety programs. Emphasizes pupil transportation programs. Also includes home, fire, traffic and transportation, industrial and public safety.
530	Independent Investigations in Health and Safety. 1 to 3 hours. Prerequisite: HI Sft 520.			582	Epidemiology: Practice and Theory. 3 hours. Prerequisite: 3 hrs. graduate level statistics.

	Application of epidemiological principles to representative occurrences of communicable and noncommunicable disease. Emphasizes problem solving and interpretation.	Emphasizes the coordination of school and community health programs and personnel in seeking solutions for health problems.	development and discharge counseling. May include field trip.
583	Public Health Administration. 3 hours. Advanced concepts of organization, administration and management of public health agencies and programs.	461G School Health Organization. 3 hours. Standards and criteria for the three phases of the school health program: health services, healthful school environment, and health instruction. Emphasizes coordination of the total school health program. Visitation in public schools.	469G Critical Issues in Health and Safety. 3 hours. Prerequisites: HI 260, 361, and Psy 250. Research and discussion of specific local, national and world wide health and safety problems.
585	International Health. 3 hours. Analyzes international health problems, including the development and administration of the World Health Organization. Covers critical health problems of both developed and underdeveloped countries. Emphasizes effective intervention strategies.	462G Folk Medicine. 3 hours. Historical circumstances, associations, and logic of traditional non-scientific medical practices.	470G Driver Education and Traffic Safety II. 3 hours. Prerequisite: Sft 370 or equivalent. Management of classroom and laboratory phases of the high school driver and traffic safety education program. Emphasizes simulation and range programs.
599	Thesis Research and Writing. 6 hours.	463G Consumer Health. 3 hours. Benefits and/or hazards of and criteria for selection of health related products and services. Analysis of methods and techniques of health frauds. May include field trips.	471G Advanced Studies in Driver Education. 3 hours. Prerequisite: Sft 370 or equivalent. Advanced instructional technology to meet the needs of the driver and safety education program. Emphasizes behavioral approaches to traffic safety education.
599c	Maintaining Matriculation. 1 to 6 hours.	465G Health and Safety in the Elementary School. 3 hours. Prerequisite: Three hours of health. Nature and purpose of school health and safety in the elementary school, including curriculum development, instructional content areas, appraising students' health, and evaluation.	481G Environmental Factors of Health Problems. 3 hours. The environment and its relationship to disease causation. Includes the ecology of health and disease, air and water pollution, insect vector and rodent control, noise pollution, population imbalance and consumer protection. Field trips required.

The following 400-level courses may be taken for graduate credit

443G Health Problems of the Aged. 3 hours. Covers ecological factors affecting human health and longevity, current health problems, and research on health and disease as they relate to the aged.
460G School and Community Health Workshop. 3 hours.

DEPARTMENT OF HOME ECONOMICS AND FAMILY LIVING

ACADEMIC COMPLEX, CANON WING
ROOM 303 (502) 745-4352

William Floyd, Head

Graduate Faculty

Professors: E. Elbert, W. Floyd, R. Hedges
Associate Professors: V. Atkins, G. Callaway, S. Clark, L. Fong, D. Hayden, M. Jenkins, W. Kleeman.
Assistant Professor: J. Rasdall

Degrees Offered: Master of Arts in Child Development and Family Living, Master of Arts in Education (Home Economics Education major and minor), Master of Science in Textiles and Clothing, Specialist in Education (Vocational Home Economics major).

Master of Arts in Child Development and Family Living

This degree is considered an intermediate step preparatory to entry into a doctoral program leading to college teaching, therapeutic activity and/or research. In addition to Graduate College requirements, the student must present an undergraduate record of B in the behavioral sciences and related disciplines. Applicants who do not have the B average but whose total score on the aptitude test of the Graduate Record Examination is at least 900 may be given provisional admission.

The major requires 24 hours, and the remaining hours of the total of 30 must come from closely related studies in counselor education, psychology, or sociology. The 24 hours in the major are HEFL 491G, 576, 577, 578, 579, 580, 599 (six hours) or six hours of restricted electives in lieu of thesis. Cognate studies must be approved by the advisor.

The research tool requirement may be met by: (1) demonstrating ability to read subject material in either French or German, (2) completing specialized study in human biology and genetics, or (3) completing additional work in statistics and research methodology.

Master of Arts in Education (Home Economics Education major or minor)

This program is planned for teachers pursuing the standard high school certificate. Applicants must have an un-

dergraduate area of concentration in home economics education. Required courses for the major are HEFL 572, 573, 574, and 9-12 hours of HEFL electives to be approved by the advisor. Required for the education minor are Educ. 540 and 500. The HEFL minor requires 12-15 hours along with 15-18 hours in professional education.

Master of Science in Textiles and Clothing

This degree is designed to prepare the candidate for positions requiring specialization at the master's level or to provide an adequate foundation for study beyond the master's degree. Applicants must be eligible for admission to the Graduate College and should have the equivalent of an undergraduate minor (18 hours) in textiles and clothing as well as basic courses in psychology, sociology, and chemistry. Other applicants may be conditionally

admitted. Decisions regarding acceptability of coursework for admittance will be made by the graduate faculty in textiles and clothing.

The required 30 hours of graduate level credit must include HEFL 536, 537 and 12 additional hours of textiles and clothing coursework, a cognate field consisting of six hours as approved by the graduate committee, and a thesis on a specific area of textiles or clothing (Plan A) or six hours of approved coursework in lieu of thesis (Plan B). The research tool requirement usually involves specialized study in statistics and research methodology or demonstration of ability to read French.

Specialist in Education (Vocational Home Economics major)

See Department of Teacher Education.

Graduate Courses in Home Economics and Family Living

531 Cultural Patterns of Dress. 3 hours.

Prerequisites: HEFL 132 and 431 or consent of instructor. In-depth analysis of literature and research related to cultural aspects of clothing. Specific cultural emphasis will vary. (Lecture, field trips)

533 Developing Fashion Merchandising Programs. 3 hours.

Prerequisite: HEFL 333 or consent of instructor. Principles, problems, and practices of curriculum, field experiences, and extended classroom activities related to fashion merchandising.

535 Textile Analysis and Interpretation. 3 hours.

Prerequisites: HEFL 435 and chemistry. Qualitative and quantitative techniques for physical and chemical analysis of textiles. Planning and conducting textile analyses and evaluating resulting data. (Lecture, lab)

536 Seminar in Textiles and Clothing. 3 hours.

Prerequisite: Consent of instructor. Survey of technological, cultural, and educational developments in the textile and clothing field. Opportunity to pursue individual interest in either clothing, textiles, or merchandising.

537 Critique and Design of Investigations in Textiles and Clothing. 3 hours.

Prerequisite: Consent of instructor. Survey of textiles and clothing investigations. Critical evaluations of theses and research and design of potentially researchable problems.

572 Curriculum Development in Home Economics Education. 3 hours.

Curriculum trends in home economics education and curriculum development in specialized fields of home economics.

573 Evaluation in Home Economics Education. 3 hours.

Theory and techniques of evaluation in home economics education. Analysis and

refinement of instruments; interpretation of results of self-evaluation; and effective administration of programs.

574 Supervision in Home Economics Education. 3 hours.

Prerequisite: Teaching experience, advanced courses, and consent of instructor. Theory, principles, and techniques of pre-service and inservice training of teachers in home economics. Emphasis on preparation of supervisory materials and evaluation.

575 Individual Study in Home Economics Education. 3 to 6 hours.

Evaluation of home economics investigations. Includes planning and completing an individual study of limited scope.

576 Theories of Child Development. 3 hours.

Prerequisite: One course in child psychology, child development, or human growth and development. Critical analysis of cognitive, social-learning, maturational, and psychoanalytic theories of human development.

577 Seminar in Child Development Research. 3 hours.

Prerequisite: HEFL 576 or equivalent preparation. Analysis of current theories and research relevant to the development of social, perceptual-cognitive, and physical-physiological processes in children.

578 Seminar in Research in Marital and Family Therapy. 3 hours.

Prerequisite: One course in marriage and the family. Critical examination of contemporary research by marital and family investigators in the fields of anthropology, biology, psychiatry, psychology, and sociology.

579 Professional Theories and Methods in Marital and Family Therapy. 3 hours.

Prerequisite: Consent of department head. Lectures on and demonstrations of contemporary theories and methods of treating couples, families, and groups. Includes the theories of Rogers, Satir, Knox, Ellis, and Adler.

580 Internship in Marital and Family Therapy. 3 hours.

Prerequisite: HEFL 579. Counseling experience is provided during the final semester of enrollment. Assignments made to approved private and public agencies.

598 Special Topics in Home Economics and Family Living. 1 to 6 hours.

Prerequisite: Consent of instructor.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

The following 400-level courses may be taken for graduate credit

422G Textile Design II. 3 hours.

Prerequisites: HEFL 120 and 221, or consent of instructor. Historic and contemporary design. Applications for costume, home furnishings, and accessories. (Lecture, lab)

425G History of Costume. 3 hours.

Prerequisite: Consent of instructor. Costumes from ancient times to present; cultural and economic factors. (Lecture)

428G Merchandise Display and Promotion. 3 hours.

Principles and practices in arranging and displaying merchandise and in planning and executing sales promotions. (Lecture, lab, field trips)

430G Historic Textiles. 3 hours.

Prerequisite: HEFL 231. Decorative fabrics and the history of textile design from ancient times to present. (Lecture, field trips)

431G Clothing and Human Behavior. 3 hours.

Prerequisites: 9 hours of social science or consent of instructor. Dress and adornment as related to human behavior. (Lecture, field trips)

432G Recent Developments in Textiles. 3 hours. New developments as reported in current literature. (Lecture, field trips)

433G Fashion Fundamentals. 3 hours. Fashion as a social force. The fashion world: designers, leading markets, fashion cycles. (Lecture, field trips)

434G Advanced Clothing: Tailoring. 3 hours. Prerequisite: HEFL 130. Advanced techniques of tailoring. (Lecture, lab)

435G Advanced Textiles. 3 hours. Prerequisites: HEFL 231 and chemistry. Relation of fiber and fabric properties to serviceability; testing of fabrics with emphasis on interpretation of results in consumer choice. Individual problems. (Lecture, lab, field trips)

436G Advanced Clothing Design. 3 hours. Prerequisite: HEFL 130 or consent of instructor. Interpretation and development of original designs through the media of flat pattern and/or draping. (Lecture, lab)

437G Fashion and Design Study Tour. 3 hours. Prerequisite: Consent of instructor. Travel to fashion and design centers to observe current trends in design, production, marketing and promotion of textiles, clothing, and home furnishings.

438G Textile and Clothing Merchandising II. 3 hours. Prerequisite: HEFL 333. Principles, techniques, and practices of effective fashion merchandising. Includes problems in store design and display, supervision of retail establishment, and fashion merchandising.

461G Advances in Science of Nutrition. 3 hours. Individual study of literature and research

concerned with foods and nutrition. (Lecture)

464G Advanced Foods. 3 hours. Prerequisites: HEFL 261, Chem 107, or consent of instructor. Biol 207 recommended. Chemical, physical, and microbiological factors related to foods. (Lecture, lab)

465G Diet Therapy. 3 hours. Prerequisites: HEFL 363, Biol 472, and Chem 309. Principles of nutrition in the treatment of certain organic, functional, and metabolic diseases or conditions. (Lecture, field trips)

466G Experimental Foods. 3 hours. Prerequisite: HEFL 464 or consent of instructor. Ingredients and their function; factors involved in food preparation; evaluation of foods by objective measurements. (Lecture, lab)

491G Family Life Education. 3 hours. Principles, practices, and content of family life education. Extension agents, social workers, and mental health professionals (in addition to teachers of family life education) may enroll.

492G Institution Food Preparation. 3 hours. Prerequisite: HEFL or consent of instructor. Basic food preparation principles applied to quantity food production and services. Standardization of recipes and procedures. (Lecture, 1 hour; practicum, 10 hours)

493G Institutional Purchasing. 3 hours. Prerequisite: HEFL 492. Principles and methods of buying food and supplies for various types of quantity food services. Emphasis on specifications, standards, inventory, and factors affecting quality and cost control. (Lecture, field trips)

494G Applied Institution Administration. 3 hours. Prerequisites: HEFL 390 and 492.

Standard methods of quantity food production, menu planning, food cost determination, job analysis and problems involved in institution administration. Requires administrative responsibilities, under supervision. (Lecture, 1 hour; practicum, 10 hours)

495G Organization and Management of School Lunch Service. 3 hours. Prerequisites: HEFL and 494. Sec Ed 280 is recommended. Organization and management of single and multiple school lunch units including menu planning, purchasing records, equipment, and meal services. (Lecture, lab, field trips)

496G Menu Planning and Merchandising for the Food and Lodging Industry. 3 hours. Prerequisite: HEFL 492. Menu planning for group feeding, meeting nutritional needs of different age levels, portion costs, menu pricing, and merchandising. (Lecture, lab, field trips)

497G Food and Labor Cost Control. 3 hours. Prerequisite: HEFL 390, principles of accounting, or consent of instructor. Areas studied include work management methods, relationship of labor costs and mechanization, food cost controls, portion control methods of purchasing and preparation, and application of accounting and inventory procedures. (Lecture)

498G Special Topics in Home Economics and Family Living. 1 to 3 hours. Prerequisite: Consent of department head. Topics selected from child development and family living, dietetics, foods, nutrition, institutional administration, textiles and clothing, interior design, home economics education. May be repeated with different topic.

DEPARTMENT OF LIBRARY SCIENCE AND INSTRUCTIONAL MEDIA

MARGIE HELM LIBRARY
ROOM 3 (502) 745-3446

Vera Guthrie, Head

Graduate Faculty

Professors: V. Guthrie, J. Caskey, E. Wassom

Associate Professor: I. Simpson

Assistant Professors: R. Smith, J. Sanders

Degrees Offered: Master of Science in Library Science,

Master of Arts in Education (Library Science major or minor).

Master of Science in Library Science

This program is designed for those who are interested in the field of school media librarianship.

In addition to meeting the general Graduate College admission requirements, the applicant should have a grade point average of at least 2.7 (4.0) for the final 60 semester hours of undergraduate work, a minimum combined score of 800 on the aptitude test of the Graduate Record Examination, and six hours of approved prerequisite work in library science from L.S.I.M. 288, 401, 406, 408, and 445 or their equivalents. The prerequisite courses may be taken concurrently with graduate coursework. Students with media library experience equivalent to these prerequisite courses may, with the approval of the department head, take a qualifying examination to have these courses waived. Applicants who have a grade point

average of 3.0 but whose GRE score is at least 700 may be admitted. Students having less than the required grade point average may be considered for admission on a probationary basis.

Both Plan A (thesis) and Plan B (non-thesis) are available. Up to six hours of the required 30-hour minimum may be selected from related fields such as literature, mass communications, history, or education. The research tool requirement may be met by demonstrating (1) the use of appropriate research techniques or (2) reading proficiency in a modern foreign language.

Students may select either of the two program options but must complete 401G, 406G, and 408G unless used as prerequisites.

Master of Arts in Education (Library Science major or minor)

The applicant must meet the general Graduate College

Graduate Courses in Library Science and Instructional Media

501 Organization and Administration of the Instructional Materials Center.

3 hours.

Prerequisite: LSIM 401 and/or consent of instructor.

Role of the staff and the function of management in the organization and administration of instructional materials centers.

502 The Library in Society.

3 hours. Types of libraries and their history, laws, standards, and inter-cooperation. Librarianship as a career, professionalism and the freedom to read.

504 The Media Center and the Computer.

3 hours.

Prerequisite: Eighteen hours of library science, including LSIM 401, 406, 408. The use of computers in media centers on a local, national, and commercial basis.

506 Cataloging of Non-Book Materials.

3 hours.

Prerequisite: LSIM 406 or equivalent. Classification and cataloging of motion pictures, filmstrips, slides, transparencies, phono-records, pictures, manuscripts, maps, microforms kits, etc.

508 Advanced Reference.

3 hours. Prerequisite: LSIM 408 or equivalent.

Reference materials in humanities, social science, history, pure and applied sciences, and general reference works in bibliography and library science.

509 Investigations in Library Science.

3 hours.

Prerequisites: 18 hours of LSIM, Ed Fnd 500 or the equivalent, and permission of graduate advisor.

Independent investigation under the direction of a faculty member.

515 Government Publications.

3 hours. Prerequisite LSIM 408 or equivalent. Sources and types of government documents, both state and federal; their acquisition and organization for use.

admission requirements and must meet requirements for certification.

The following options are available under this degree:

A. Elementary Education Curriculum (Library Science area of specialization)

When approved by the student's graduate advisory committee, 12 to 15 hours in the curriculum for elementary teachers can be applied toward the total requirements for certification as a public school media librarian.

B. Secondary Education Curriculum (Library Science major or minor)

This program provides courses for the school librarian. Students following it must meet all requirements for the standard high school certificate or the standard certificate for school media specialist. The library science major requires 18-21 hours in library science, while the minor requires 12-15 hours. The remaining hours will be taken in professional education courses.

The following 400-level courses may be taken for graduate credit

401G Library Organization and Administration.

3 hours.

Organization and administration of media for access and use; circulation and other library records; maintenance of the media collection; and service to patrons. Field trips may be required.

403G Books and Related Materials for Young People.

3 hours.

Principles of selection; reading guidance; materials for information and recreation. Field trips may be required.

405G Recreational Reading, Listening, and Viewing.

3 hours.

Emphasizes popular reading and viewing interests of adults in such areas as recreation, inspiration, self-improvement, and information. Field trips may be required.

406G Classification and Cataloging.

3 hours. Classification, descriptive cataloging, main entries, added entries, shelf list, and filing. Laboratory sessions.

407G Literature for Young Adults.

3 hours. Reading interests of young adults and study of selected titles. Methods of working with young adults in public and school libraries.

408G Reference and Bibliography.

3 hours. Study of bibliographies, indexes, dictionaries, encyclopedias, yearbooks, almanacs, directories, atlases, gazetteers, and handbooks.

409G Selected Topics in Library Science.

1 to 3 hours.

A problematic study under the direction of a faculty member.

410G Storytelling.

3 hours. Storytelling in work with children. The literature; criteria in selection of materials; practice in oral communication.

411G Creative Experiences for Elementary Children.

3 hours.

Experiences in creative expression: creative play acting, puppetry, creative writing, shadowplays, creative use of audiovisual equipment and materials.

445G Audio-Visual Materials and Methods.

3 hours.

Theory relative to the best practices in audio-visual techniques. Laboratory experience. Cross-listed with Elementary Education.

446G Selection, Acquisition, and Evaluation of Non-Print Materials.

3 hours.

Instruction and experience in locating sources of supply for non-print materials and use of appropriate selection aids; acquisition procedures and evaluative techniques appropriate to non-print materials. Cross-listed with Elementary Education.

447G Instructional Television for Media Specialists. 3 hours.

Types of distribution systems, budgeting, personnel requirements, equipment operation and care, and classroom planning between teacher and media specialist. Laboratory experience.

463G Intercultural Communication. 3 hours. Cross-listed with Communication and Theatre.

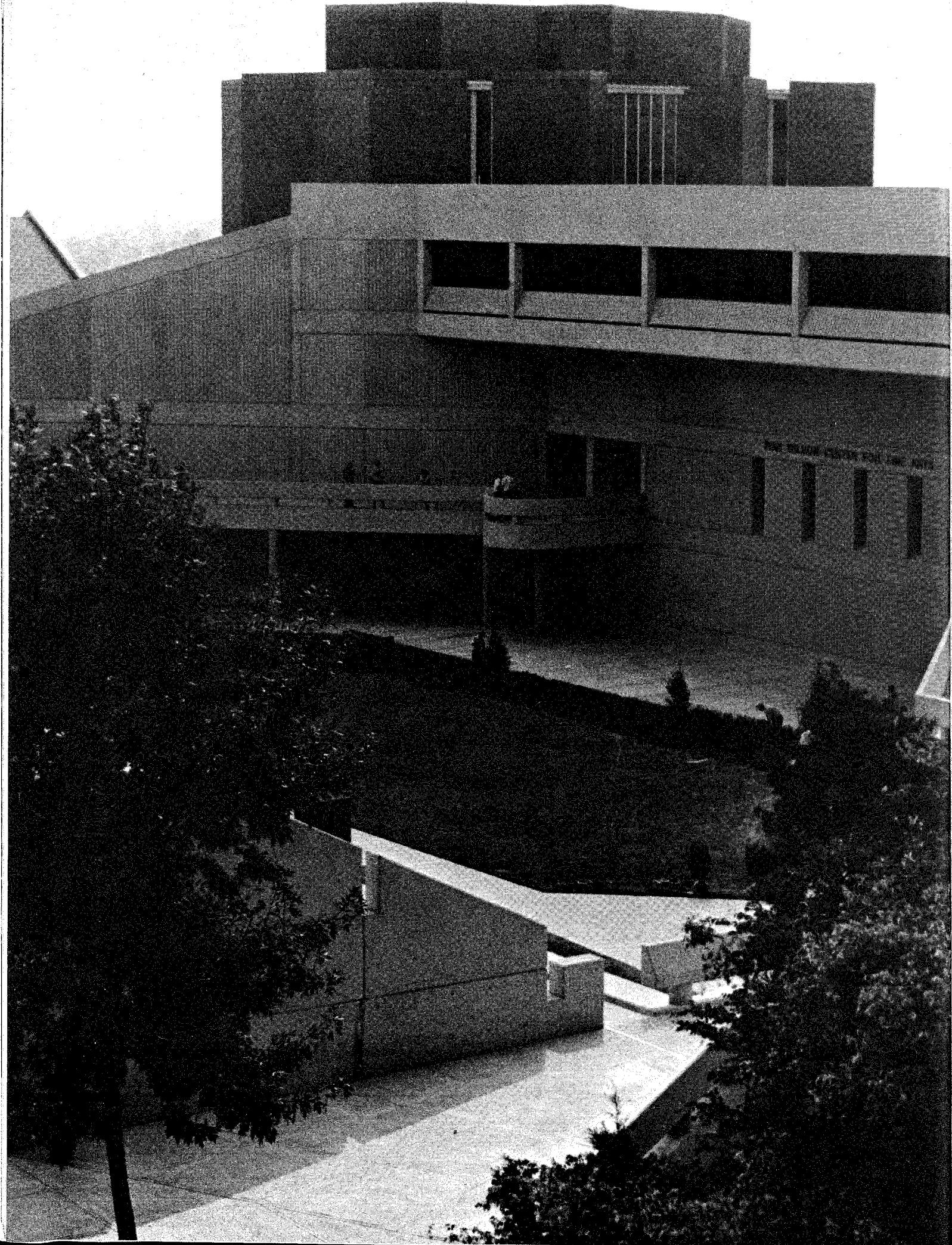
470G Museum Procedures and Preservation Techniques. 3 hours.

Cross-listed with Intercultural and Folk Studies.

475W-G Workshop in Library Science.

1 to 3 hours.

One, two, and three week workshops designed primarily for practicing librarians.



COLLEGE OF ARTS AND HUMANITIES

DEPARTMENTS

Art
Communication and Theatre
English
Foreign Languages
History
Intercultural and Folk Studies
Journalism
Music
Philosophy and Religion

DEGREES OFFERED

**Master of Arts (English, Folk Studies, History,
Humanities, Spanish, Speech)**
Master of Music
Specialist in College Teaching (English, History)

Majors and Minors Offered Under the Master of Arts in Education Degree

Art
Drama/Theatre
English
English and Allied Language Arts (major only)
Folk Studies (minor only)
Foreign Languages (German, French, Spanish)
History
Music
Social Science (major only)
Speech

DEPARTMENT OF ART

IVAN WILSON CENTER
ROOM 441 (502) 745-3944

Walter Stomps, Head

Graduate Faculty

Professors: E. Monroe, N. Peterie, W. Stomps, L. Wallace

Associate Professors: L. Fernandez, C. Forrester, I. Schieferdecker, W. Weaver

Assistant Professors: H. Custead, C. Kakas, M. Klein

Degree Offered: Master of Arts in Education (Art major or minor).

A presentation of a portfolio or permission of the professor under whom the student plans to study is required for admission. The major requires 18 to 21 hours in art and 9 to 12 hours in professional education. The 18-21 hours in art can be selected to meet individual needs. The minor in art requires 12 to 15 hours and 15 to 18 hours in professional education. Professional education courses taken must satisfy the requirements for standard high school certification.

Graduate Courses in Art

500 History of Architecture and Sculpture During the Middle Ages. 3 hours. Architecture and sculpture during the Middle Ages. Selected individual research problems.

501 History of Painting During the Middle Ages. 3 hours. The history of painting during the Middle Ages. Lecture and independent study.

511 Investigations in Art Education. 3 hours. Research in art education curriculum and methodology, with emphasis on the literature, selected art history, and studio areas.

512 Investigations in Art Education. 3 hours. Independent study in art curriculum and methodology (including art history and studio). Emphasizes the use of surveys, observations, and experimental techniques.

520 Ceramic Art. 3, 6, 9 hours. Prerequisite: Art 422 or 422G, or permission of instructor. Advanced levels of clay forming techniques and clay glaze composition. Research in various phases of the ceramic process.

540 Drawing. 3, 6, or 9 hours. Prerequisites: Art 440 or 440G, or permission of instructor. Independent study utilizing traditional methods of drawing. Students are encouraged to investigate and utilize new directions.

550 Printmaking. 3, 6 or 9 hours. Prerequisite: Art 452 or 452G, or permission of instructor. Independent study utilizing traditional methods of printmaking. Encourages the investigation of new directions in personal expression.

560 Painting. 3, 6, or 9 hours. Prerequisite: Art 462 or 462G, or permission of instructor. Advanced aspects of painting, with emphasis on experimentation in different

schools of painting and on individualized approaches.

570 Sculpture. 3, 6, or 9 hours. Prerequisite: Art 472 or 472G, or permission of instructor. Independent study and experimentation in sculpture.

580 Weaving. 3, 6, or 9 hours. Prerequisite: Art 482 or 482G, or permission of instructor. Individual study of weaving utilizing traditional and experimental techniques; the production of works that are highly individualistic and are of exhibition quality.

590 Seminar in Contemporary Art. 3 hours. Prerequisite: Permission of instructor. Critical analysis (written and oral) of current trends in ceramics, drawing, painting, printmaking, sculpture, weaving, and other media.

591 Investigations In Art History. 3 hours. Prerequisites: Nine hours of art history or permission of instructor. Topics and approaches for special areas of interest. Emphasis on the traditional periods of art history.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

The following 400-level courses may be taken for graduate credit

401G Art of the Italian Renaissance

402G American Architecture

420G, 421G, 422G Ceramics

440G Drawing

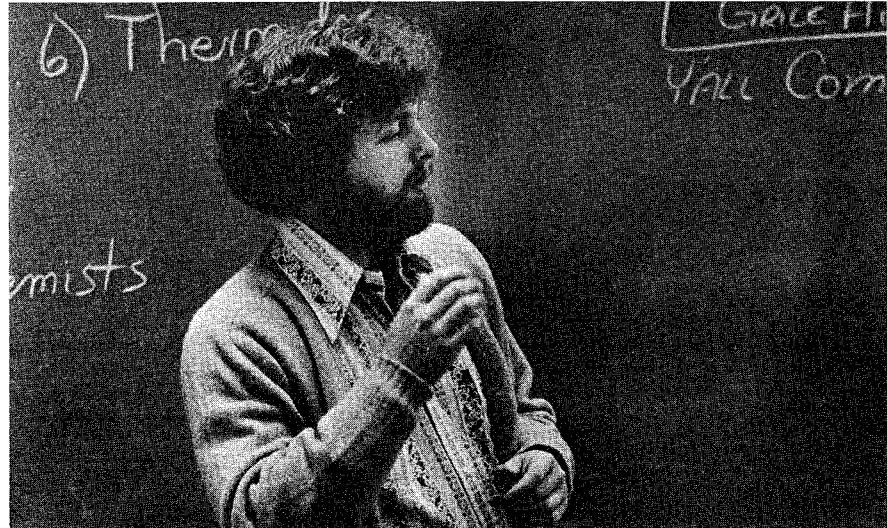
450G, 451G, 452G Printmaking

460G, 461G, 462G Painting

470G, 471G, 472G Sculpture

480G, 481G, 482G Weaving

490G, 491G Special Problems



DEPARTMENT OF COMMUNICATION AND THEATRE

IVAN WILSON CENTER
ROOM 130 (502) 745-3296

Randall Capps, Head

Graduate Faculty

Professor: R. Capps

**Associate Professors: C. Anderson, S. Cooke, P. Corts,
C. Kell, W. Leonard, J. Wesolowski**

**Assistant Professors: D. Combs, C. Dodd, J. Kesler,
R. O'Connor, J. Pearse, D. Rivers, L. Ruff,
D. Wicklander, L. Winn**

Degrees Offered: Master of Arts in Speech, Master of Arts in Education (Speech major or minor), Master of Arts in Education (Drama/Theatre minor).

Master of Arts in Speech

This program provides preparation for students who plan to teach at the college level, to pursue additional graduate study, or to follow careers in fields where advanced study in speech would be helpful. To pursue a graduate degree in speech, a student must be eligible for admission to the Graduate College and must have at least an 18-hour minor, or the equivalent, in speech.

During the early stages of the program, the candidate for the MA in Speech should, in consultation with his/her

Graduate Courses in Communication

500 Speech Communication Internship.

3 hours.

Practical experience in a speech communication situation. On-site guidance from a coordinator within the organization.

501 Introduction to Graduate Study in Communication and Theatre.

1 hour.
Nature and uses of research. Methods and career curricular information regarding the various areas of communication and theatre.

521 Evaluation of Mass Communication.

3 hours.

Criteria for determining the social responsibility of and for judging the performance of the mass media in America. Principal recurring schema used to evaluate the mass communication process.

522 Seminar in Mass Communication.

3 hours.

Selected topics in mass communication theory and practice: mass communication history, mass communication law and regulation, popular culture, message

characteristics, etc. May be repeated with a different topic.

540 Seminar in Rhetoric and Public Address.

3 hours.

Theories of rhetoric and the application of rhetorical standards to selected speakers, movements, areas, and periods. May be repeated with a different topic.

541 Seminar in Communication.

3 hours.

Selected topics in communication theory: interpersonal communication, persuasion and attitude changes, non-verbal communication, small group communication, language behavior, etc. May be repeated with a different topic.

544 History and Theory of Interpretation.

3 hours.

History and development of interpretive theory from ancient times to the present. Use and developments of the interpreter's art, with analysis of contemporary principles and practices.

545 Seminar in Speech.

3 hours.

Content will vary. If offered as independent study, an area of individual interest may be pursued. If offered as a class, timely topics will be covered.

committee, decide whether to follow Plan A (thesis) or Plan B (non-thesis).

Maximum flexibility is provided for students pursuing the degree. Courses are organized to allow concentration in one of the following areas within the department: communication disorders (in cooperation with Brescia College), communication theory, general speech, interpretation, rhetoric and public address, mass communication, and drama/theatre. Students may, with permission of the advisors, take courses in related departments.

The MA in Speech requires 30 credit hours plus 4 hours of research tool for non-credit. The research tool requirements are as follows:

Speech 501 Introduction to Graduate Study in Communication and	1 hour
Speech 440G Experimental Studies in Communication or	3 hours
Speech 400G Historical Studies in Communication	3 hours
	Total 4 hours

Occasionally, a tool other than 440G or 400G may be needed, in which case the student's graduate committee may submit an appropriate substitute.

Master of Arts in Education (Speech major or minor; Drama/Theatre minor)

Since this program provides graduate coursework in speech or theatre for the public school teacher, all requirements for standard high school certification must be met. The major in speech requires a minimum of 18 or a maximum of 21 hours. The minor in speech or in theatre requires a minimum of 12 or a maximum of 15 hours in the appropriate area. The remaining hours will be taken in professional education.

546 Seminar in Forensics. 3 hours.
Principles and procedures involved in directing the standard forensic events such as debate, extemporaneous speaking, discussion, original oratory, analysis of a public address. Also includes interpretative reading, duet acting, and story telling.

549 Rhetorical Theory and Criticism.
3 hours.
Development of the classical tradition in rhetorical theory, practice, criticism, and pedagogy, from pre-Aristotelian writings through twentieth century British and American theorists.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

The following 400-level courses in Communication may be taken for graduate credit

400G Historical Studies in Communication.
3 hours.
Research methodologies in communication and theatre.

401G History of Broadcasting in America.

3 hours.

Historical factors in the development of primary means of contemporary print and broadcast mass communications; background data on the creation, adoption and diffusion of mass media in America.

405G Phonetics. 3 hours.

Speech sounds, their production, and acoustic properties.

440G Experimental Studies in Communication. 3 hours.

Research design, procedures, and reporting. Critical examination of experimental studies in various areas of communication.

441G Advanced Oral Interpretation: Prose.

3 hours.

Study of poetry with emphasis on differentiation of types of oral performance.

443G Contemporary Rhetoric and Public Address. 3 hours.

Contemporary theories of rhetoric and persuasion as they relate to public address. Also includes analysis of contemporary public address.

444G Advanced Oral Interpretation: Poetry.

3 hours.

An analysis of prose fiction (short story, novella, novel) with emphasis on point of view, tone, and characterization in oral performance.

445G Research in Speech and Theatre.

3 hours.

Usually offered as an independent study.

446G Classical Rhetoric. 3 hours.

Greek and Roman theories of rhetoric; Plato, Aristotle, Cicero, and Quintillian.

447G American Public Address. 3 hours.

Study and evaluation of selected speakers from American history.

448G Kentucky Oratory. 3 hours.

Prerequisite: Sp 447 or His 456.

Studies speakers of influence in Kentucky and provides an overview of oratory from political, religious, and social issues.

449G Speech Development. 3 hours.

Speech as a teaching tool. Minor problems in voice control, articulation, and pronunciation.

461G Organization Communication. 3 hours.

Theoretical examination of rhetorical principles operant in modern organizational communication systems.

463G Intercultural Communication. 3 hours.

Dimensions of communication theory that apply across cultural boundaries, including anthropological and linguistic perspectives.

Graduate Courses in Communication Disorders

503 Advanced Diagnostic Procedures in Speech Pathology. 3 hours.

Prerequisites: Sp 481 or 481G and 485 or 485G.

Expansion of diagnostic theory and procedures utilized in clinical settings by the certified speech pathologist.

504 Seminar in Language Disorders of Childhood. 3 hours.

Prerequisites: Sp 481 or 481G and 483 or 483G or permission of instructor.

Language development disorders of children. Characteristics of normal as well as of delayed and disrupted language patterns and their differential diagnosis.

505 Communication Disorders of Cleft Palate and Cerebral Palsy. 3 hours.

Prerequisite: Sp 481 or 481G.

Etiology, diagnosis, and management of speech and language dysfunctions associated with cleft palate and cerebral palsy.

506 Dysfluency. 3 hours.

Prerequisite: Sp 481 or 481G.

Research review in the field of dysfluency, including cluttering and stuttering. Emphasis on etiology and clinical management of all fluency disorders.

507 Dysphasia. 3 hours.

Prerequisite: Sp 481 or 481G.

Dysphasia — including symptomatology, etiology, differential diagnosis, and training, with primary emphasis on adult problems.

508 Voice Disorders. 3 hours.

Prerequisites: Sp 481 or 481G and 484 or 484G.

Diagnosis and remediation techniques of voice disorders in childhood and adulthood. Rehabilitation of the laryngectomized client, with emphasis on the development of esophageal speech or the use of the electro-larynx as a substitute voice.

509 Speech Science. 3 hours.

Contemporary research in the area of speech science.

510 Seminar in Speech Pathology. 3 hours.

Current issues that influence the profession of speech pathology; local, regional, and national issues that affect the speech pathologist's role as a service provider.

580 Diagnostic Procedures in Speech Disorders. 1 hour.

Identification of speech disorders and treatment available.

590 Clinical Practicum in Speech Pathology. 3 hours.

Advanced, supervised, clinical practicum in speech pathology. Exposes the student to the more acute communication disorders.

The following 400-level courses in Communication Disorders may be taken for graduate credit

481G Introduction to Speech Pathology.

3 hours.

The development of speech and language; cause and treatment of the simpler deviations from normal speech and lan-

guage; identification of and remedial suggestions for the more common speech problems.

482G Audiology. 3 hours.

The anatomy of hearing, causes of loss of hearing, and introduction to the methods of testing, analysis, and rehabilitation of people of all ages with hearing loss.

483G Articulation Disorders. 3 hours.

The etiology, evaluation, and management of articulatory disorders in children and adults.

484G Speech Anatomy and Physiology.

3 hours.

Structures and functions which comprise the speech mechanism and its relation to the production and development of speech and language.

485G Introduction to Diagnostic Procedures in Communication Disorders. 3 hours.

Theory and utilization of the most common screening and diagnostic techniques in speech pathology. Evaluation procedures for all communicative dysfunctions.

486G Language Disorders. 3 hours.

Identification, diagnosis, evaluation, and treatment techniques to be used with language disorders — specifically, aphasia and delayed language problems.

487G Aural Rehabilitation. 3 hours.

Principles and procedures of communication and amplification systems for the hearing impaired.

490G Clinical Practicum in Speech.

3 hours.

Supervised clinical experience, including individual and group therapy.

Graduate Courses in Theatre

550 Seminar in Theatre. 3 hours.

Provides theatre experience through research and application. Individual investigation of interpretative, technical, or promotional problems.

552 Dramatic Theory and Criticism.

3 hours.

Theories and practices within the theatre from Aristotle to present, criteria for critical analysis.

553 Restoration and Eighteenth Century Drama. 3 hours.

Representative plays, evaluation of influences, movements, and productions. Reading and individual study.

583 Shakespeare II. 3 hours.

(See English 583)

The following 400-level Theatre courses may be taken for graduate credit

431G Musical Theatre. 3 hours.

Development of the musical theatre; the style and form of its music, dance, and drama; and its impact on the modern theatre.

435G Puppet Theatre. 3 hours.

Puppets, muppets, and marionettes with emphasis on history, construction, operation, and performance.

450G Readers Theatre. 3 hours.

Prerequisite: Sp 349 or permission of instructor. Methods of group oral interpretation of literature with emphasis on the short story, poetry, and drama. Includes analysis of literature, preparation of Readers Theatre and Chamber Theatre scripts, and performance in class projects.

451G Design of Stage Costuming. 3 hours.

For theatre majors and those interested in understanding the concept of costuming. Emphasis on the historical and practical aspects of theatrical costume design.

452G Stage Lighting. 3 hours.

Lighting equipment demonstration and

practical experience in working with lights for the major productions. Each student will design the lighting for a full-length play.

453G Historic Costume for the Stage.

3 hours.

Prerequisite: Theatre 251.

Historic costumes of the major periods of theatrical production. Covers the costumed actor's problems with manners and movements.

454G Theatre Management. 3 hours.

Principles of management applied to fields of theatre operation, production preparation, and performance.

455G American Drama. 3 hours.

Development of American drama from the colonial period to the present. An overview of American drama and the works of major American playwrights of the past forty years.

456G Elizabethan Drama. 3 hours.

Intensive study of the immediate predecessors and contemporaries of Shakespeare.

457G Directing. 3 hours.

Interpreting and directing the play, laboratory experience in connection with the college theatre program.

458G Theatre Practicum. 3 hours.

Reading of plays and dramatic materials; staging methods; script selection for production; prompt script with analysis of director's research; individual interpretation and production plans; final production.

459G Modern Drama. 3 hours.

Dramatic literature since Ibsen, with emphasis on evolving developments and trends in world theatre.

460G Theories of Directing. 3 hours.

Evolution of the modern director and the theoretical and practical bases of contemporary stage directing.

499G Studies in British Theatre. 3 hours.

Viewing of representational plays of the English theatre and visitation to supplementary historical and cultural sites.

DEPARTMENT OF ENGLISH**CHERRY HALL**

ROOM 135 (502) 745-3043

James Heldman, Head**Graduate Faculty**

Professors: H. Bowen, N. Davis, W. Fridy, J. Heldman, L. Little, G. McCelvey, D. McMahon, W. McMahon, F. Steele, W. Wood

Associate Professors: C. Allmon, M. Bruner, J. Flynn, J. Glaser, R. Miller, J. Survant, R. Ward

Degrees Offered: Master of Arts in English, Master of Arts in Education (English major or minor; English and Allied Language Arts area major), Specialist in College Teaching (English major).

Master of Arts in English

This program is designed for students who are preparing to teach in secondary schools or junior colleges, or who expect to continue graduate work toward an advanced degree. To meet departmental admission requirements, the student must have a minimum of 27 hours of undergraduate English with a grade point average of 3.0 or above and a satisfactory GRE aptitude score.

To complete the program, a student must earn a minimum of 24 semester hours of coursework (six of which

may be in a related field such as drama, English history, foreign literature, mass media, philosophy, or speech) and write a thesis, which will carry six hours of credit. Courses in the student's program must meet departmental requirements, a list of which is available from the Departmental Graduate Advisor.

The research tool requirement may be met by demonstrating proficiency in a foreign language or by earning 33 graduate hours in English including English 520, which will be designated as the research tool.

An examination over coursework, thesis, and related materials must be completed. Early in the graduate program, the student should obtain from the graduate advisor in English a copy of the Reading List for the MA Oral Examination.

Master of Arts in Education (English major or minor; English and Allied Language Arts area major)

This degree qualifies the student for the standard high school certificate. To pursue a major or minor in English, the student must have completed at least 24 hours of undergraduate work in English.

The major in English is designed primarily for secondary teachers who wish to acquire a strong academic background in their teaching field. Requirements include 18 to 21 hours in English, nine to 12 hours in education, and a final examination on courses and related materials specified in the Reading List for the MA Oral Examination. At the beginning of the graduate program, the student should obtain a copy of the reading list from the Graduate Advisor in English. The thesis is optional.

Students minoring in English take a maximum of 15 hours or a minimum of 12 hours in that department.

The major in English and Allied Language Arts is designed for middle and secondary school teachers involved

in teaching basic language courses and in directing student activities related to the language arts. Admission to this program usually requires 24 hours of undergraduate coursework in English; however, to keep the entrance requirements as open as possible to qualified applicants, up to 9 of the 24 hours may consist of appropriate courses from related fields (foreign language, speech, drama, journalism, reading) may be acceptable.

This area major requires 18 to 21 semester hours of coursework in English and Allied Language Arts (speech, drama, journalism, mass media, foreign languages, and folk studies). The requirement in English varies according to undergraduate preparation. English 401G — Advanced Composition — and 6 to 9 hours of British or American literature are required of all. The remaining 6 to 12 hours for the area major will be selected from allied language arts. Nine to 12 hours must be taken in professional education.

Graduate Courses in English

503 Linguistics and Transformational Grammar. 3 hours.

History and development of modern grammar and linguistic principles, a review of current professional writers, and an introduction to the various "new" grammars.

508 Studies in Language Development.

3 hours.

Nature and function of language, the processes and stages of language learning, and the development of functional language skills.

509 Standard English as a Second Dialect. 3 hours.

Differences between standard and non-standard English; second language teaching techniques for speakers of non-standard English; and a review of the literature on materials for teaching language arts to culturally disadvantaged children.

520 Bibliographical and Methodological Studies in Literature. 3 hours.

Basic bibliography and bibliographical problems; research methods requisite for the M.A. thesis and scholarly publications; methodologies of recent critical essays.

553 Restoration and Eighteenth Century Drama. 3 hours.

Emphasis on representative plays. Evaluation of influences, movements, and productions.

560 Literary Criticism II. 3 hours.

Critical theory and practice of significant literary critics of the Western world from the Romantic period to the present.

581 Readings in Old English. 3 hours.

Introduction to Anglo-Saxon vocabulary, grammar, and literary devices. Readings in the original and in translation.

582 Middle English Literature. 3 hours.

Non-Chaucerian English literature of the Middle English period. Language of the period reviewed.

583 Shakespeare II. 3 hours.

Selected comedies and histories. Individual research in literary criticism.

585 Milton. 3 hours.

The writings of John Milton, with emphasis on his poetic works.

587 Wordsworth and Keats. 3 hours.

The major works of these two writers and an evaluation of their contributions to the Romantic Movement.

588 Modern British Poetry. 3 hours.

Detailed study of the works of major twentieth century British poets.

591 Emerson, Thoreau, and Whitman.

3 hours.

Selected works, cultural backgrounds, and contributions of these writers.

592 The Age of Twain and James.

3 hours.

Realism and naturalism in American literature. Emphasis on Twain, James, and their contemporaries.

593 Poe, Hawthorne, and Melville.

3 hours.

Selected works, cultural backgrounds, and contributions of these writers.

594 Contemporary Fiction. 3 hours.

Selected major figures and their works. Consideration of movements, influences, developments since 1900.

596 Seminar in American Writers.

3 hours.

Varies according to assigned instructor and students' needs. Usually covers group of writers or one major writer.

597 Investigations in English. 2 or 3 hours.

Review of articles in professional journals dealing with problems relative to the teaching of English.

598 Problems in English. 2 or 3 hours.

Supervised research on literary or linguistic problems.

599 Thesis Research and Writing. 6 hours.

Specialist in College Teaching (English major)

This program is designed to prepare students for teaching in a two-year or four-year college. It is intended for students who want extensive preparation for a teaching career without the heavier research emphasis of a traditional Ph.D. program. In addition to meeting Graduate College requirements for admission to the program, the applicant must have earned at least 18 hours of graduate work in English with a minimum GPA of 3.25.

The 30-hour degree program includes traditional courses and seminars in English, a teaching internship, a specialist project resulting in a scholarly paper, and a final comprehensive examination. The student may earn six to nine hours in a related field such as history, folklore, philosophy, literature in a foreign language, or drama, provided that the student will accumulate at least 48 graduate hours in English, with 21 hours concentrated either in American literature or in English literature.

599c Maintaining Matriculation. 1 to 6 hours.

699 Specialist Project. 6 hours.

699c Maintaining Matriculation. 1 to 6 hours.

The following 400-level courses may be taken for graduate credit

401G Advanced Composition. 3 hours.

Study and practice in various forms of writing and rhetorical principles.

404G The History of The English Language.

3 hours.

Origin and development of the language from Indo-European to Modern English, with emphasis on developments in the sound system, vocabulary, and grammar; historical and cultural forces which have affected language.

405G Phonetics. 3 hours.

Speech sounds, their production and acoustic properties.

406G American Dialects. 3 hours.

Regional and social variations in American English, causes of these variations, and directions of change.

407G Descriptive Linguistics. 3 hours.

Current linguistic theory which includes the important levels of language as a means of communication; various theories and applications of linguistic theory to other fields of study.

455G American Drama. 3 hours.

See Department of Communication and Theatre.

456G Elizabethan Drama. 3 hours.

See Department of Communication and Theatre.

458G Modern British Novel. 3 hours.

Techniques and rationale in representative works of major British novelists from

Joseph Conrad to the present. Intellectual climate of the period.	and studied in the light of the Elizabethan period as representing typical dramatic writing and production.	movements to show the interrelationships between the culture of the era and its literature.
459G Modern Drama. 3 hours. See Department of Communication and Theatre.	483G The English Renaissance. 3 hours. Non-dramatic literature of the Renaissance, with emphasis on Spenser.	489G The English Novel. 3 hours. Technique and history of the novel. Several representative novels studied.
460G Literary Criticism I. 3 hours. Critical theory and practice of significant literary critics of the Western world from the Greek and Roman periods through the English Neo-Classical period.	484G The Romantic Movement. 3 hours. Background and phases of romanticism; representative exponents of the Romantic Movement.	490G The American Novel. 3 hours. The American novel from Cooper to the present. History, general development, and technique. Several representative novels studied.
476G The Ballad. 3 hours. The ballad as a genre of literature and folklore in the English-speaking world.	485G The Seventeenth Century. 3 hours. Seventeenth century literature, forms, and developments.	493G Major American Poets. 3 hours. The major poems, the styles, and the poetic intent of the most important American poets from Poe to the present.
478G Folklore in Literature. 3 hours. Readings in world literature from the Bible to the modern novel; aspects of folklore reflected there; the effects of unwritten literature on the origins and development of written literature.	486G The Eighteenth Century. 3 hours. Eighteenth century literature, forms, and developments.	494G Kentucky Literature. 3 hours. Survey of literary people and places in Kentucky, including detailed study of several works of Kentucky writers.
481G Chaucer. 3 hours. Representative works of Chaucer; backgrounds; outside readings and reports.	487G Victorian Prose. 3 hours. Major prose writers of the Victorian period. Also covers political, social, and economic movements to show the interrelationships between the culture of the era and its literature.	495G Southern Literature. 3 hours. Covers major, minor, and "regional" writers of the South.
482G Shakespeare I. 3 hours. Selected major Shakespearean plays read	488G Victorian Poetry. 3 hours. Major poets of the Victorian period. Also covers political, social, and economic	496G Comparative Literature. 3 hours. Foreign literature and its genres or themes in comparison to English or American literature.

DEPARTMENT OF FOREIGN LANGUAGES

IVAN WILSON CENTER
ROOM 251 (502) 745-2401

C. P. Brown, Head

Graduate Faculty

Professors: C. Brown, P. Hatcher, J. Miller
Associate Professors: J. Babcock, T. Baldwin,
 R. Martin, W. Walls
Assistant Professor: R. Padilla

Degrees Offered: Spanish — Master of Arts, Master of Arts in Education (Spanish major or minor). French — Master of Arts in Education (French major or minor). German — Master of Arts in Education (German major or minor).

Master of Arts in Spanish

This program prepares students for teaching Spanish at the junior or senior college level, for pursuing doctoral study, for meeting certification standards, and for meeting vocational objectives requiring proficiency in Spanish.

In addition to meeting Graduate College admission requirements, the student must have completed the equiva-

lent of an undergraduate minor in Spanish (18 hours above the elementary year), including an introductory course in Hispanic literature, with approximately a 3.0 (4.0) average in this field. Deficiencies must be made up within one year without graduate credit.

Under Plan A (thesis), a minimum of 24 hours of acceptable coursework and a thesis are required. Under Plan B (non-thesis), a minimum of 30 hours of acceptable coursework must be completed. With the approval of the graduate advisor, six hours may be taken in the following related fields: another foreign language (modern or classical), English, history of Spain or a Spanish speaking area, and other fields which clearly relate to the Hispanic interest. At least nine of the required 18 hours of coursework in Hispanic literature or language and three of the additional six hours must be at the 500-level or above.

An examination over coursework and the thesis, if elected, must be completed. Prior to taking the final examination the student must demonstrate reading ability sufficient to do scholarly research in another language, modern or classical, which meets the approval of the Department Head.

Master of Arts in Education

Majors and minors are available in French, German, and Spanish. Since this program is designed for the public school teacher, students following it must meet all requirements for the standard high school certificate. Those persons majoring in French, German, or Spanish may take a minimum of 18 or a maximum of 21 hours. Those minoring in French, German, or Spanish may take a minimum of 12 or a maximum of 15 hours. The remaining hours will be taken in professional education.

Graduate Courses in Foreign Languages

French

520 Seminar in French Literature or Language. 3 hours.

524 Nineteenth Century French Novel. 3 hours.

526 Modern French Poetry. 3 hours.

529 Seminar in French Literature. 3 hours.

590 Comparative Romance Linguistics. 3 hours.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

600 Seminar in College Teaching. 3 hours.

German

538 Seminar in German Literature. 3 hours.

539 Seminar in German Literature or Language. 3 hours.

600 Seminar in College Teaching. 3 hours.

Spanish

570 Literature of Spain's Golden Age. 3 hours. Prose fiction, drama and poetry during the period 1479 to 1635.

572 Nineteenth Century Literature. 3 hours. The novel, drama and poetry in nineteenth century Spanish literature.

575 Twentieth Century Prose. 3 hours. The novel and the essay of the Generation of '98 and the novel of the post-civil war period in Spain.

576 Twentieth Century Poetry and Drama. 3 hours. The drama of Spain from the Generation of '98 through the contemporary period, with emphasis on Benavente and Garcia Lorca. Poetry from the Modernists through the contemporary period, with emphasis on Jimenez, Machado, and Garcia Lorca.

578 Seminar in Hispanic Literature or Language. 3 hours. May be repeated once.

590 Comparative Romance Linguistics. 3 hours.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

600 Seminar in College Teaching. 3 hours.

The following 400-level courses may be taken for graduate credit

French

420G Advanced French Composition and Stylistics. 3 hours. Prerequisite: Fr 320. Creative self-expression, refinement of grammatical understanding, the art of translation, and stylistic devices.

421G Advanced French Conversation. 3 hours. Prerequisite: Fr 321. Discussion on assigned topics and reports on current newspaper and magazine articles. Special emphasis on idiomatic expression.

422G History of the French Language. 3 hours. Prerequisite: Fr 221. Phonological, morphological, syntactic, and lexical changes which turned the Latin spoken in Gaul into modern standard French. No previous training in linguistics required.

423G Seventeenth Century French Literature. 3 hours. Prerequisite: Fr 325. Literature of the period, focusing on the works of Corneille, Racine, and Molière and the development of *classic* theory beginning with Malherbe.

425G Nineteenth Century French Literature. 3 hours. Prerequisite: Fr 326 or permission of instructor. Romantic, Realistic, and Naturalistic trends of the nineteenth century, as exemplified in the French novel.

426G Twentieth Century French Drama. 3 hours. Prerequisite: Fr 326 or permission of instructor. Covers principal authors and works, directors, and main currents of twentieth century French theatre.

427G Twentieth Century French Novel. 3 hours. Prerequisite: Fr 326. Novelists studied include Proust, Gide, Mauriac, Aymé, Camus, and Robbe-Grillet.

429G Studies in French Literature or Language. 3 hours. Topic selected in consultation with assigned instructor (may include literature or language). May be repeated once.

German

430G Advanced Written German. 3 hours.

Prerequisite: Ger 330. Covers selection of vocabulary and sentence structure appropriate to letters, reports, essays and descriptions.

431G Advanced Spoken German. 3 hours. Prerequisite: Ger 331. Practical in oral German with emphasis on student discussion of literary, cultural, and political topics.

432G History of the German Language. 3 hours. Prerequisite: Ger 330 or permission of instructor. Emphasis on the relationship of German to the Indo-European and other Germanic languages and upon the development of modern standard German from the earliest recorded documents.

434G Survey of Nineteenth Century German Literature. 3 hours. Prerequisite: Ger 334. The major writers of Romanticism, Biedermeier, and Realism with emphasis on prose and drama.

435G Twentieth Century German Literature. 3 hours. Prerequisite: Ger 334. Major German, Austrian and Swiss writers, with emphasis on prose and drama.

436G German Literature of the Classical Period. 3 hours. Prerequisite: Ger 334. The outstanding works of Goethe, Schiller and other authors of the late eighteenth and early nineteenth centuries.

438G Survey of the German Lyric. 3 hours. Prerequisite: Ger 334. German lyric poetry from the earliest times to the present. Representative works and authors.

439G Studies in German Literature or Language. 3 hours. May be repeated once.

Latin

450G Seminar in Latin Literature. 3 hours. Prerequisite: Latin 252 or equivalent. May be repeated once.

Russian

465G Soviet Literature. 3 hours. Prerequisite: Rus 261. Major fiction writers and literary trends since 1917. Lectures, readings and reports.

469G Studies in Russian Literature or Language. 3 hours. Prerequisite: Rus 261 or equivalent. May be repeated once.

496G Russian Literature in Translation. 3 hours. Prerequisite: Rus 261 or equivalent. Selected works of major Russian authors.

Spanish

470G Advanced Oral Spanish. 3 hours.

Prerequisite: Spn 370.

Conversation units, dramatic sketches, original oral topics.

471G Advanced Spanish Syntax. 3 hours.

Prerequisite: Spn 371.

Examination of selected literary works; original compositions on selected topics.

472G Background of Modern Spanish.

3 hours.

Prerequisite: Spn 371.

History of the Spanish language, stresses the development of sounds and forms, word borrowings, and changes in meanings.

476G Literature of Spain II. 3 hours.

Prerequisite: Spn 374.

Peninsular Spanish literature from the 18th Century to the present. Readings, reports.

477G Spanish American Literature. 3 hours.

Prerequisite: Spn 374.

Spanish American literature from the pre-conquest period through the contemporary period.

479G Studies in Hispanic Literature or

Language. 3 hours.

May be repeated once.

DEPARTMENT OF HISTORY

CHERRY HALL

ROOM 200 (502) 745-3842

Richard Troutman, Head

Graduate Faculty

Professors: J. Bennett, J. C. Crowe, L. Harrison, C. Jackson, M. Lucas, J. Minton, F. Murphy, J. Thacker, F. Thompson, R. Troutman

Associate Professors: C. Crowe, D. Harrington, R. Salisbury, R. Stone

Assistant Professor: C. Bussey

Degrees Offered: Master of Arts in History, Master of Arts in Education (History major or minor), Specialist in College Teaching.

A person pursuing a graduate degree in history must take at least half of the work in history, excluding the thesis, at the 500 or 600 level.

Master of Arts in History

This program is designed to prepare students for the teaching of history on the junior or senior college level; to provide the initial graduate work for those who intend to pursue a doctoral degree; and to enhance the preparation of secondary teachers of history who desire to meet certification requirements through such a program.

In addition to meeting general Graduate College requirements, the applicant must present a major or minor in history with approximately a B average in this field.

A student who has an undergraduate major in history may be permitted to take six to nine hours of graduate work in a related field in courses approved by the Graduate Advisory Committee. A student who presents an undergraduate minor in history must complete the entire program in the field of history.

Both Plan A (thesis) and Plan B (non-thesis) are available. Plan A requires a minimum of 24 hours of coursework, including European Historiography 435G or Ameri-

can Historiography 455G (unless previously taken) and the thesis. Reading proficiency in a modern foreign language must be demonstrated.

Plan B requires 36 hours, including at least 21 hours in courses open only to graduate students. Both European Historiography 435G and American Historiography 455G must be included on the program or used as a research tool. The research tool may be met by (1) demonstrating proficiency in a foreign language, (2) completing Math 203 — Statistics, or (3) completing either History 435G or 455G.

A final examination over coursework, thesis (if Plan A), and related materials must be passed.

Master of Arts in Education (History major or minor)

Since this program is designed for the public school teacher, the student following it must meet all requirements for standard high school certification. A maximum of 21 or a minimum of 18 hours is required for a major. A maximum of 15 or a minimum of 12 hours is required for a minor. The remaining hours must be taken in professional education courses.

Specialist in College Teaching

The specialist degree program is designed for those who wish to pursue work beyond the master's level and who do not expect to earn the doctorate. The program involves additional academic courses, a practicum in college teaching, and a specialist project.

In addition to meeting general Graduate College requirements for admission, an applicant for the Specialist Degree must have completed at least 18 hours of graduate work in history with a minimum grade point average of 3.25.

A student may, with the prior approval of the graduate advisor, take a minor of six to nine hours in a related field provided that at least 48 graduate hours in history will have been accumulated upon completion of the Specialist Degree. A three hour practicum in college teaching is required.

The specialist project, which may be a field project, a creative study, or more formal types of research and study, culminates in a scholarly written report and carries six hours of graduate credit.

History and the Humanities Program

History is an integral part of the program leading to the Master of Arts in Humanities degree. As a general rule, students under the humanities program who enroll in graduate courses in history must have at least 18 hours of history as a prerequisite.

Graduate Courses in History

500	Cultural and Social Aspects of American Life. 3 hours. Designed for graduate students who have undergraduate majors in the field of elementary education.	as the Middle Ages, the Renaissance, and the Reformation.	428G England Since 1914. 3 hours.
501	European History for Secondary Teachers. 3 hours. Emphasis on bibliography, documents, historical interpretations and materials useful for secondary teachers of history. (Summer and on demand)	619 Seminar in United States Diplomatic Relations. 3 hours.	435G European Historiography. 3 hours.
502	United States History for Secondary Teachers. 3 hours. Emphasis on bibliography, documents, historical interpretations and materials for secondary teachers of history.	622 Seminar in Western United States History. 3 hours.	440G Colonial History of the United States. 3 hours.
515	Nineteenth Century Britain. 3 hours.	630 Seminar in United States History. 3 hours. Graduate seminar in such diverse areas as Colonial America, the Confederation Period, the Federalist era, the Jeffersonian Republicans, the Slavery Controversy.	441G The Formative Period, 1776-1815. 3 hours.
521	United States 1900-1945. 3 hours.	631 Seminar in Kentucky History. 3 hours.	442G The Jacksonian Era, 1815-1850. 3 hours.
525	Social and Intellectual History of the US: Nineteenth Century. 3 hours.	640 Seminar in College Teaching. 3 hours. Course organization, lecture preparation, professional development, ethics, testing procedures, and library development.	443G Civil War and Reconstruction, 1850-1877. 3 hours.
526	Social and Intellectual History of the US: Twentieth Century. 3 hours.	699 Specialist Project. 6 hours.	444G The United States, 1870-1900. 3 hours.
527	Social and Intellectual History of Europe: Nineteenth Century. 3 hours.	699c Maintaining Matriculation. 1 to 6 hours.	450G Diplomatic History of the United States to 1898. 3 hours.
599	Thesis Research and Writing. 6 hours.	The following 400-level courses may be taken for graduate credit	
599c	Maintaining Matriculation. 1 to 6 hours.	419G Tudor-Stuart England. 3 hours.	451G Diplomatic History of the United States Since 1898. 3 hours.
605	Seminar in Ancient History. 3 hours.	422G The French Revolution and Napoleonic Era. 3 hours.	452G Urban History. 3 hours.
606	Seminar in European History. 3 hours. Graduate Seminar in such diverse areas	425G Modern Germany. 3 hours.	455G American Historiography. 3 hours.
		426G The Middle East in Modern Times. 3 hours.	457G The Old South. 3 hours.
			458G The New South. 3 hours.
			459G The Immigrant in American History. 3 hours.
			464G Latin America and the United States. 3 hours.
			499G Advanced Individual Study. 3 hours. Prerequisite: 3.0 average in at least 21 hours of history. Research problem or intensive readings. Directed by graduate faculty member.

CENTER FOR INTERCULTURAL AND FOLK STUDIES

GORDON WILSON HALL
ROOM 304 (502) 745-3111

Graduate Faculty

Professor: L. Montell
Associate Professors: J. Crowe, J. Miller, A. Petersen
Assistant Professor: B. Feintuch

Degrees Offered: Master of Arts in Folk Studies, Master of Arts in Education (Folk Studies minor).

Master of Arts in Folk Studies

This interdisciplinary program is designed for students who desire to teach at the college level; for teachers who desire to add new vistas to public school classroom instruction in the arts, humanities, and social sciences; as enrichment for school administrators and for persons interested in public service employment in such areas as recreation, welfare and social work; for persons who desire to continue their education on a personal or a vocational basis; and for students who expect to pursue doctoral studies at another institution.

Since folklore deals with the entire traditional culture of man, the discipline has close affinities with literature, anthropology, sociology, history, geography, philosophy, and psychology. Adequate undergraduate preparation in any of these disciplines will be acceptable for admission to graduate study in folk studies. The student without sufficient background may be required to take additional courses.

Minimum requirements of the program consist of 12 hours of folklore at the 500 level, including Folk Studies

577 and 578, 12 additional hours of folklore or selected courses in related disciplines, and the thesis. An extended, fully documented collection project may be completed in lieu of the thesis.

The research tool requirement may be met by demonstrating proficiency in a foreign language or by completing Folk Studies 578. The student must also pass a comprehensive written examination.

Master of Arts in Education (Folk Studies minor)

This program is designed to enrich teaching content in the public schools in the arts, humanities, and social sciences, and to broaden the teacher's general education background. Admission requirements are the same as for the Master of Arts in Folk Studies. The folk studies minor requires a minimum of 12 hours in folklore, including Folk Studies 577 and 578 and two folklore electives. One course from a related discipline may be substituted for one folklore elective.

Graduate Courses in Folk Studies

500 American Folklore. 3 hours. An overview of American folklore fields: myths, legends, folktales, folksongs, proverbs, beliefs, customs, folk speech, material culture, etc. Not recommended for folk studies majors.

570 Appalachian Folklore and Folklife. 3 hours. Folklife and culture of the Upland South, with emphasis on verbal and material traditions. Cursory investigation of the Ozark region.

571 Folk Narrative. 3 hours. A survey of narrative genres of folklore and applicable scholarship.

572 Applied Folklore. 3 hours. Folklore concepts and methods as application-oriented research and public sector concerns with emphasis on social, medical, governmental, and educational programs. Includes relationships with other applied disciplines.

573 Seminar in Interpretation of Myth. 3 hours. Principal contemporary modes of research and interpretation of myth.

576 American Traditional Song. 3 hours. Interdisciplinary American folksong and folksmusic including ethnic, regional, and occupational manifestations. Emphasis on both conventional genres and cultural contexts.

577 Folklore Theories and Techniques. 3 hours. Folklore scholarship, its historical development, and its principal bibliographical materials and their uses.

578 Folklore Fieldwork and Oral History. 3 hours. Examination of and practical experience in theories and techniques of folklore fieldwork and oral history.

579 Directed Study and Research in Folklore. 3 hours. Prerequisite: FS 578 or demonstrated ability to work independently. Supervised individual study under the direction of a member of the folklore graduate faculty. Cross-listed with Anthropology 579.

580 Folklife Conversation and Communication. 3 hours. Forms of folklore which occur within a conversational stream. Attention to proverbs, riddles, speech play, and belief. Expressive culture as a particular culture-specific mode of communication.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

reference to northwest European antecedents, sources, and parallels.

478G Folklore in Literature. 3 hours. Readings in world literature from the Bible to the modern novel; aspects of folklore reflected there; the effects of unwritten literature on origins and development of written literature.

Afro-American Studies

480G Directed Independent Study in Afro-American Topics. 1 to 3 hours.

490G Afro-American Seminar. 3 hours.

The following 400-level courses may be taken for graduate credit

462G Folk Medicine. 3 hours. Historical circumstances, associations, and logic of traditional non-scientific medical practices. Cross-listed with Health and Safety.

470G Museum Procedures and Preservation Techniques. 3 hours. Essential aspects of museums and of preservation, i.e., collecting, preserving, researching, exhibiting, and interpreting material culture. Cross-listed with Library Science.

476G The Ballad. 3 hours. Narrative folksong in the English-speaking world.

477G Folk Art and Technology. 3 hours. Folklife research and selected world culture groups, with emphasis on pre-industrial folk crafts, technology, and architecture in the United States. Special

Interdisciplinary Courses Recommended for Graduate Students in Folk Studies

Anthro 440G, 507, 555
Comm 541, 463G
Eng 583, 481G
Geog 530, 560, 430G
Soc 410G

DEPARTMENT OF JOURNALISM

ACADEMIC COMPLEX
ROOM 323 (502) 745-4143

David B. Whitaker, Head

A graduate program is not offered by the Department of Journalism. However, students in other departmental programs may elect coursework from the limited offering in this area.

The following 400-level courses may be taken for graduate credit

427G School Journalism. 3 hours. Processes and problems of the mass media in our nation; responsibilities of advisors to school publications and broadcasting facilities; materials and resources available to support mass communication instructional programs.

481G Problems in Mass Communication. 3 hours. Individualized research, management, production, etc., in the fields of mass communication activities. Supervised internship with professional media operations. May be repeated once for credit.

DEPARTMENT OF MUSIC

IVAN WILSON CENTER
ROOM 351 (502) 745-3751

Wayne Hobbs, Head

Graduate Faculty

Professors: H. Carpenter, W. Hobbs, S. Kersenbaum, E. Pease

Associate Professors: K. Campbell, V. Hale, D. Livingston, O. Pauli, T. Watson

Assistant Professor: B. Woodruff

Degrees Offered: Master of Music, Master of Arts in Education (Music major or minor).

Master of Music (Major in Performance)

This program is designed for students who seek a career in performance, symphony orchestra, or private studio teaching in college or community. In addition to the general Graduate College requirements, the applicant

must have a bachelor's degree in music with a grade point average in music subjects of at least 3.0. In addition the individual must demonstrate ability and knowledge through examination in music theory, music literature, and the chosen area of performance.

Included in the required 30 hours (minimum) are 15 hours in the performance area; 12 hours selected from music literature, theory, composition, orchestration, or music psychology; and three elective hours. Music literature and music theory courses must be included.

Voice majors are required to demonstrate ability to sing in English and three foreign languages. Any deficiency in this area may require extra coursework. A full length public recital is required in lieu of a thesis.

Master of Arts in Education (Music major or minor)

Since this program is designed for the public school teacher, the student following it must meet all requirements for standard high school certification. The major requires a minimum of 18 or a maximum of 21 hours in music. The minor requires a minimum of 12 or a maximum of 15 hours in that department. The remaining hours will be taken in professional education courses. (Note: Education 535, Seminar in Music Education, is recommended as a part of the education core). A typical program consists of a balanced selection of music education and music literature offerings. In addition, consideration is given to those with an interest in music theory, instrumental arranging, applied music (primary or secondary), or a related field.

Graduate Courses in Music

500 Seminar in Theory. 3 hours.

501 Analytical Techniques. 3 hours. Harmonic and contrapuntal analysis in various styles.

510 The Teaching of Applied Music. 3 hours. Investigation of pedagogical problems in a specific performance area of music.

511 Investigations in Music Education.

3 hours.

Problems and methods of research in music education. Includes application of pure and action research and investigation of published research in music education.

513 Directed Individual Study. 3 hours.

Research projects in music education.

514 General Music in The Secondary Schools. 3 hours.

Training the music teacher to provide orientation experiences for junior and senior high school non-performers.

515 Administration and Supervision of Public School Music. 3 hours.

Current trends in educational thought and the implications for administration, instruction and evaluation public school instrumental music.

530 Music Literature. 3 hours.

Investigation of a specialized area not covered in other music literature courses.

538 Directed Individual Study. 3 hours. Supervised private research culminating in a scholarly paper.	Prerequisite: Theory 201. Sixteenth Century polyphony.	440G Choral Union. .5 hours.
556, 557, 558 Applied Music Major. 4 hours. (MM in Performance only)	403G Counterpoint II. 2 to 3 hours. Prerequisite: Counterpoint I.	441G Choir. .5 hours.
559 Graduate Recital. 2 hours. Required of candidates for the Master of Music Degree.	406G Composition. 3 hours. Prerequisite: Consent of the instructor.	443G Band. .5 hours.
599 Thesis Research and Writing. 6 hours.	407G Orchestration and Band Arranging. 3 hours. Prerequisite: Theory IV.	444G Orchestra. .5 hours.
599c Maintaining Matriculation. 1 to 6 hours.	415G Choral Methods. 3 hours.	445G Madrigal Singers. .5 hours.
The following 400-level courses may be taken for graduate credit	416G Instrumental Methods. 3 hours.	449G Chamber Music. .5 hours.
402G Counterpoint I. 2 to 3 hours.	430G Music Literature. 2 to 3 hours. A survey embracing music of several periods, styles, and forms.	450G, 451G Applied Music Secondary. 1 hour.
	432G Research Techniques in Music. 3 hours.	453G, 454G Applied Music Principal. 2-3 hours.
		471G Jazz Ensemble. .5 hours.

DEPARTMENT OF PHILOSOPHY AND RELIGION

CHERRY HALL
ROOM 300 (502) 745-3136

Ronald H. Nash, Head

Graduate Faculty

Professors: W. Lane, R. Mounce, R. Nash, R. Veenker

Associate Professors: M. Howe, D. Tuck, A. Vos

Assistant Professors: R. Johnston, L. Mayhew,

B. Roberts, E. Schoen, J. Spiceland

Degree Offered: Master of Arts in Humanities (an inter-departmental program).

The Department of Philosophy and Religion administers the graduate program in humanities. In addition graduate courses in philosophy and religion give significant support to graduate programs in other areas.

The graduate program in humanities is designed to provide the student with a broad background in the intellectual and cultural achievements of Western civilization. It involves a serious attempt to develop a creative synthesis

of those contributions which flow from the study of history, literature, philosophy, religion, and the fine arts. It traces the adventure of the human spirit across the disciplines with the intention of nurturing in the student an increased awareness of the interrelatedness of all knowledge.

At least 18 of the required 30 hours must be in courses numbered 500-level or above. The student's program must include one course each from history, philosophy, and literature (which includes religious literature), as well as a basic methodology course in interdisciplinary study (Humanities Seminar). Each student will also take 598 — Humanities Essay (3 hours) or 599 — Thesis Research and Writing (6 hours) plus a final written examination. The student must also demonstrate reading ability in either French, German, or Greek.

Options available within the core course sequence of this program include:

(1) A concentration in the history of ideas of a particular cultural epoch. The goal here is one of breadth of material and approach. The student electing this option will select one of three periods of Western civilization for the area of specialization: Ancient and Medieval; Renaissance through Enlightenment; Nineteenth and Twentieth Centuries. Twenty-one of the student's thirty hours including thesis or essay are to be taken in the period of specialization. The research for the essay or thesis must also be in this period and must demonstrate a knowledge of the unifying relationships which exist between the various disciplines in the humanities.

(2) A specialization in philosophy or religious studies. This option permits a concentration in the more traditional disciplines of philosophy and religion while permitting a broad background in supporting disciplines.

Graduate Courses in Philosophy

500 Humanities Seminar. 3 hours. Problems in and approaches to interdisciplinary study.

501 Readings in Philosophy. 3 hours. Philosophic classics or readings in a selected area of philosophy. May be repeated with different topics.

502 Seminar in Ancient and Medieval Philosophy. 3 hours. Topics in ancient and medieval philosophy. May be repeated with different topics.

503 Seminar in Modern Philosophy. 3 hours. Philosophers or topics in modern philosophy. May be repeated with different topics.

504 Seminar in Contemporary Philosophy. 3 hours. Philosophers or topics in contemporary philosophy. May be repeated with different topics.

598 Humanities Essay. 3 hours.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

The following 400-level Philosophy courses may be taken for graduate credit.

400G Contemporary Philosophy. 3 hours.

401G Readings in Philosophy. 3 hours.

405G Existentialism. 3 hours.

420G Philosophy of History. 3 hours.

425G Twentieth Century British Philosophy. 3 hours.

432G Early Political Philosophy. 3 hours.

433G Modern Political Philosophy. 3 hours.

440G Metaphysics and Epistemology. 3 hours.

499G Research in Philosophy. 3 hours.

510 Seminar in Religious Literature. 3 hours. Selected literature from one major religious tradition. May be repeated with different topic.

520 Seminar in Religious History. 3 hours. Significant topics, movements, or events in the development of one major religious tradition. May be repeated with different topic.

530 Seminar in Religious Thought. 3 hours. Selected topics or thinkers from one major religious tradition. May be repeated with different topic.

The following 400-level Religion courses may be taken for graduate credit

400G Contemporary Religious Thought. 3 hours.

401G Religion Seminar. 3 hours.

405G Current Issues in New Testament Studies. 3 hours.

415G Old Testament Themes. 3 hours.

420G The Age of the Apostles. 3 hours.

430G Christianity to 1517. 3 hours. Development of Christian thought and institutions prior to the Reformation.

431G Christianity from 1517 to the Present. 3 hours. Development of Christian thought and institutions from the Reformation to the present.

440G Judaism. 3 hours.

445G The Religious Traditions of Israel. 3 hours.

455G The Hindu Religious Tradition. 3 hours.

460G The Religion of Primitive Peoples. 3 hours.

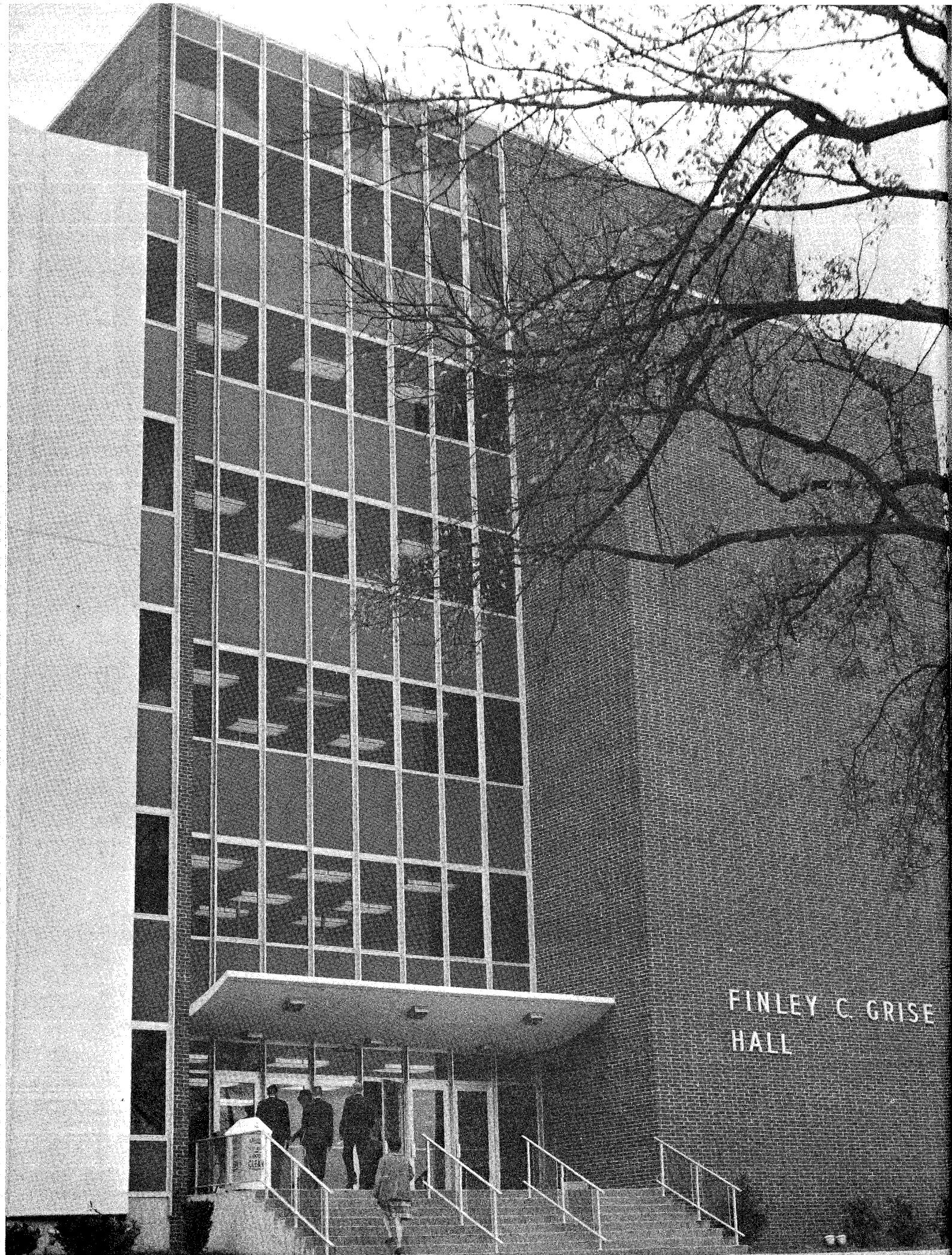
465G The Buddhist Religious Tradition. 3 hours.

499G Research in Religion. 3 hours.

Graduate Courses in Religion

501 Graduate Seminar in Religious Studies. 3 hours. Specific issues in one of the areas of concentration. May be repeated for different topics.





COLLEGE OF BUSINESS AND PUBLIC AFFAIRS

DEPARTMENTS

Accounting
Business Administration
Business Education and Office Administration
Economics
Government
Public Service Institute
Sociology and Anthropology

DEGREES OFFERED

Master of Arts (Economics, Government, Sociology)
Master of Business Administration
Master of Public Service
(Public Administration, Regional Planning)

Majors and Minors Offered Under the Master of Arts in Education Degree

Business Education and Office Administration
Economics
Government
Social Science Area (major only)
Sociology (minor only)

DEPARTMENT OF ACCOUNTING

GRISE HALL
ROOM 402 (502) 745-3895

Charles T. Hays, Head

Graduate Courses in Accounting

518 **Investigations in Accounting.** 3 hours. Primarily for secondary education teachers of bookkeeping. Includes updating of terminology and practice in accounting.

560 **Controllership.** 3 hours. Control function in corporate enterprise; accounting and financial control concepts and techniques; control measures for production and marketing decisions; risk and uncertainty in the decision-making process.

The following 400-level courses may be taken for graduate credit

400G **Partnership and Fund Accounting.** 3 hours. Prerequisite: Acct 300. Problems in accounting for partnerships; specialized techniques and concepts of accounting for governmental and institutional organizations.

401G **Consolidated Statements and Related Topics.** 3 hours. Prerequisite: Acct 302. Problems involved in the preparation of consolidated financial statements. Also covers other specialized areas of accounting.

402G **Contemporary Accounting Issues.** 3 hours. Prerequisite: Acct 302. Contemporary problems in financial accounting with emphasis on pronouncements of various organizations concerned with the development of accounting principles and practices.

410G **Accounting for Decision-making and Control.** 3 hours. Prerequisite: Acct 200. Accounting information as an aid to decision-making and control with emphasis on the internal use of accounting data. Primarily for students in the MBA program.

431G **Federal Tax Accounting II.** 3 hours. Prerequisite: Acct 430. The Federal income tax structure as it applies to partnerships and corporations. Also covers other specialized areas of federal taxation. Emphasizes the use of tax services in researching tax problems.

450G **Auditing Theory and Application.** 3 hours. Prerequisite: Acct 302. Emphasizes the work of public accountants. Topics include auditing standards, professional ethics, legal liabilities, auditing objectives and procedures, etc.

DEPARTMENT OF BUSINESS ADMINISTRATION

GRISE HALL
ROOM 200 (502) 745-5408

Graduate Faculty

Professors: S. Ahmed, E. Evans, J. Herrick, R. Nelson
Associate Professors: L. Finley, H. Fletcher, J. Withey
Assistant Professor: P. VanAuken

Degree Offered: Master of Business Administration.

The program is designed to provide professional education for successful careers at the higher levels of business enterprise. It is general in approach and emphasizes the relevance of economics, statistics, organizational theory, behavioral science, finance, marketing, and quantitative decision-making techniques.

Admission to the program requires the approval of the Graduate College and the Master of Business Administration Admissions Committee. The Admissions Committee applies the minimum requirements as recommended by the American Assembly of Collegiate Schools of Business.

Graduate Faculty

Professor: C. Hays
Associate Professor: J. Hall

Accounting is an integral part of the Master of Business Administration curriculum. In addition, graduate courses in accounting give significant support to other graduate programs.

These requirements are as follows: (1) Graduate Management Admissions Test (GMAT) score of 450 or above and overall grade point average of 2.5(4.0)

or

(2) GMAT score of 450 or above and junior-senior grade point average of 2.75(4.0) or above

or

(3) a total of at least 950 points based on the formula: 200 x undergraduate g.p.a. + GMAT score

or

(4) a total of at least 1000 points based on the formula: 200 x junior-senior g.p.a. + GMAT score.

GMAT registration forms and information bulletins can be obtained by contacting the Graduate College, the Department of Business Administration, or by writing to Educational Testing Service, Princeton, New Jersey 08540.

The Master of Business Administration program is flexible to the extent that both business and non-business undergraduate degree holders can pursue the degree through individually tailored curricula.

The student having an undergraduate degree in business must demonstrate competence in advanced statistics and financial statement analysis or take Economics 306 (Statistical Analysis) and/or an advanced accounting course specified by the advisor as preparation for the graduate core work. If the undergraduate transcript indicates deficiencies in one or more functional areas of business administration, the department advisor may require that the student take undergraduate foundation courses. In addition to the preparatory work, 30 semester hours of

approved graduate work, consisting of 27 hours of core courses and 3 hours of electives, are required.

The student holding a non-business undergraduate degree is required to build a foundation of business academic expertise at the undergraduate level before advancing to graduate level coursework. The number of foundation courses is flexible and is determined for each student on an individual basis. The student's academic background and business experience are considered when the foundation requirements are chosen. In addition to the foundation work, the student holding a non-business undergraduate degree is required to complete 30 semester hours of approved graduate coursework consisting of 27 hours of core courses and 3 hours of electives.

All candidates for the Master of Business Administration degree must demonstrate proficiency in mathematics through calculus or take one or more of the following courses: Mathematics 100, 116 and 119. The exact sequence of required mathematics courses will be determined for each candidate by the MBA advisor with consideration given to the candidate's background.

In the final semester of coursework all candidates for the degree must pass a comprehensive examination covering the graduate core work. Students must maintain a minimum grade point average of 3.0 in all courses while pursuing the degree.

The Master of Business Administration graduate core consists of the following courses:

- Acct 410G Accounting for Decision Making and Control
- Bus Ad 500 Business, Government, and Law
- Bus Ad 503 International Business
- Bus Ad 510 Organization Theory
- Bus Ad 511 Advanced Management Science
- Bus Ad 520 Advanced Marketing
- Bus Ad 530 Finance and Valuation of Corporations
- Econ 520 Advanced Microeconomic Theory
- Econ 525 Advanced Macroeconomic Theory

Graduate Courses in Business Administration

- 500 **Business, Government, and Law.** 3 hours. Development, implementation, and impact of major public policies toward business, including antitrust, public utility regulation, consumer protection, conservation and environmental control.
- 503 **International Business.** 3 hours. Institutions, organizations, and procedures of international business with emphasis on problems and decision making techniques.
- 510 **Organization Theory.** 3 hours. Analytical concepts and models derived from the classical, behavioral, decision-making, and systems approaches to the study of administrative organization.
- 511 **Advanced Management Science.** 3 hours. Linear programming and simplex. Applications of linear programming, dynamic programming, queueing theory, inventory theory, and simulation.
- 520 **Advanced Marketing.** 3 hours. Marketing principles, institutions, policies, and operations. The quantitative and behavioral sciences as related to the theory, philosophy, and operation of integrated marketing systems.
- 530 **Finance and Valuation of Corporations.** 3 hours. Financing policies of corporate entities with emphasis on planning the capital structure, measuring and controlling the costs of alternate sources of funds, dividend policy, capital budgeting, and growth through mergers and acquisitions.

DEPARTMENT OF BUSINESS EDUCATION AND OFFICE ADMINISTRATION

GRISE HALL
ROOM 500 (502) 745-3097

Hollie W. Sharpe, Head

Graduate Faculty

Professors: J. Harrington, P. Keck, C. Ray, W. Savage,

H. Sharpe

Associate Professor: K. Utley

Assistant Professor: T. Madron

Degree Offered: Master of Arts in Education (Business Education and Office Administration major or minor).

This program broadens the skills and understandings of business teacher education through the application of research findings to business teaching.

The Department of Business Education and Office Administration requires a minimum of 18 or a maximum of 21 hours for a major. A minimum of 12 or a maximum of 15 hours is required for a minor. The remaining courses will be taken in professional education.

Graduate Courses in Business Education and Office Administration

525 Modern Stenographic Techniques.

3 hours.

Touch shorthand theory. Also includes teaching methods and development of the basic speed on the Stenograph.

530 Modern Data Processing.

3 hours. Electronic data processing, its hardware, languages, and applications.

535 Survey of Distribution.

3 hours. Business activities involved in moving goods from production to consumption, with emphasis on the role of marketing in the American economy.

540W Consumer Financial Problems.

3 hours.

Eight basic elements of money management and the relationship of these elements to family units and corporate citizenship.

544 Current Problems in Business Education.

2 to 6 hours.

Current problems and significant research in business education. Also offered as independent study or workshop.

545 Principles of Business Education.

3 hours.

Principles, practices, problems, and philosophy in business education. Includes standards, guidance, curricula, and supervision at all educational levels.

550 Contemporary Office Administration Problems.

3 hours. Prerequisite: BE 462 or permission of instructor.

Basic problems in office administration. Individual and group analysis and presentation of case problems and current literature. Problems areas include: systems analysis and design, procedures and methods, cost control, personnel, environmental factors, and automation.

575 Administration and Supervision in Business Education.

3 hours. Roles and functions of administration and supervision in business education at all educational levels. Includes vocational education laws and their relationship to business education.

461G Report Writing.

3 hours.

Defining the problem, collecting and organizing information, constructing and presenting the report.

462G Office Management.

3 hours. Fundamentals of management in the administrative services area. Coordination of services and personnel.

463G Records Management.

3 hours. Systems for the retrieval and retention of information. Procedures for the creation, classification, retention, and disposition of written records.

471G Internship in Business and Office Education.

3 hours.

Seminars supplemented by on-the-job experience.

481G Advanced Business Communications.

3 hours.

Communication theory and office management situations. Emphasizes written and oral communication in the administrative process.

495G Independent Study in Data Processing.

1 to 3 hours.

May be repeated.

The following 400-level courses may be taken for graduate credit

DEPARTMENT OF ECONOMICS

GRISE HALL

ROOM 431 (502) 745-2249

Kenneth Cann, Head

Graduate Faculty

Professors: K. Cann, S. Lile, J. Wassom

Associate Professors: C. Fost, R. Pulsinelli, C. Van Eaton

Assistant Professors: W. Davis, M. Morgan

Degrees Offered: Master of Arts in Economics, Master of Arts in Education (Economics major or minor), Master of Public Service (Regional Development option).

Master of Arts in Economics

This program is designed to prepare students for further graduate work leading to the Ph.D. degree, for teaching at the junior college level, or for employment in business or government.

The applicant must have completed at least 21 semester hours, or equivalent, in undergraduate courses in economics with a 2.7 grade point average. Students having less than a 2.7 average may be admitted on a probationary basis upon recommendation of the Department of Economics. The applicant is expected to have completed six

semester hours in intermediate economic theory (microeconomics and macroeconomics) and three hours in elementary statistics, and must have an appropriate background in mathematics or quantitative skills. Deficiencies in undergraduate preparation may be removed by satisfactorily completing the appropriate courses during the first semester(s) after admission.

Foreign students must demonstrate the ability to use English and must submit an acceptable score on the Test of English as a Foreign Language (TOEFL).

Both Plan A (thesis) and Plan B (non-thesis) are available. The research tool may be met by (1) demonstrating reading proficiency in a foreign language or (2) completing Econ 464G or 465G. Students pursuing Plan B may select six additional hours from economics, mathematics, computer science, or business administration, upon consultation with the graduate advisor.

All students are required to complete a nine-hour core consisting of Economics 520, 525, and either 464G or 465G. The remaining 15 to 21 hours of coursework may be selected from the list of economics courses approved for graduate credit. No more than six hours of 400-level courses, excluding Economics 464G and 465G, may be taken; no more than six hours may be taken in areas other than economics.

A final written or oral examination, covering major areas of study and/or the thesis, is required.

Master of Arts in Education (Economics major or minor)

This program provides graduate work in economics within the program designed for the public school teacher. The student following it must meet all requirements for standard high school certification. The major requires 18 to 21 hours in economics. The minor requires

12 to 15 hours in economics. The remaining hours of coursework will be taken in professional education.

Master of Public Service (Regional Development option)

This option of the Master of Public Service, an interdisciplinary degree program, is designed to prepare students for employment with governmental agencies at local, state, and federal level; public utility companies; area development districts; industrial development corporations; and other public and private organizations dealing with the development of geographic, economic, and political regions. The Regional Development option provides students with special skills and tools of analysis in the area of regional and urban economics. Both Plan A (thesis) and Plan B (non-thesis) are available.

Applicants must have completed courses in the disciplines involved in this degree program with at least a 2.5 grade point average. Prior preparation in economics (at least two courses in principles of economics and one course in statistics at the undergraduate level) is required. A mature student with deficient undergraduate preparation in the disciplines represented may be admitted to the program provided he or she removes the deficiencies by taking appropriate courses during the first semester after admission.

Graduate Courses in Economics

		All candidates for the Master of Public Service degree (regardless of the option chosen) are required to complete a core area of nine to twelve hours including PSI 540 — Public Administration (required of all).
		The remaining hours of the core may be selected from the following courses:
		Econ 550 Public Sector Economics Geog 580 Problems in Urban Geography Govt 511 Seminar in State and Local Government Soc 565 Studies in the Community Psy 551 Social Psychology of Organizations
		In addition to the core requirements, M.P.S. students in the Regional Development option must complete Economics 475G (Urban and Regional Development) and Economics 540 (Land Economics) and three of the following:
		Econ 410G Economics of Government Expenditures Econ 470G Economic Growth and Development Econ 520 Advanced Microeconomic Theory Econ 525 Advanced Macroeconomic Theory Econ 570 Economics Development Econ 598 Directed Studies
		The remainder of the required 30 hour minimum is planned, in consultation with the advisor, from appropriate courses in the areas of economics, geography, and business administration.
501	Survey of Public Finance Theory. 3 hours. Prerequisite: Econ 310. Theoretical aspects of government finance and its influence on public and private decision making.	540 Land Economics. 3 hours. Prerequisite: Consent of instructor. Topics in land use, values, and natural resources.
502	Seminar in Economic History. 3 hours. Prerequisite: Consent of instructor. Topics and research in United States and European economic history.	550 Public Sector Economics. 3 hours. Prerequisite: Consent of instructor. Considers problems in government finance, budgeting, fiscal relations, and revenue sharing. Primarily for Master of Public Service Students.
503W	Economics for Teachers. 3 hours. Basic economic concepts and topics dealing with the functioning of a market oriented economic system and the U.S. economy.	560 Seminar in Economic Theory. 3 hours. Prerequisites: Econ 520 and 525. Intensive study of selected topics in theory.
520	Advanced Microeconomic Theory. 3 hours. Prerequisite: Econ 302 or consent of instructor. Topics in the theory of consumer behavior, prices, markets, production, distribution, and welfare.	570 Economic Development. 3 hours. Prerequisite: Econ 470 or consent of instructor. Considers the development problems of the less developed countries.
525	Advanced Macroeconomic Theory. 3 hours. Prerequisites: Econ 303 or consent of instructor. Topics in the theory of consumption, saving, investment, interest, money, and employment.	575 Advanced International Economics. 3 hours. Prerequisites: Econ 302 and 380 or consent of instructor. Considers trade theory, tariffs, balance of payments, and capital transfers.
530	Monetary Theory. 3 hours. Prerequisite: Econ 300 or 450. Classical, neoclassical, Keynesian, and modern quantity theory of money and monetary policy.	597 Economic Research and Report Writing. 3 hours. Prerequisite: Consent of instructor. Techniques of data collection, research, and formal writing on selected topics.
		598 Directed Studies. 3 hours. Prerequisite: Consent of instructor. Intensive study of selected topics in economics.
		599 Thesis Research and Writing. 6 hours.
		599c Maintaining Matriculation. 1 to 6 hours.

The following 400-level courses may be taken for graduate credit

410G	Economics of Government Expenditures. 3 hours. Prerequisites: Econ 206 and 302. Topics in government spending policy and effects on the economy.
414G	Managerial Economics. 3 hours. Prerequisites: Econ 206 and 302. Application of economic principles and analysis to business management decision-making in areas of demand, pricing, cost, production, and investment.
430G	Comparative Economic Organization. 3 hours. Prerequisites: Econ 302 and 303 or consent of instructor. Analysis of different world economic systems.
440G	American Industry: Structure, Performance, and Policy. 3 hours. Prerequisites: Econ 302 and 303 or consent of instructor. Economic analysis of the behavior of business firms in a market economy.
450G	Central Banking Theory and Monetary Policy. 3 hours. Prerequisites: Econ 300 and 303. Applied monetary theory and policy.
460G	Business and Economic Fluctuations. 3 hours. Prerequisites: Econ 302 and 303. Study of business cycles and economic forecasting.
464G	Introduction to Mathematical Economics. 3 hours.

Prerequisites: Econ 302 and 303.
Application of mathematics to economic theory.

465G Introduction to Econometrics.

3 hours.
Prerequisites: Econ 306 or consent of instructor.
Advanced topics in statistical measurement.

470G Economic Growth and Development.

3 hours.

Prerequisites: Econ 302 and 303.
Analysis of growth and development theory and practices in the modern world.

475G Urban and Regional Economics.

3 hours.
Prerequisites: Econ 202, 203, and 206, or consent of instructor.
Analysis of regional economic relationships, income, and employment.

490G Economic Thought to 1870.

3 hours.

Prerequisites: Econ. 202 and 203.
The origin and development of economic thought through Marx emphasizing the contribution of political economy to the behavioral sciences.

491G Economic Thought Since 1870.

3 hours.
Prerequisites: Econ. 202 and 203.
The further development of economic thought from the marginalists to the present.

DEPARTMENT OF GOVERNMENT

GRISE HALL

ROOM 300 (502) 745-4558

George S. Masannat, Head

Graduate Faculty

Professors: F. Carroll, C. Chelf, R. Cravens, W. Jenkins, E. Kearney, T. Madron, G. Masannat, F. Neuber, H. Thomason

Associate Professors: G. Bluhm, J. Parker, J. Petersen

Assistant Professor: J. Sloan

tinued graduate work at the doctoral level, for positions in junior college or university teaching, or for careers in professions such as journalism, public service, and politics.

To be eligible for admission, the applicant should have a B average in the major undergraduate field and/or all undergraduate courses in government. Letters of recommendation are also required.

Under Plan A (thesis), a minimum of 24 hours of acceptable coursework and a thesis, carrying six hours of credit, are required. Under Plan B (non-thesis), a minimum of 30 hours of acceptable coursework must be completed. The research tool requirement may be met by (1) demonstrating reading ability in a foreign language appropriate to the major area or (2) demonstrating competency in appropriate research techniques.

A final examination over courses, thesis, and related materials must be passed.

Master of Arts in Education (Government major or minor)

Since this program is designed for the public school teacher, candidates must meet all requirements for the standard high school certificate. For a major the student must complete 18 to 21 hours in government; for a minor the student must complete 12 to 15 hours in government. The remaining hours will be taken in professional education.

Master of Arts in Government

This program is designed to prepare students for con-

Graduate Courses in Government

510 Problems in National Government.

3 hours.
Research, reports, and discussion of selected aspects of national government.

511 Seminar in State and Local U.S. Government. 3 hours.

Selected problems at all levels of U.S. Government.

520 Seminar in Public Law. 3 hours.

Exposition, discussion, and analysis of concepts and issues in jurisprudence, and/or in administrative, constitutional, and international law.

530 Seminar in Political Theory. 3 hours.

Analysis of selected topics in political theory.

550 Seminar in International Relations.

3 hours.
Individual and group study of theories and practical applications of international relations.

560 Seminar in Comparative Government.

3 hours.
Study and research in the areas of democratic and totalitarian governments.

580 Directed Study. 3 hours.

Faculty guidance of student research in one or more selected fields of political science.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

The following 400-level courses may be taken for graduate credit

401G Methods of Political Inquiry. 3 hours.

Prerequisite: Govt 201 or equivalent.
Analysis and description of the logic and procedures necessary for valid political inquiry.

403G Field Studies in Politics.

1 to 4 hours.
Practical problems of political research.
Students will be directed through the design and execution of a major field study.

410G Seminar in National Government.

3 hours.
Prerequisite: Govt 110 or permission of the instructor.
Research, reports, and discussion of selected aspects of national government.

411G Seminar In State Government.

3 hours.

Prerequisite: Govt 110, 210 or permission of the instructor.

Research, reports, and discussion of selected aspects of state government.

417G Urban Political Systems. 3 hours.

Contemporary American urban political systems; socioeconomic values in the urban political culture and how they relate to political structures and activities.

431G Normative and Empirically-Related Theory. 3 hours.

Prerequisite: One political theory or philosophy course or permission of the instructor.

Structure and function of normative theories and of empirically-related theories and their role in the study of politics.

432G Early Political Theory. 3 hours.

Prerequisite: Permission of the instructor. Political ideas in the West from Plato through Thomas Aquinas.

433G Modern Political Theory. 3 hours.

Prerequisite: Govt 432 or permission of the instructor.

Political ideas in the West from Machiavelli to present-day theorists.

434G Contemporary Political Theory.

3 hours.

Prerequisite: Govt 432 or 433 or permission of the instructor.

Selected aspects of contemporary political thought.

435G American Political Theory. 3 hours.

American political theory from puritanism to present.

450G International Relation of the Middle East. 3 hours.

Relations among states in the area, with international organizations, and with the Soviet and Western blocs.

461G Government and Politics of the U.S.S.R.

3 hours.

The rise, sources and nature of communist ideology, Soviet political institutions, and functions of the Communist Party of the Soviet Union.

462G Latin American Governments and Politics. 3 hours.

Basic governmental and political processes in Latin America. Emphasis on social and economic problems, political development, leadership recruitment, political instability and change.

463G Politics of the Developing Nations.

3 hours.

Political culture, processes and problems of nations independent since World War II.

465G Middle Eastern Governments and Politics.

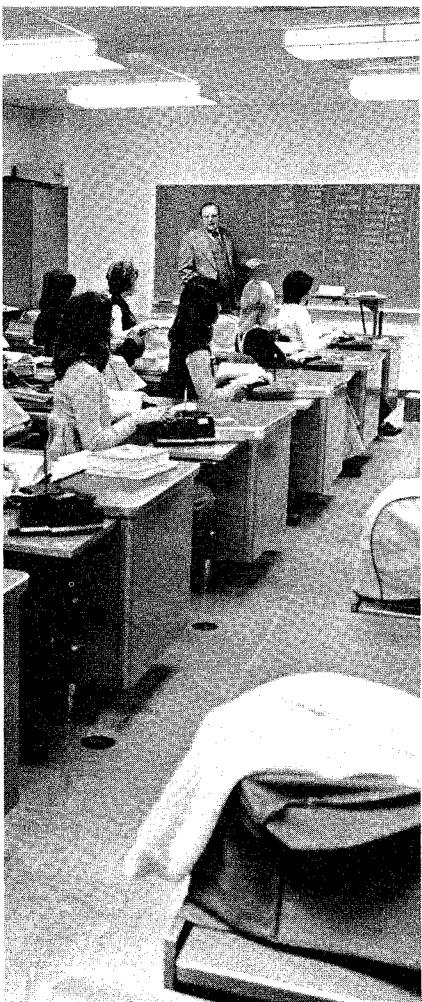
3 hours.

Governmental and political processes of the Middle East, with emphasis on Iran, Israel, Turkey and the United Arab Republic.

466G Far Eastern Governments and Politics.

3 hours.

Political traditions, structures and processes of major governments in the Far East.

LEGAL AREA STUDIES**GRISE HALL**
ROOM 332 (502) 745-5230**Associate Professor: W. Bivin****Legal Area Studies** does not offer a graduate program, but graduate students in some programs may select coursework from the limited offering in this area.**Courses which may be taken for graduate credit**

405G Legal Research and Writing. 3 hours. Teaches the student how to find the law; the nature of law as it affects law books and their use; the aim of research and the recognition of what is authority; the role of stare decisis in law; and the characteristics of law books.

406G Court Procedures and Practices. 3 hours. Provides students with a knowledge of court procedures and practices in both criminal and civil cases.

410G The Law of Labor-Management Relations. 3 hours. Includes organizational activities, elections, negotiation and administration of

contracts, collective bargaining, arbitration, National Labor Relations Board proceedings, and court proceedings.

413G Court Management. 3 hours.

Provides background in concepts of basic court management and judicial administration.

423G Jurisprudence. 3 hours.

The nature of law; origins, evolutions and characteristics of the common and Roman law systems; principal schools of legal theory; and the arrangement, methods and processes of the law.

424G Administrative Law. 3 hours.

Prerequisite: Permission of instructor. The development of and trends in administrative law with emphasis on problems caused by the exercise of quasi-legislative and quasi-judicial powers by administrative agencies.

PUBLIC SERVICE INSTITUTE (PSI)

GRISE HALL
ROOM 333 (502) 745-5230

Vernon Martin, Director

Graduate Faculty:

Professors: V. Martin, J. Uveges

Degree Offered: Master of Public Service (Administration option).

The Master of Public Service (MPS), an interdisciplinary program, is designed to prepare individuals for employment in governmental or quasi-governmental organizations requiring broad administrative knowledge as well as more specialized academic and practical training. The program requires the completion of a core curriculum consisting of courses from several departments and provides for career specialization within the different option areas. No thesis is required.

Students planning to enter the administration option must seek admission before completing more than 12 hours of graduate credit. In addition to meeting Graduate College admission requirements, the applicant must submit two letters of recommendation to the Director of the Public Service Institute.

Two choices are offered within the administration option: (1) general administration and (2) urban administration. Students pursuing either choice must complete PSI 540 and six to nine hours selected from the following core courses:

Geo 580 — Problems in Urban Geography
Govt 511 — Seminar in State and Local Government
Econ 550 — Public Sector Economics
Soc 565 — Studies in the Community
Psy 551 — Social Psychology of Organizations

Graduate Courses in PSI

540 Seminar in Public Administration.

3 hours.

Analysis of behavior and problems of public organizations in democratic environments. Links societal values to administrative structure and behavior.

550 Seminar in Public Policy Analysis.

3 hours.

Theoretical approaches to the analysis of public policy, policy-making, and policy implementation and to such topics as health and welfare, poverty, education, and urban affairs.

555 Seminar in Urban and Regional Public Policy.

3 hours.
Current approaches to urban and regional public policy. Detailed treatment of selected problems and related policy choices facing decision makers.

580 **Directed Study in Policy and Administration.** 3 hours.
Directed research and study of selected field(s) of policy and administration.

The following 400-level courses may be taken for graduate credit

405G **Theory and Method of Administrative Research.** 3 hours.
Focuses on the ability to read and comprehend administrative research as well as the skills needed for selecting, designing, and carrying out such research.

430G **Governmental Financial Accounting.** 3 hours.
Budgeting and accounting processes of

local government. Also includes state and federal grant and revenue-sharing programs.

440G **Essentials of Public Administration.** 3 hours.
Focus on public administration theory and application in open and closed political systems. Personnel and financial management examined under changing systems of public control.

441G **Public Personnel Administration.** 3 hours.
The development of modern personnel systems in the public sector. Emphasizes contemporary trends at the state, local, and national level of government.

450G **Elements of Policy Analysis and Evaluation.** 3 hours.
Covers theoretical approaches to policy analysis as well as theories and models of policy evaluation.

The **general administration** program is designed to provide the student with extensive knowledge of administrative procedures, especially those concerned with personnel, public policy formation and implementation, and administrative behavior. In addition to the core requirement, the student is required to complete 18 to 21 hours selected from the following courses:

Govt 403G — Field Studies in Politics
Govt 410G — Seminar in National Government
Govt 411G — Seminar in State and Local Government
PSI 440G — Public Administration
PSI 441G — Public Personnel Administration
Govt 510 — Seminar in National Government
Bus Ad 500 — Business, Government and Law
Bus Ad 510 — Organization Theory
Bus Ad 511 — Management Science I
Bus Ad 512 — Management Science II
Geo 484G — Planning: Theory and Application
Soc 575 — Complex Organizations
LAS 424G — Administrative Law
Govt 580 — Directed Studies
PSI 550 — Public Policy Analysis
PSI 430G — Governmental Financial Accounting

The **urban administration** program is designed to provide the student with knowledge of administrative procedures and practices, especially those dealing with planning, intergovernmental relations, and administrative behavior in urban settings. In addition to the core requirements, the student is required to complete 18 to 21 hours selected from the following courses (student is responsible for meeting any course prerequisites):

Govt 403G — Field Studies in Politics
Govt 410G — Seminar in National Government
Govt 411G — Seminar in State and Local Government
PSI 440G — Public Administration
Govt 417G — Urban Political Systems
Bus Ad 510 — Organization Theory
Soc 410G — Urban Sociology
Soc 575 — Complex Organization
Govt 580 — Directed Studies
PSI 550 — Public Policy Analysis
PSI 430G — Governmental Financial Accounting
Geog 484G — Planning: Theory and Application

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY

GRISE HALL
ROOM 101 (502) 745-3759

H. Kirk Dansereau, Head

Graduate Faculty

Professors: F. Baali, K. Dansereau,
E. DiBella (Emeritus), J. Wittman (Emeritus),
R. Yokley
Associate Professors: L. Beck, E. Bohlander, T. Dunn,
J. Faine, J. Grimm, K. Kalab, J. Krenzen, J. Schock,
P. Toups, P. Wozniak
Assistant Professors: Z. Ahmad, J. Miller

Degrees Offered: Master of Arts in Sociology, Master of Arts in Education (Sociology minor), Master of Arts in Education (Social Science Area major composed partially of Sociology courses).

Master of Arts in Sociology

This program is designed to provide a sound methodological and theoretical foundation for students who contemplate pursuing graduate studies beyond the master's level, to give a thorough preparation for those students who seek teaching positions at the college level, and also to transmit the basic sociological knowledge to those students who elect to pursue careers in industry or governmental service.

In addition to general Graduate College requirements, the student should have a B average for all undergraduate work in sociology. Promising students with limited grade or course deficiencies may be considered for admission to the program upon completion of an approved program of study for the removal of the deficiencies.

Persons admitted to the program should also have previously had a minimum of eighteen hours in sociology including the following courses or their equivalent:

Methods of Social Research, Social Statistics, History of Social Thought, and Contemporary Sociological Theory.

Graduate Courses in Sociology

505 Elements of Sociology. 3 hours.
Basic course for the nonsociology graduate student. The conceptual problem of interaction in terms of demography and ecology, culture and personality, and social structure and process.

520 Studies in Family Relations. 3 hours.
Prerequisite: Six hours of sociology or consent of instructor.
Analysis of the family institution; the impact of modern culture on the family.

530 Seminar in the Sociology of Deviant Behavior. 3 hours.
Prerequisite: Six hours of sociology or consent of instructor.
Types of deviant behavior with emphasis on criminality, delinquency, drug addiction, and alcoholism. Also covers current sociological theory and research in the field.

535 Seminar in Criminology. 3 hours.
Prerequisites: Six hours of sociology or permission of instructor.
Theories of crime causation and current research in the areas of criminology and corrections — methodological research considerations.

In circumstances where special competence has been developed through experiences other than traditional coursework or extensive coursework in related disciplines, the above departmental guidelines may be adjusted by approval of the department head in consultation with the Department Graduate Committee.

Both Plan A (thesis) and Plan B (non-thesis) are available. Students who anticipate future doctoral study are encouraged to pursue Plan A.

Under Plan A students will be required to complete 30 semester hours (including thesis), 18 of which must be taken at the 500 level within the Department of Sociology. Six hours of 400G level coursework may be taken in sociology or a related field. An oral examination over the master's thesis must be passed.

Under Plan B students will be required to complete 30 semester hours, 21 of which must be taken at the 500 level within the Department of Sociology. A maximum of 9 hours of 400G level coursework may be taken in sociology or a related field.

All candidates for the Master of Arts in Sociology (Plan A or B) are required to pass three written examinations covering material cited in the departmental Master's Reading List. All candidates must pass examinations in three of the following areas: Sociological Theory; Methods/Statistics; Sociology of Economic Life; Demography/Community; Social Psychology/Mass Communications; Deviant Behavior/Criminology; Social Structure/Institutions/Social Change.

The research tool requirement may be met by demonstrating either (1) reading proficiency in a foreign language appropriate to the major area or (2) mastery of appropriate research techniques.

Master of Arts in Education (Social Science Area major; Sociology minor)

This program provides graduate coursework in sociology and anthropology for the public school teacher, and the student pursuing it must meet all requirements for the standard high school certificate. The student desiring an emphasis in sociology is advised to follow the Social Science Area major, which allows 9 to 12 hours within the Department of Sociology and Anthropology and the remaining 6 to 9 hours in other social science departments. The student minoring in sociology may take a minimum of 12 hours or a maximum of 15 hours in the department. In both cases, the remaining hours are taken in professional education courses.

545 Seminar in Society, Personality, and Behavior. 3 hours.
Prerequisite: Six hours of sociology or consent of instructor.
Inter-personal relations in different situations and from various perspectives. Attitudes, norms, and values; crucial factors in motivation and the actor's definition of the situation.

564 Demography. 3 hours.
Prerequisite: Six hours of sociology or consent of instructor.
A review of the demographic processes such as mortality, fertility and migration, with emphasis on measurements, methods, and analytical techniques.

565 Studies in the Community. 3 hours.
Prerequisite: Six hours of sociology or consent of instructor.
Ecological and social concepts of the community and its structure and function.

566 Industry and Community. 3 hours.
Prerequisite: Six hours of sociology or consent of instructor.
The interaction of industry with its immediate environment; social structure of the workplace as an extension of community; the impact of industry on community organization.

570 Studies of Social Systems. 3 hours.
Prerequisite: Six hours of sociology or consent of instructor.
Use of organizational theory and its application to social systems.

572 Seminar in Social Change. 3 hours.
Prerequisite: Six hours of sociology or consent of instructor.
Various approaches to social change and social disorganization as treated by the major sociological theorists. Also covers the origin, nature, consequences, and future outcome of social change and disorganization.

575 Complex Organizations. 3 hours.
Prerequisite: Six hours of sociology or consent of instructor.
The goals, internal structure, and environmental relations of large organizations. Emphasizes the emergence of bureaucracies, competing theoretical frameworks for viewing organizations, and the analysis of organizational change.

580 Advanced General Sociology. 3 hours.
Prerequisite: Six hours of sociology and consent of instructor.
Examination of the various sub-disciplines of the field and the most important developments in each. Also includes recent research and theory in the various sub-fields.

590 Sociological Research Design and Analysis. 3 hours.
Prerequisite: Six hours of sociology and consent of instructor.
Covers concept definition, model building, and research design appropriate to problem and data. Includes a review of representative research studies to acquaint the sociology major with advanced social research methodology, techniques, and procedures.

595 Seminar in Sociological Theory. 3 hours.
Prerequisite: Six hours of sociology and consent of instructor.
Analysis of current sociological theories, including a survey of recent approaches to the construction and application of systematic theoretical models.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

635 Seminar in Family Theory and Analysis. 3 hours.
Prerequisite: Six hours of sociology or consent of instructor.
Analysis of the basic theoretical and conceptual frameworks used in past analytical studies of the family, as well as the use

of these frameworks for current and future analyses.

640 Seminar in the Sociology of Work. 3 hours.
Prerequisite: Six hours of sociology or consent of instructor.
The meaning of work and its social import in contemporary society, the integration of sociological theories of work, and the procedures used in the sociological analysis of work.

The following 400-level courses in Sociology may be taken for graduate credit

400G Juvenile Delinquency. 3 hours.
Prerequisite: Soc 365 or consent of instructor.
General conditions related to juvenile delinquency, including a critical examination of trends and methods of treatment. Field trips required.

410G Urban Sociology. 3 hours.
Prerequisite: Six hours of sociology or consent of instructor.
The impact of city life on social actions, social relationships, and social institutions. Emphasis on the rise and significance of cities in American life.

415G Sociology of Religion. 3 hours.
Prerequisite: Six hours of sociology or consent of instructor.
The various forms and content of religious organizations and movements and the behavioral and attitudinal concomitants of religious affiliation.

433G Correction and Confinement. 3 hours.
Prerequisite: Soc 365 or consent of instructor.
The structure and function of the correctional process and a specialized study of trends, legislation, experiments and accomplishments in correctional programs. Field trips required.

435G Probation and Parole. 3 hours.
Prerequisite: Soc 365 or consent of instructor.
Community treatment of convicted law violators as part of the correctional process, the role of probation and parole personnel, pre-sentence investigation and selection, supervision and release.

445G Industrial Sociology. 3 hours.
Prerequisite: Soc 346 or consent of instructor.
The factory as a social system, the interrelation of industry and the social order, selected problems of technological change, industrialization, and human relations in industry.

450G Occupations and Professions. 3 hours.
Prerequisite: Soc 346 or consent of instructor.
Occupation specialization and the nature of occupational organization. Examines a variety of occupations and professions to determine the place of work in the lives of their members.

465G Mass Society and Mass Communication. 3 hours.
Prerequisite: Soc 110, 395, or consent of instructor.
The relationship between the organization of mass society and its communication media; propaganda and other mass persuasion techniques related to the formation, alteration or maintenance of public opinion and mass values; emphasis on the impact of television on culture and social structure.

470G Sociology of Education. 3 hours.
Examines social conditions affecting education and those affected by education.

495G-496G Directed Study. 3 hours.
Prerequisite: Consent of the department head.
Individual research in a specific area of sociology in close cooperation with supervising faculty.

Graduate Courses in Anthropology

507 Elements of Anthropology. 3 hours.
Prerequisite: Graduate standing.
Basic course for the non-anthropology graduate student. Covers the concept and nature of culture, the materials and structure of culture, cultural dynamics, and cultural variation.

555 Seminar in Anthropological Theory. 3 hours.
Prerequisite: Consent of instructor.
History and development of anthropological thought to the end of the nineteenth century. Survey of contemporary anthropological thought, with special reference to the methods and theory of scientific anthropology.

570 Appalachian Folklore and Folk Life. 3 hours.
See: Intercultural and Folk Studies 570.

572 Applied Folklore. 3 hours.
See: Intercultural and Folk Studies 572.

577 Folklore Theories and Techniques. 3 hours.
See: Intercultural and Folk Studies 577.

578 Folklore Fieldwork and Oral History. 3 hours.
See: Intercultural and Folk Studies 578.

579 Directed Study and Research in Folklore. 3 hours.
See: Intercultural and Folk Studies 579.

The following 400-level courses in Anthropology may be taken for graduate credit

420G Fossil Man. 3 hours.
Detailed examination of the fossil evidence for the origins of man.

440G Cultural Anthropology. 3 hours.

Selected topics in ethnological theory and methods of analysis. Includes comparative and functional analysis of culture configuration and the historical development of theory in anthropology.

470G Archaeology of Kentucky. 3 hours.

Examination of the prehistoric cultures which inhabited Kentucky, with emphasis on diagnostic artifacts and representative sites.

485G Language in Culture. 3 hours.

Human language as it relates to other aspects of sociocultural behavior. Linguistics as a sub-field of anthropology.

491G-492G Field Course in Archaeology.

3 hours each.

Prerequisite: Anthro 151, 280, 330 or consent of the instructor.

Techniques used by archaeologists for the recovery, preservation and recording of information pertaining to man's past. Includes archaeological survey, site excavation mapping and recording techniques, and cataloging procedures.

495G-496G Directed Study. 3 hours.

Prerequisite: Consent of the instructor.

The following 400-level courses in Social Work may be taken for graduate credit

425G Problems in Social Welfare.

3 hours.

Prerequisite: SW 476 or 477.

Current problems in the field of social welfare, with emphasis on issues and problems in public welfare.

460G Social Action. 3 hours.

Prerequisite: Nine hours of social work or consent of instructor.

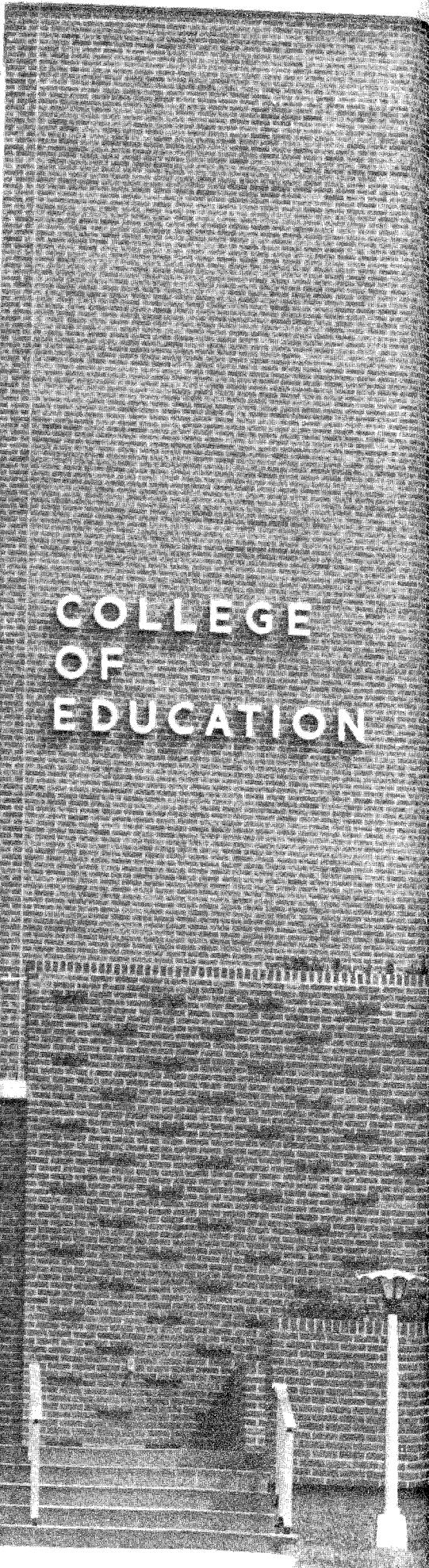
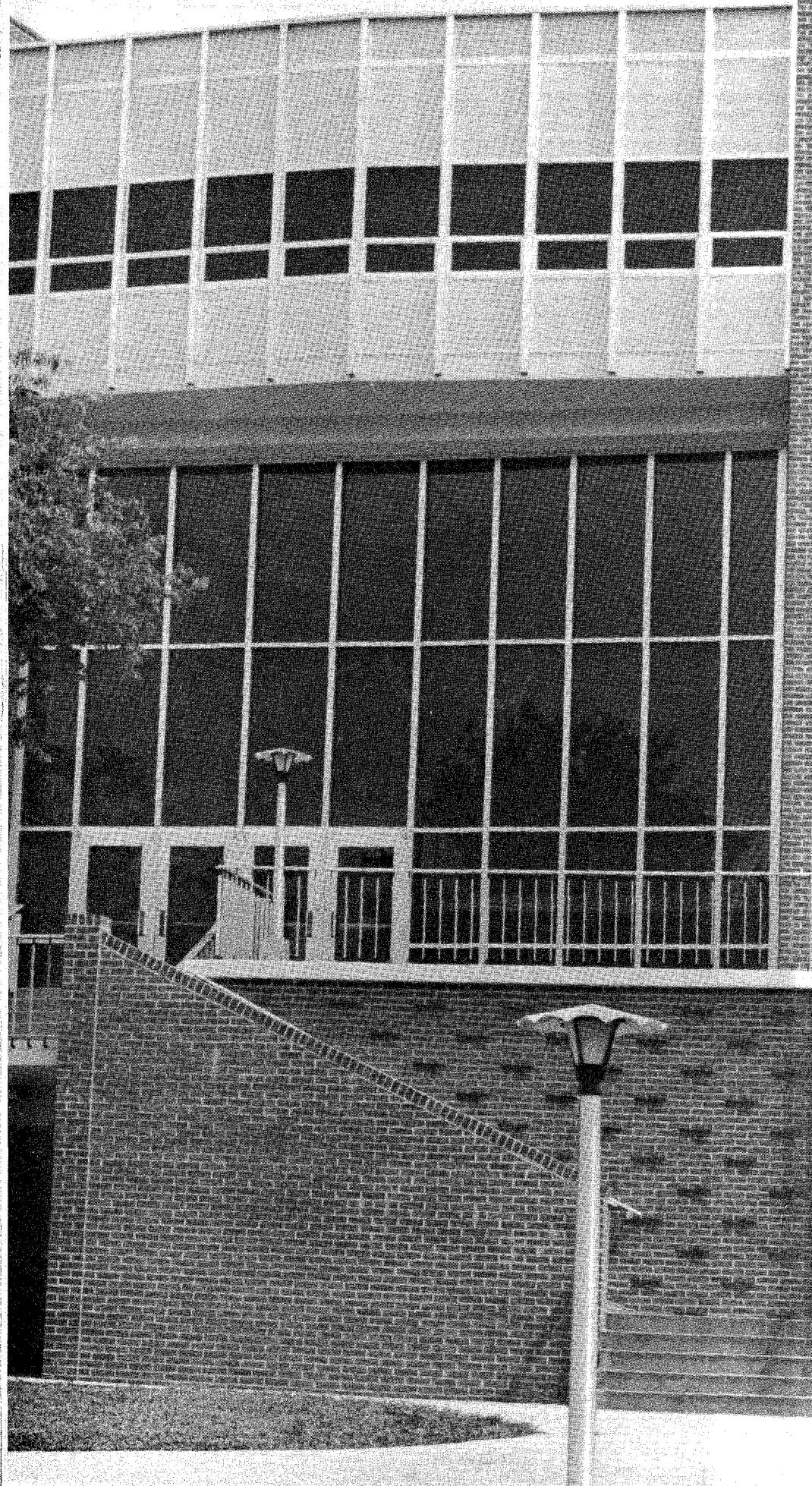
Use of concepts from the behavioral sciences in analyzing community structure and organization for the purpose of effecting change. Planned change theory in relation to defined social welfare needs.

475G Social Welfare Administration.

3 hours.

Prerequisite: SW 330 or consent of instructor.

Analysis of the process of administration as related to practice, with emphasis on the role of the worker in the processes by which groups and individuals meet community needs.



COLLEGE OF EDUCATION

DEPARTMENTS

Center for Career and Vocational Teacher Education
Educational Leadership
Industrial Education and Technology
Physical Education and Recreation
Psychology
Teacher Education

DEGREES OFFERED

Master of Arts in Education
Master of Arts (Psychology)
Master of Public Service (Counseling)
Master of Science (Physical Education, Recreation)
Specialist in Education

JOINT-DOCTORAL PROGRAM

(With the University of Kentucky)

Doctor of Education
Doctor of Philosophy in Education

NON-DEGREE PROGRAMS

Rank II — Planned Fifth Year
Rank I — Teacher (Elementary, Secondary)
Rank I — School Administration
Rank I — Guidance

Vocational Administrator Certification Program.

CENTER FOR CAREER AND VOCATIONAL TEACHER EDUCATION

COLLEGE OF EDUCATION BUILDING
ROOM 403 (502) 745-3441

Dwight Cline, Program Coordinator

Graduate Faculty

Professors: N. Ehresman, C. Riley

Associate Professors: W. Nave, N. Schira

Assistant Professors: D. Butler, D. Cline

Degree Offered: Master of Arts in Education — General (Areas of emphasis include adult and community education, higher education, and vocational education); Master of Arts in Education (Distributive Education minor).

The Center also offers a program leading to certification in vocational education administration.

The Center for Career and Vocational Teacher Education offers a flexible, individualized program leading to the Master of Arts in Education degree. This program is provided for individuals whose career interests are oriented toward an area of education which does not require public school (elementary or secondary) certification.

The center also offers a minor in distributive education under the Master of Arts in Education (Secondary) program and a 15-hour program leading to certification of administrators, supervisors, and coordinators of vocational education programs.

Master of Arts in Education (General)

Students must meet requirements for admission to the Graduate College and applicable departmental requirements.

A minimum of 30 semester hours of graduate level coursework is required for the non-thesis option; 24 hours of coursework is required for the thesis option. A final comprehensive examination must be satisfactorily completed.

The education major (15-21 hours) must include Ed Fnd 500 — Research Methods and 3 hours selected from Ed Fnd 576, Ed Fnd 577, Psy 510, or Psy 511. The remaining courses (9-15 hours) may be selected, in consultation with

Graduate Courses in CVTE

578 Methods and Materials in Teaching

Adult Education. 3 hours.

Methods and materials used in teaching adults; the nature of the adult learner; factors that influence adult learning; special needs of the disadvantaged adult.

581 Organization and Administration of Occupational Education. 3 hours.

Organization, administration, and implementation of occupational education programs as an integral part of the education system.

582 Organization and Administration of Community Education. 3 hours.

The community education concept; local community education programs; utilization of available resources to meet community needs.

591 The Administration, Management and

the advisor, from adult and community education, higher education, vocational education, and/or other areas of education.

The distributed subject matter minor courses (9-15 hours) may be selected from one or more academic departments. These courses must be approved by a representative from the academic department(s) involved.

Master of Arts in Education (Distributive Education minor)

This minor has the flexibility to meet the needs of individuals whose career interests require standard certification in distributive education. Available emphases include retail merchandising, marketing, sales promotion, and mid-management. Teacher/coordinators pursuing this minor must take 12-15 hours of coursework which supports the undergraduate major or teaching area. The courses may be chosen, with advisor approval, from the following and other appropriate courses:

Bus Ad 500, 520
BEOA 550, 540W, 535, 462G
Econ 502
HEFL 536, 533, 438G, 433G, 428G, 422G
Psy 570, 551, 520, 412G

Vocational Administrator Certificate

Students must complete a minimum of 15 hours in the areas of administration, supervision, research, and guidance — to include at least one course from each area as follows:

Organization and Administration of Vocational Education
CVTE 581
CVTE 591

Administration and Supervision of Educational Personnel
Sch Ad 686
Sch Ad 585
CVTE 595

Program Planning, Research and Evaluation in Vocational Education

Ed Fnd 500
CVTE 592
CVTE 593
Ed Fnd 570W

Vocational Guidance, Industrial Psychology, Human Relations

Cns Ed 656
CVTE 594

Finance of Federal-State Occupational Education Programs. 3 hours.

Sources, standards, management functions, and procedures concerned with financing and operating federal-state occupational education programs.

592 Program Planning in Occupational Education. 3 hours.

Determining the need for occupational education programs, developing programs and curricula, evaluating existing programs, annual and long-range planning.

593 Planning and Equipping Occupational Education Facilities. 3 hours. Determining facility needs, evaluating existing facilities, planning new construction, renovation and utilization of existing facilities.	693 Programs of Continuing Education. 3 hours. Philosophy, organization, and administration of continuing education programs. Organizations and agencies that provide continuing education opportunities for adults.	417G Curriculum Development for Distributive Education. 3 hours. Identification and development of instructional units and teaching aids which integrate student needs and needs of the business community.
594 Seminar on Leadership in Occupational Education. 3 hours. Principles and practices of leadership as related to involving community resources in the development and operation of occupational education programs.		428G Techniques of Teaching Distributive Education. 3 hours. Emphasizes problem solving; use of demonstrations, field trips, audio-visual materials and classroom equipment; and utilization of facilities in local business and industry.
595 Supervised Practice in Administration of Occupational Education Programs (Internship). 3 to 6 hours. Supervised internship with emphasis on development of administrative leadership and management skills.		482G Clinical Teaching Techniques in Health Occupations Education. 3 hours. Techniques and methods of effective clinical instruction in health occupations education.
596 Occupational Education in the Community Junior College. 3 hours. Organization and Administration of occupational education programs in the community junior college.		483G Curriculum Planning in Health Occupations Education. 3 hours. Principles of curriculum development; subject matter selection; instructional plans; sequence and time allotment; curriculum issues; State certification policies and practices.
598V Organization and Supervision of Student Teachers in Vocational Education. 3 hours. Philosophy, theory, and practices essential in an effective student teaching program. Examines both State and NCATE standards.	The following 400-level courses may be taken for graduate credit 404G Adult and Community Education: History and Contemporary Perspective. 3 hours. Historical development, philosophical basis, and contemporary concerns of adult education; societal forces that dictate the need for life-long learning.	485G Methods of Teaching Health Occupations. 3 hours. Basic methods and techniques of effective instruction in health occupations education.
	416G Coordination Techniques in Distributive Education. 3 hours. Development of cooperative relationships with community resources; program development and initiation; selection and development of training stations; placement and supervision of students; and development and evaluation of training plans.	

DEPARTMENT OF EDUCATIONAL LEADERSHIP

COLLEGE OF EDUCATION BUILDING
ROOM 426 (502) 745-4953

Kenneth A. Estes, Head

Graduate Faculty

Professors: B. Broach, S. Brumfield, E. Burkeen, V. Christenson, C. Clark, P. Constans, N. Deeb, K. Estes, G. Farley, C. Frady, C. Kreisler, D. Mitchell, J. Sandefur, D. Shannon
Associate Professors: R. Adams, W. Ashley, E. Ball, S. Farley, M. Harryman, F. Robinson, S. Schnacke, V. Sheeley, W. Traugott, T. Updike, J. Wilder
Assistant Professors: R. Greer, R. Smith

Degrees Offered: Master of Arts in Education (School Counseling, Student Personnel Services in Higher Education, School Business Administration); Master of Public Service (Counseling Option); Specialist in Education (Counseling, School Administration).

Additional program specialization areas are available in elementary school administration, secondary school administration, pupil personnel administration, supervision of instruction, and general school administration (superintendent).

The Department of Educational Leadership offers programs designed to prepare school personnel for effective leadership in the elementary and secondary schools. The department also offers programs of preparation for school and professional personnel in the areas of guidance, counseling, and personnel services. The curricula meets professional certification standards in school administration, school counseling, and school supervision. The department also provides educational foundations courses which give professional educators a greater understanding of their roles and the function of educational institutions in society.

Master of Arts in Education (School Counseling)

This program leads to the master's degree and provisional certification for school counselors. Applicants must meet Graduate College requirements for admission and must gain admission to the department.

All students shall complete Ed Fnd 500 — Research Methods and one additional foundations course selected from Ed Fnd 577, Sec Ed 580, or Ed Fnd 576. In addition to the 6 hours of educational foundations, the following counselor education courses must be taken:

A. Elementary School Counselor
 550 Introduction to Guidance
 552 Individual and Group Analysis
 554 Group Guidance
 558 Counseling Theory and Practice
 560 Counseling Practicum

(Practicum experience must be at the elementary level)
 Courses for the 9-hour subject matter minor will be taken in the area of psychological, physical, and social development of children.

B. Secondary School Counselor
 550 Introduction to Guidance
 552 Individual and Group Analysis
 *556 Informational Services
 558 Counseling Theory and Practice
 560 Counseling Practicum
 (Practicum experience must be at the secondary level)
 *In special cases, Cns Ed 554 may be substituted.
 Courses for the 9-hour minor will be taken in related fields other than professional education.

Master of Arts in Education (Student Personnel Services)

Applicants to this program must meet Graduate College requirements for admission. Course requirements are as follows:

A. Professional Education (6 hours)
 Ed Fnd 500 — Research Methods (required) and three hours from Ed Fnd 576, 577, Sec Ed 580, or Hi Ed 675.

B. Counselor Education major (15-18 hours)
 550 Introduction to Guidance
 552 Individual and Group Analysis
 554 Group Guidance
 556 Informational Services
 558 Counseling Theory and Practice
 560H Practicum in Student Personnel Services (required)
 652 Research in Guidance and Counseling
 664 Org. and Adm. of Student Personnel Services (required)
 674 Seminar in Student Personnel Services (required)

Note: Other counselor education courses may be selected.

C. Distributed Minor (6-9 hours)

Courses to be selected from related areas such as: psychology, sociology, government, home economics and family living, economics, and health and safety.

Master of Public Service (Counseling Option)

This interdisciplinary program consists of offerings from several departments and is designed to prepare individuals for governmental positions which require administrative training as well as knowledge of the particular areas they are to serve.

All applicants to this program (regardless of the option chosen) are required to complete a core area of 9 to 12 hours including PSI 540 — Public Administration (required of all). The remaining hours for the core may be selected from the following courses:

Econ 550 Government Financial Policy and Administration
 Geog 580 Problems in Urban Geography

Graduate Courses in Counselor Education

550 **Introduction to Guidance.** 3 hours.
 Philosophy, organization, administration, and functions of guidance and personnel services.

552 **Individual and Group Analysis.** 3 hours.
 Methods, techniques, and instruments used in assessing and evaluating individuals and groups; administering, scoring, and interpreting both objective and subjective instruments; survey of research design, statistics, and computer utilization.

Govt 511 Seminar in State and Local Government
 Soc 565 Studies in the Community
 Psy 551 Social Psychology of Organizations

The counseling option of the MPS requires that applicants who have not completed a minor or the equivalent in psychology or sociology shall remove this deficiency by completing the necessary undergraduate courses to meet the behavioral science prerequisite, which must be satisfied prior to admission to the program.

In addition to the core requirements, students pursuing the counseling option must complete 3 hours of psychology or sociology.

Required Counselor Education Courses

550 Introduction to Guidance
 552 Individual and Group Analysis
 558 Counseling Theory and Practice
 560 Counseling Practicum

The remaining 6 hours may be selected from

Ed Fnd 500 Research Methods
 Ed Fnd 501 Educational Statistics
 Cns Ed 554 Group Guidance
 Cns Ed 556 Informational Services
 Cns Ed 650 Utilization of Community Resources
 Cns Ed 656 Seminar in Vocational Guid. and Occupational Adj.
 Hi Ed 675 Higher Education in America

Specialist in Education (Counselor Education major)

Applicants desiring to pursue this program must meet Graduate College requirements for admission and must also be admitted to the department. A personal interview is required for reviewing professional and educational background and other pertinent data. A departmental admissions committee will review the information and make final recommendations regarding the applicant's eligibility.

Three major emphases are available: school counseling, public service counseling and personnel work, and student personnel services in higher education.

This degree requires a minimum of 30 semester hours of graduate coursework beyond the master's degree. Specific courses and field experiences are provided to meet individual needs. Coursework is generally taken from three areas:

Foundations Core — education and research, 6 hours.

Major Emphasis — school counseling, public service counseling, or student personnel services in higher education, 15-18 hours.

Cognate — psychology, sociology, home economics and family living and/or related areas, 6-12 hours.

The student's committee directs the coursework and required research project and administers a final oral examination.

554 **Group Guidance.** 3 hours.
 Dynamics and processes within group structures; experiences in the formation of groups and their utilization in group counseling procedures and in guidance aspects of career development and vocational choice.

556	Informational Services. 3 hours. Sources, types and uses of educational and occupational information applicable to a program of developmental guidance and counseling.	guidance services that are congruent with the philosophy, curricula, and student patterns within the elementary school.
558	Counseling Theory and Practice. 3 hours. Major contemporary theories of counseling; implementation of the various methods and procedures followed in individual and group counseling; laboratory demonstration and participation.	656 Seminar in Vocational Guidance and Occupational Adjustment. 3 hours. Vocational guidance and occupational adjustment and its application at all educational levels as well as to business, industry, and government.
560	Counseling Practicum. 3 hours. Supervised experiences in a setting related to the area in which the individual plans to seek certification or employment.	657 Readings in Contemporary Counseling. 3 hours. Significant books and research articles related to counseling theory, theory application, and innovative techniques.
561	Introduction to Rehabilitation Counseling. 3 hours. Basic counseling procedures appropriate to rehabilitation; history, settings, and functions of the rehabilitation counselor.	658 Seminar in Guidance and Counseling. 3 hours. Presentation and discussion of research in guidance and counseling. Emphasizes theoretical and practical criticism of relevant studies in the field.
650	Utilization of Community Resources in Guidance. 3 hours. Individual community surveys of all resources used in guidance and counseling; utilization of these resources in choice of educational program and in career selection.	659 Theories of Career Development and Vocational Choice. 3 hours. Major theories of vocational development as they relate to educational progress. Topics include vocational choice, development of interests, values and attitudes as related to work, etc.
652	Research in Guidance and Counseling. 1 to 3 hours. Research problems relating to the organization and administration of guidance programs.	660 Organization and Administration of Guidance Services. 3 hours. Effective guidance services in elementary and secondary schools. Basic principles and postulates underlying the justification of guidance services. Emphasis on initiating guidance programs, developing related services, staffing, facilities, budget, etc.
654	Educational and Intellectual Analysis of Children and Adults. 3 hours. Administration and interpretation of standard mental and aptitude tests as tools of educational and occupational guidance.	661 Seminar in Disability and Rehabilitation Counseling. 3 hours. Psychological, physiological, and sociological impacts of congenital and traumatic disabilities, with emphasis on the rehabilitation counselor's role.
655	Seminar in Guidance Services in the Elementary School. 3 hours. Determining, instituting, and maintaining	
662	Advanced Counseling Practicum. 3 to 6 hours. Supervised, on-campus experiences in counseling elementary, junior and senior high school students, and their parents. Emphasizes educational, vocational, and social-personal planning and problems. Also includes experience in providing consultative services to teachers, principals, agency workers, and other professional people who work with children.	
663	Counseling the Exceptional Child and Parent. 3 hours. General concepts of exceptionality; the needs of and effective counseling techniques for the exceptional child; referral, resources, staffing and coordination efforts of the counselor; the needs of and effective counseling techniques for the parent of the exceptional child.	
664	Organization and Administration of Student Personnel Services in Higher Education. 3 hours. The history, philosophy, and scope of student personnel services, with emphasis on the professional nature of the personnel worker.	
668	Special Topics in Student Personnel Services in Higher Education. 3 hours.	
669	Special Topics in Counseling and Guidance. 3 hours.	
674	Seminar in Student Personnel Services in Higher Education. 3 hours. Philosophy, organization, and administration of and current practices in student personnel work.	
699	Specialist Project. 6 hours.	
699c	Maintaining Matriculation. 1 to 6 hours.	

Master of Arts in Education (School Business Administration)

Required courses in education are 577 — Philosophy of Education or 576 — Social Foundations of Education, 585 — Fundamentals of School Administration, 677 — School Law, 676 — School Finance, 678 — School Building, and 500 — Research Methods. Additional courses or demonstrated competency are required in the following: office and personnel management, taxation, business law, school business management, accounting, data processing, public finance.

Provisional certification in school business administration is based on completion of the above coursework (18 hours) and two years successful experience in government, business, or education. Standard certification is based on completion of the master's degree and three years experience as a school business administrator.

Specialist in Education (School Administration)

This advanced professional degree requires a minimum of 36 semester hours of graduate credit beyond the master's degree. It is designed to increase the competency of educational administrators and to enable them to meet specific goals and objectives in their areas of specialization.

Program Specialization Areas Leading to Professional Certification for School Administration and Supervision.

All school administration programs (other than school business administration) require additional credit above the master's degree. Application for admission should be made after completion of that degree. The professional certificate for school administration and supervision shall be issued, initially, upon completion of a program of endorsement for one of the school leadership positions. Programs are offered in the following areas: elementary principal, secondary principal, supervisor of instruction, director of pupil personnel, school business administrator, and superintendent. When the certificate has been issued and endorsed for one position, it may be further endorsed for another position upon completion of that specific program.

Admission to these programs requires:

1. The master's degree
2. Professional experience in public or private schools
3. Recommendations from school officials under whom the applicant has worked
4. Recommendations from graduate faculty members under whom the applicant has studied
5. Satisfactory standardized test scores
6. Satisfactory scholastic record
7. Personal interview

Curriculum for School Principal Endorsement (Elementary or Secondary)

The professional certificate for school administration and supervision may be endorsed for either the elementary or the secondary principalship when the following conditions have been met:

1. Completion of requirements for the standard elementary teaching certificate (for elementary principal endorsement) or the standard secondary teaching certificate (for secondary principal endorsement).
2. Three years of successful teaching experience.
3. Completion of a minimum of 45 semester hours of graduate credit including the master's degree. Within these total hours the student must complete the following required courses in education:

500 — Research Methods
550 — Introduction to Guidance
585 — Fundamentals of School Administration
and must also complete departmentally approved electives with emphasis in elementary education (for elementary principal endorsement) or secondary education (for secondary principal endorsement) to meet certification requirements and to provide administrative competencies.

Curriculum for Director of Pupil Personnel Endorsement

The professional certificate for school administration and supervision may be endorsed for the position of director of pupil personnel when the following conditions have been met:

1. Completion of the requirements for either the standard elementary certificate or the standard high school certificate.
2. Three years of successful teaching experience.
3. Completion of a minimum of 45 semester hours of graduate credit including the master's degree. Within these total hours the student must complete the following required courses in education

500 — Research Methods
550 — Introduction to Guidance
583 — Accounting for Pupil Personnel
585 — Fundamentals of School Administration
and must also complete departmentally approved electives selected from the behavioral sciences and from administration to meet certification requirements and to provide the necessary competencies in those areas.

Curriculum for Supervisor Endorsement

The professional certificate for school administration and supervision may be endorsed for the position of supervisor of instruction when the following conditions have been met:

1. Completion of the requirements for either the standard elementary certificate or the standard high school certificate.
2. Three years of successful teaching experience.
3. Completion of a minimum of 45 semester hours of graduate credit including the master's degree. Within these total hours, the student must complete the

following required courses in education

500 — Research Methods
585 — Fundamentals of School Administration
— Advanced Reading

and must also complete departmentally approved electives selected from curriculum, supervision, administration and/or subject-matter areas to meet certification requirements and to provide the necessary competencies.

Curriculum for Superintendent Endorsement

The professional certificate for school administration and supervision may be endorsed for the position of school superintendent when the following conditions have been met:

1. Completion of the requirements for either the standard elementary certificate or the standard high school certificate.
2. Completion of a minimum of 60 semester hours of graduate credit including the master's degree.
3. Completion of, as a general rule, 21 hours outside education (within the 60 hour minimum).
4. Completion of, as a general rule, 39 hours in professional education (within the 60 hour minimum).
5. Five years of successful experience in teaching or administration.
6. Completion of the following required courses in education.
676 — School Finance
677 — School Law
678 — School Plant Administration
7. Completion of departmentally approved electives selected from professional education, behavioral sciences, and/or subject-matter fields to meet certification requirements and provide administrative competencies.

JOINT-DOCTORAL PROGRAM

(With the University of Kentucky)

Persons who have completed, or are completing, a master's degree in education and who have adequate qualifications may petition to enter the joint program leading to the Ed.D. or Ph.D. in Education from the University of Kentucky. The applicant must meet the entrance requirements of Western and the Graduate School at the University of Kentucky. In addition, admission standards of the doctoral program of the UK College of Education must be met.

Application is filed with the Graduate College of Western Kentucky University. The applicant's qualifications are evaluated by a screening committee, which makes an appropriate recommendation to the University of Kentucky.

Each student admitted to the program is appointed an advisory committee, known as the Special Doctoral Committee, which represents both participating institutions. Normally the student will continue in residence at Western Kentucky University for one school year (maximum 24 semester hours) after being admitted to the joint program. Variations as to period of residence at each institution may be approved by the student's committee. For further information, contact the Dean of the Graduate College, Western Kentucky University.

NON-DEGREE PROGRAMS

Students wishing to pursue one of the following programs must make application to the Graduate College. Upon completion of the program, the certification officer in the College of Education certifies to the State Department of Education that rank requirements have been met.

Rank II Non-Degree Program

Western Kentucky University provides the planned Fifth Year Program for students who do not meet the admission requirements of a degree program or who want greater flexibility with regard to time allowed for completion, transfer limitations, and selection of courses than is permitted in a degree program.

Although the Fifth Year Program does not result in the master's degree nor standard certification, it does result in Rank II salary classification in Kentucky, renews the provisional certificate, and permits entry into a Rank I teacher program.

Guidelines

1. Thirty-two (32) hours of upper division undergraduate and graduate courses must be completed.
2. At least 18 of the required hours must be taken at Western Kentucky University.
3. A grade point average no less than that for undergraduate certification shall be required.
4. A minimum of 12 hours must be in professional education and a minimum of 12 hours in cognate areas.
5. At least 12 hours must be in graduate level courses.
6. Coursework taken by correspondence is not accepted.

Rank I Programs

Western Kentucky University offers the following Rank I programs in accordance with the minimum regulations prescribed by the Kentucky State Board of Education:

1. Rank I—Teacher (program leading to Rank I qualification for teachers)
2. Rank I—School Administration (the professional certificate for school administration and supervision endorsed for school superintendent)
3. Rank I—Standard Guidance (leading to standard certification in guidance)

General Guidelines:

1. Rank I classification shall require the completion of either (a) 30 semester hours approved graduate level credit in addition to the requirements for a Rank II classification, or (b) 60 semester hours approved graduate level credit including a master's degree.

Graduate Courses in Educational Foundations

500 **Research Methods.** 3 hours.
Includes theory of research, experimental

design, bibliographical and data gathering techniques, and interpretation of results.

501 **Educational Statistics.** 3 hours.
Graphic and tabular arrangement of data, measures of central tendency and of rela-

2. The student's program shall be planned in consultation with the advisor and shall be related to the professional needs of the individual.
3. A minimum of 15 semester hours must be in courses open only to graduate students.
4. The student shall maintain a B standing, and no credit shall be given for a course grade lower than C.
5. At least 15 of the required hours shall be taken at Western Kentucky University. The remaining hours may be taken, upon approval of the college advisor and the Graduate College, at other institutions provided the grade is A or B.

Rank I — Teacher's Program

(Based upon the Master's Degree)

A minimum of 24 hours of the total 60 must be in academic work apart from professional education. These hours shall be in the candidate's major or minor, or area of preparation, or in supporting courses from other disciplines as approved by this institution.

Rank I — Teacher's Program

(Based upon Fifth Year Non-Degree Classification)

A minimum of 30 hours of approved coursework, in addition to the requirements for Rank II classification, must be completed. Of this 62 hour total, at least 24 hours must be in an academic area apart from professional education. These hours shall be in the candidate's major or minor, or area of preparation, or in supporting courses from disciplines as approved by this institution.

Rank I — School Administration Program

Students following a program for endorsement under the professional certificate for school administration and supervision must possess the master's degree and complete standard elementary or standard high school certification before requesting an endorsement. Of the total 60 hours (Master's and Rank I), at least 12 hours must be taken in the behavioral sciences or subject matter fields other than professional education.

Rank I — Guidance Program

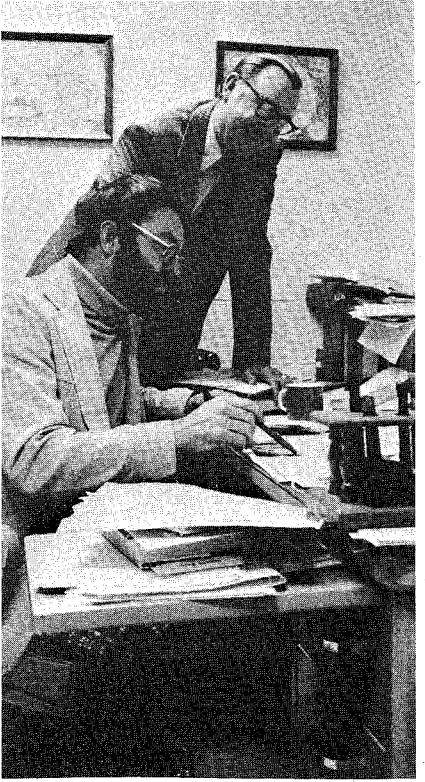
Students holding the provisional guidance certificate and having at least one year's experience as a school counselor may pursue the standard certificate for guidance counselors through this program. Of the total 60 hours (Master's and Rank I), at least 12 hours must be taken in the behavioral sciences or subject matter fields other than professional education. The remaining courses are planned in the field of guidance. (For further details see Counselor Education).

tionship.

548 **Research in Curriculum and Instruction.** 1 to 3 hours.
Research in elementary instructional problems in reading, mathematics, science, social studies, English, and in

elementary and secondary curriculum.	598 The Organization and Supervision of Student Teaching. 3 hours. The philosophy, theory, and practices essential for an effective student teaching program. Covers State and NCATE standards for teacher education, personal and professional relationships, and evaluation of student teachers.	Problems of instruction; classification, promotion, and guidance of pupils; custodial services, and relationships with patrons and community.
570W Workshops in Education. 1 to 3 hours. Special short courses on educational problems.		
576 Social Foundations of Education. 3 hours. Selected problems in American society, their impact on the educational system, and the possible role of that system in resolving such problems.	601 Statistical Techniques for Experimental Designs in Education. 3 hours. Parametric and non-parametric statistical techniques applied to experimental and quasi-experimental research designs in education.	692 Secondary School Organization and Administration. 3 hours. Programs of instruction; classification, promotion, and guidance of pupils; relation of principal to non-professional personnel; and relationship with patrons and community.
577 Philosophy of Education. 3 hours. The relationship between philosophy and education. Emphasizes the development of an effective individual philosophy of education.	676 Public School Finance. 3 hours. School budgets, and accounting for school money. Unit costs and cost accounting; accounting for school property, insurance business procedure and office practice.	694 Seminar in Educational Administration. 3 hours. Emphasis on current research and identification of research needed in educational administration.
675 Higher Education in America. 3 hours. History, purpose, philosophy, organization, curriculum, student personnel services, financial services, and trends of the American system of higher education.	677 School Law. 3 hours. Clinical study of existing school code; judicial decision; administrative problems and school code.	695 School Surveys. 3 hours. Gathering and interpreting data; evaluating educational programs and facilities; predicting future enrollment, and presenting results to school authorities.
685 Academic Problems in Higher Education. 3 hours. Prerequisite: Hi Ed 675 or permission of instructor. Major problem areas of academic administration with emphasis on issues and procedures of college and university level curricular development.	678 School Plant Administration. 3 hours. Prerequisite: Sch Ad 585. Educational needs and building planning; architect service; standards of construction; building surveys.	696 Advanced Theory in Education Administration. 3 hours. Prerequisite: Permission of instructor. Theoretical approaches to the study of education administration and leadership.

Graduate Courses in School Administration

583 Accounting for Pupil Personnel. 3 hours. Emphasizes the responsibilities of directors of pupil personnel, problems of personnel accounting, and records and reports related to the Minimum Foundation Program.	679 Seminar in Foundations of Education. 3 hours. Prerequisite: Permission of instructor. Inter-disciplinary seminar.	698 Practicum in Administration and Supervision. 3 to 6 hours. Prerequisite: Permission of instructor. Internship or other field experience for administrators and supervisors.
585 Fundamentals of School Administration. 3 hours. Organization and administration of American schools. Principles of effective leadership and the roles and responsibilities of administrative—supervisory positions.	681 Secondary School Curriculum. 3 hours. Critical issues and suggested means of resolving these issues for an improved educational program.	699 Specialist Project. 6 hours.
588 School Business Management. 3 hours. Effective operation of the fiscal and business aspects of school administration in the educational program.	682 School-Community Relations. 3 hours. Background, need, and techniques for establishing a wholesome working relationship with laymen with emphasis of their involvement in school programs.	699c Maintaining Matriculation. 1 to 6 hours.
590 Administration of School Personnel. 3 hours. Allocation of human resources to accomplish the purposes of the school organization.	683 Seminar in Curriculum Development. 3 hours. Examination of factors influencing curriculum development.	
596 Readings in Education. 1 to 3 hours. Prerequisite: Permission of major professor. Reading and research in an area of individual interest. Supervised by the major professor.	684 Supervision of Elementary School Subjects. 3 hours. Applying principles of supervision to problems of instruction in the elementary grades.	
597 Problems in Administration and Supervision. 1 to 3 hours. Prerequisite: Permission of instructor. Identifying and attempting to solve administrative problems in the local school setting.	686 Principles of Supervision. 3 hours. The instructional aspect of school administration: organization, problems, principles, and techniques of improving in-service training for teachers.	
	688 Evaluating the Elementary School. 3 hours. Techniques for and approaches to evaluating the school for accreditation purposes as well as for general improvement of programs. Designed specifically for prospective administrative and/or instructional leadership personnel.	
	691 Elementary School Organization and Administration. 3 hours. Prerequisite: Sch Ad 585.	

DEPARTMENT OF INDUSTRIAL EDUCATION AND TECHNOLOGY

ENVIRONMENTAL SCIENCE AND TECHNOLOGY BUILDING ROOM 204 (502) 745-3251

Franklin Conley, Head

Graduate Faculty

Professors: F. Conley, F. Pittman, D. Wendt

Associate Professor: E. Hein

Assistant Professors: R. Eversoll, G. Roberts,
N. Tomazic, D. Towell

Degrees Offered: Masters of Arts in Education (Industrial

Education major or minor), Specialist in Education (for secondary teachers in the area of Industrial Arts).

Applicants must meet the general requirements of the Graduate College and of the College of Education.

Master of Arts in Education (Industrial Education major or minor)

This program provides increased competency for persons who are teaching in or administering industrial education programs and also serves as the basis for entering a specialist or doctoral program. Its flexibility meets the needs of students with varying backgrounds and goals.

Individuals following this program must meet all requirements for standard high school certification (see Secondary Education).

The major requires 18-21 hours. The minor requires 12-15 hours. The remaining hours, in both cases, will be taken in professional education courses.

Specialist in Education (See Secondary Education)

Graduate Courses in Industrial Education

510 Investigations in Industrial Education. 3 hours. Individual research under the direction of a graduate faculty member.

520 Philosophy of Industrial Education. 3 hours. The development of industrial education in Europe and America. Emphasis on influences, experiments, and trends leading to modern practices in industrial, vocational, and technical education.

524 Organization and Teaching of Industrial Education for the Handicapped and Disadvantaged. 3 hours. Current research and literature on the handicapped and/or disadvantaged surveyed in relation to the adaptation of industrial education activities.

525 Industrial Education Curriculum. 3 hours. Curriculum practices, concepts, and trends in curriculum development and improvement of programs.

The following independent study courses are for students pursuing specific areas.

530 Advanced Drafting. 3 hours.

532 Industrial Design. 3 hours.

542 Industrial Electricity and Electronics. 3 hours.

544 Wood Technology. 3 hours.

548 Graphic Arts. 3 hours.

552 Advanced Machine Shop. 3 hours.

556 Power and Auto Mechanics. 3 hours.

560 Metal Technology. 3 hours.

564 Problems in Crafts. 3 hours.

568 Ceramics and Plastics. 3 hours.

572 General Shop. 3 hours.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

The following 400-level courses may be taken for graduate credit

410G Industrial Arts Problems. 3 hours.

Prerequisite: Graduate standing and departmental approval. Individual study and/or research in industrial education.

430G Plastics Mold Design and Construction. 3 hours.

Prerequisite: Consent of instructor. Plastics mold design related to the physical characteristics of plastics, molding techniques, and mold construction. Includes mold design for each of the major processing techniques, electrical discharge machining, electroforming, pantograph milling, plaster tooling, hobbing and wood fabrication.

439WG Workshop in Industrial Education.

3 hours.

Special short course on problems in industrial education and technology.

450G Planning Industrial Education Facilities. 2 hours.

The planning and designing of shops and laboratories for vocational-industrial and technical education.

452G Industrial Wood Processing II.

3 hours.

Prerequisite: Departmental approval. The setup and use of woodworking machines. Includes tooling, jig and fixture design, and the mass production of wood products. Field trips.

460G Seminar in Vocational-Industrial and Technical Education. 3 hours.

Individual and group investigations of current problems and issues in the field of vocational-industrial and technical education.

464G The Organization and Supervision of Vocational-Industrial and Technical Student Teaching. 2 hours.

Philosophy, theory, and practices essential to an effective student teaching program. Also covers vocational-industrial and technical accreditation and certification standards, personal and professional relationships, and evaluation of student teachers.

465G Industrial Arts for Elementary Teachers. 3 hours.

Philosophy, purposes, organization and correlation of industrial arts activities as they apply to the elementary school program.

490G Organization and Teaching of Industrial-Technical Subjects in the**Multiple Activities Laboratory.** 3 hours.

Procedures and techniques for simultaneously conducting different industrially oriented subjects and occupational orientation activities. Coordinating activities, rotating students, preparing and using appropriate instructional materials, ordering and storing supplies, and identifying and providing for individual differ-

ences.

498G Advanced Wood Products Analysis.

3 hours.

Prerequisite: Departmental approval. Seminar on selected wood products topics. Current research and development as it relates to the wood products industries. Field trips.

DEPARTMENT OF PHYSICAL EDUCATION AND RECREATION

ACADEMIC-ATHLETIC BUILDING #2
ROOM 316 (502) 745-3347

Burch Oglesby, Head**Graduate Faculty****Professor: B. Oglesby****Associate Professors: J. Jones, S. Laney, A. Little, W. Meadows****Assistant Professors: J. Carter, T. Crews, C. Hughes, W. Kummer, R. Miller, B. Shollenburger**

Degrees Offered: Master of Science in Physical Education, Master of Arts in Education (Physical Education major or minor), Master of Science in Recreation.

Diversified programs are available in physical education and recreation. The department maintains laboratories for study of human motor behavior and physical performance, and students are encouraged to pursue personal research interests.

Master of Science in Physical Education

This program is designed to meet the needs of students seeking concentrated study within the academic discipline of physical education. All candidates are required to take PER 501, 12-27 hours of physical education course-

work (selected in consultation with the advisor), and 0-6 hours from allied areas. Although Plans A and B are available, candidates are encouraged to write a thesis. The research tool requirement may be met by demonstrating (1) competency in research techniques or (2) reading proficiency in a foreign language.

Master of Arts in Education (Physical Education major or minor)

Students following this program must meet all requirements for the standard high school certificate.

The student majoring in physical education must take 15-21 hours in physical education including PER 501 and three courses selected from PE 502, 503, 504, 505, 506, and 507. The student minoring in physical education must take 12-15 hours in physical education including six hours selected from PE 502, 503, 504, 505, and 506. The remainder of the required 30 hours, in both cases, is taken in professional education (see secondary education).

Master of Science in Recreation

This program is designed to prepare professional recreation practitioners for a wide range of recreation and leisure-service occupations; provide opportunity for study in a specialized area of recreation; provide knowledge of research procedures; and provide academic background for students planning to pursue doctoral study. Although Plans A and B are available, candidates are encouraged to write a thesis. The research tool requirement may be met by demonstrating either (1) competency in the use of appropriate research techniques, or (2) reading proficiency in a foreign language.

A twenty-four hour major in recreation is required with a six hour cognate field to be selected in consultation with the student's graduate committee.

Graduate Courses in Physical Education**501 Analysis of Research in Physical Education.** 3 hours.

Selected studies in the physical education literature related to methods, materials, techniques, and planning of research studies used and conducted by the profession. (To be taken in first term of enrollment).

502 Philosophical Bases of Physical**Education and Athletics.** 3 hours.

The influence of major educational philosophies upon physical education and athletics; the development of a practical and usable personal philosophy of modern physical education.

503 Motor Learning. 3 hours.

Prerequisite: PE 501. Theories and principles of learning as they apply to the acquisition of gross motor skills. Emphasizes the interpretation and practical application of experimental data.

504 Physiological Bases of Motor**Performance.** 3 hours.

Application of physiological principles of motor activity. Inferences on improving instructional practices.

505 Foundations of Curriculum Construction. 3 hours.

Principles, procedures, and criteria for curriculum construction and revision, course building, and lesson planning.

506 Psychological Aspects of Sport and Performance. 3 hours.

Prerequisite: PE 501. The various psychological parameters on sport performance.

507 Sport in Culture. 3 hours.
The sports movement in America from a socio-cultural viewpoint. Analysis of current problems and trends.

510 Seminar: Facilities, Construction and Equipment. 3 hours.
Principles, standards, practices and problems in planning, constructing, administering the building program, maintaining the facilities and in purchase and care of equipment.

511 Theory in Administration and Supervision of Physical Education and Athletics. 3 hours.
Basic administrative theory and research for the administration of physical education and athletic programs.

512 Seminar: Administration Problems in Physical Education and Athletics. 3 hours.
Organization and control of physical education and athletics programs at various education levels. Discussion of controversial issues and practice in seeking solutions.

530 Independent Investigations in Physical Education. 3 hours.
Prerequisites: PE 501 and consent of instructor.
Research problems or projects in the organizational, administrative, or supervisory areas of physical education.

570 Workshop in Physical Education. 3 hours.
Workshop and/or seminars dealing with special problems and current topics in physical education.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

Recognition of abnormalities and exercise for correction.

492G Advanced Athletic Training. 3 hours.
Techniques needed in the prevention and care of athletic injuries — including recognition, prevention, treatment, reconditioning, rehabilitation.

599c Maintaining Matriculation. 1 to 6 hours.

The following 400-level Recreation courses may be taken for graduate credit

410G Therapeutic Recreation. 3 hours.
Principles, trends and programs of therapeutic recreation. Selected disabilities considered.

412G Adaptive Activities and Facilities for Recreation. 3 hours.
Methods of adapting recreational programs, activities, and facilities for the handicapped.

432G Principles of Outdoor Recreation. 3 hours.
Values and extent of outdoor recreational philosophy based on legislation, geographic factors, land use, standards, agencies, and economics.

433G Camp Administration. 3 hours.
Status, purpose, and administration of organized camping. Includes history and trends, selection and training of staff, health and safety considerations, etc.

434G Development of Nature Oriented Areas and Facilities. 3 hours.
Nature trail design and preparation, live and inanimate exhibit design and preparation, resource inventory, building, exhibit material purchase, vandalism, etc.

435G Techniques in Outdoor Education. 3 hours.
Field trips, nature crafts, audio-visual aids and interpretive materials, etc., and their importance in developing outdoor education as a recreational activity.

456G Advanced Studies in Recreation. 3 hours.

470G Administration of Municipal Recreation. 3 hours.
Covers various aspects of recreation in a municipal setting. Includes personnel, financing, facilities, planning, maintenance, and such other topics as legislation and vandalism.

471G Community Centers and Playgrounds. 3 hours.
Playground and community center operation. Teaching techniques, programming, and problems relating to community recreation.

480G Recreation Management. 3 hours.
Practical approach to management of park facilities and personnel. Includes program planning, design, and standards.

481G Recreation Seminar. 3 hours.
Introduces current problems, trends, and issues in the area of leisure services.

482G Recreation Workshop. 1-3 hours.
In-depth study of specific skill areas relating to the recreational profession.

The following 400-level courses in Physical Education may be taken for graduate credit

430G Physical Education Curriculum in the Elementary School. 3 hours.

454G Problems and Trends in Elementary Physical Education. 3 hours.

456G Advanced Studies in Physical Education and Athletics. 3 hours.

490G Evaluation in Physical Education. 2 hours.
Prerequisite: Ed 340.

491G Physical Diagnosis and Corrective Physical Education. 3 hours.

Graduate Courses in Recreation

501 Analysis of Research in Recreation. 3 hours.
Selected studies in recreation literature relative to methods, materials, techniques, and planning of research studies used and conducted by the profession.

513 Organization, Administration, and Supervision of Parks, Playgrounds, and Recreation Programs. 3 hours.
Organization and administration of recreation at federal, state, and local levels. Correlation and integration of the entire recreation program into the culture and society of the community.

515 Planning and Maintenance of Park and Recreation Facilities. 3 hours.
Principles and problems in planning and maintenance of park and recreation facilities. Relationship of facilities to program needs. Field trips required.

517 Construction and Utilization of the Survey in Recreation. 3 hours.
Planning, application, and evaluation of the survey as a means of determining recreation program needs in selected settings.

519 Fiscal Practices for the Administrator of Recreation and Parks. 3 hours.
Budget construction, record-keeping, purchasing, personnel problems, and office management as related to recreation.

521 Public Relations for Parks and Recreation Programs. 3 hours.
Effective communication between colleagues, program participants, and the public through the use of audio-visual devices and techniques.

523 Philosophy and Trends. 3 hours.
Philosophical and historical development of opinions and attitudes toward the concepts of leisure and recreation.

530 Independent Investigations in Recreation. 3 hours.
Special research problems in the area of recreation.

590 Internship in Recreation. 3 hours.
Experience in recreation planning, leadership, supervision, and program evaluation through work in recreation, park, and other leisure oriented settings. Supervised by University faculty and personnel from area recreation agencies.

599 Thesis Research and Writing. 6 hours.

DEPARTMENT OF PSYCHOLOGY

COLLEGE OF EDUCATION BUILDING
ROOM 276 (502) 745-2695

John O'Connor, Head

Graduate Faculty

Professors: J. Craig, L. Clark, W. Cunningham,
E. Dotson, A. Laird, L. Metze, J. O'Connor, H. Robe
Associate Professors: J. Cangemi, C. Layne, C. Martray,
S. McFarland, R. Miller, E. Owen, D. Sheik, R. Simpson
Assistant Professors: D. Grice, L. Hanser, B. Howton,
L. Layne, R. Mendel, R. Poe, D. Roenker

Degrees Offered: Master of Arts in Psychology, Master of Arts in Education (Psychology major or minor).

Master of Arts in Psychology

This program provides preparation for students planning to teach at the college level or to pursue careers in industry, government, school or clinical psychology.

A number of options are available but most are included in the three following plans:

1. A two-year training sequence in Clinical or School Psychology.
2. A pre-doctoral sequence in General-Experimental Psychology
3. A General Psychology option which prepares one to teach at the college or high school level, enter business or industry, or to pursue a doctoral program in allied areas.

Applicants should have a statistics and experimental methodology course, background in general psychology, a minimum score of 850 on the Graduate Record Examination aptitude (verbal and quantitative combined) test, a GPA of 2.5 with a 3.0 in psychology courses, and four letters of recommendation sent to the departmental admissions committee.

Clinical or School Psychology

This two-year program prepares a student to assume a position at the MA level in a clinical or school setting. Upon completion of the program a student is recommended to state boards of psychology for certification in states where such certification is available. Students are expected to adhere to the *APA Ethical Standards of Psychologists* and to maintain a professional demeanor in clinical activities.

Undergraduate preparation should include the areas of:

- *Abnormal Psychology
- Social Psychology
- *Personality Theory
- Psychological Testing
- Personal Adjustment and Mental Hygiene
- Physiological Psychology

A minimum of 40 hours (43 for School Psychology) is required to complete the program. Graduate courses which make up the core of the program are: Psychology 540, 541, 550, 560, 561, 562, 563, **592, 640, 641, 642, 660, 661, 662, ***512, ***599.

Note:

- *Required before graduate work is initiated.
- **Required for School Psychology or School Psychometry.
- ***Required for all MA programs in Psychology.

General-Experimental Psychology

This 30-hour (minimum) program is designed for students who plan to pursue doctoral studies after completion of the master's degree. If a student anticipates future study in a specialized area (i.e., cognitive processes, physiological, clinical, social, developmental, etc.), courses in the planned area of specialization should be included in the program. Graduates are recommended to appropriate doctoral programs or for teaching positions. They do not have preparation for positions as clinical or school psychologists.

Courses required of all students pursuing the program are: Psychology 500, 511, 512, 513, 599.

Courses for specialization (the student selects 4 of the 8 areas) are: Physiological Psychology (580), Clinical Psychology (541), Psychometrics (563), Developmental (521, 522), Cognition (523), Social Psychology (522), Personality (550).

Industrial Psychology

This program provides specific psychological skills utilized by business and industry and is intended primarily as a terminal degree. The student will meet the requirements of the General Psychology program and will achieve some measure of competence in each of the following areas: employee selection and placement, test construction and validation, training, motivation, job satisfaction, and leadership.

General Psychology

This flexible program is designed for students who do not plan to practice as clinical psychologists or to pursue doctoral study in psychology. Graduates are recommended for teaching positions or for admission to doctoral programs in allied areas or other areas of specialization. Psychology 512, 563, 599, and 18 hours of psychology electives must be included in the required 30-hour minimum for the program.

Master of Arts in Education (Psychology major or minor)

Students following this program must meet all requirements for standard high school certification. The major requires a minimum of 18 or a maximum of 21 hours. The minor requires a minimum of 12 or a maximum of 15 hours. The remaining hours, in both cases, will be taken in professional education courses. The thesis is recommended.

School Psychometrist

A program which meets Kentucky certification of school psychometrists is available. Detailed information may be obtained from the Psychology Department.

Graduate Courses in Psychology

500 Trends and Scientific Approaches in Psychological Thinking. 3 hours.

Historical and philosophical bases of contemporary psychological thought and research with emphasis on the philosophy and logic of science as it pertains to psychology.

510 Advanced Educational Psychology. 3 hours.

Psychology of learning. Different psychological theories, methods and techniques.

511 Psychology of Learning. 3 hours.

Theories of learning including conditioning, social learning, reinforcement, problem solving, motivation, and structure of the learning situation.

512 Seminar in Experimental Design. 3 hours.

Required for all graduate students in psychology. Understanding the principles of experimental design and the application of appropriate statistical techniques. Includes the design of an experimental project.

513 Advanced Statistical Analysis. 3 hours.

Prerequisite: Psy 512 or permission of instructor. Advanced analysis techniques appropriate to psychological research. Emphasizes the more complex forms of the analysis of variance, the analysis of covariance, and non-parametric statistics.

516 Advanced Study in Motivation. 3 hours.

Prerequisite: Permission of instructor. Historical and present motivation theories. Particular emphasis on a current literature survey of both human and animal research.

520 Psychology of Individual Differences. 3 hours.

Research and theory in developmental aspects of behavior from the prenatal period to adulthood with emphasis upon individual differences.

521 Advanced Child Psychology. 3 hours.

Particular emphasis upon a critical review of current research in child development.

522 Advanced Adolescent Psychology. 3 hours.

Current research and theories in the area of adolescent psychology as they relate to physical, social, emotional, and intellectual development.

523 Cognitive Theory. 3 hours.

Information processing, thinking and cognition. Covers major theories and research techniques in the area.

540 Behavior Problems of Childhood and Adolescence. 3 hours.

The major forms of psychopathology in children and adolescents, with emphasis upon recent research, classification systems and developmental patterns. Also covers clinical and school treatment of behavior problems encountered in the school setting.

541 Introduction to Clinical Psychology. 3 hours.

Methods and research in clinical psychology with emphasis on the use of clinical reports prepared for schools and clinics.

550 Personality Theory. 3 hours.

Psychological principles underlying the study of personality in relation to a social environment. Topics include theories of personality, the process of socialization of the individual, factors influencing adjustment to social environment.

551 Social Psychology of Organizations. 3 hours.

The dynamics of groups and organizations. Current theory and research in psychology of organizations.

552 Advanced Social Psychology. 3 hours.

Prerequisite: Permission of instructor. Behavior of the individual in relation to social contexts. Topics include group dynamics, attitude formation and change, social influence processes, socialization and language use in communication.

560 Individual Assessment — I. 3 hours.

Prerequisite: Permission of instructor. Administration of the WICS, WAIS, WPPSI, BINET, and other individually administered tests used as basic tools in education, occupational guidance and clinical diagnosis.

561 Individual Assessment — II. 3 hours.

Prerequisite: Permission of instructor. Interpretation of the tests commonly used in educational, vocational guidance and clinical diagnostics. Emphasis on report writing and basic clinical practice.

562 Practicum in Psychological Assessment. 1 to 3 hours.

Corequisite: Psy 560 or 561. Supervised experience in the administration and interpretation of tests used in an educational or clinical setting for the diagnosis of intellectual and learning problems. (May be repeated.)

563 Test Construction and Psychometric Theory. 3 hours.

Introduction to psychometrics with emphasis on both technical and ethical problems involved in the use and construction of psychological measurement instruments.

570 Personnel Psychology. 3 hours.

The development of dependent variables

in applied behavioral research — measurement of performance effectiveness and applications in industry, education, etc. Current methods in selection and classification, testing, interviewing, and training.

580 Advanced Physiological Psychology. 3 hours.

Prerequisite: Permission of instructor. Anatomy of the nervous system, relationships among the components of the nervous system and psychological functioning.

581 Laboratory in Advanced Physiological Psychology. 3 hours.

Corequisite: Psy 580. Physiological techniques of electrical recording and electrical chemical stimulation.

590 Readings or Research in Psychology. 1 to 3 hours.

Prerequisite: Departmental permission only. Individual readings or research. Arrangements must be made before enrollment.

591 Internship in College Teaching. 1 to 2 hours.

Prerequisite: Permission only. Problems and methods of teaching at the college level. Students enrolled in this course will concurrently teach a course in introductory or general psychology.

592 Seminar and Field Experiences in School Psychometry. 3 hours.

Professional seminar and field experience for school psychometrists and psychologists. To be taken in the student's last semester in residence.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

640 Psychopathology. 3 hours.

Prerequisite: Permission only. Major forms of child and adult psychopathology with emphasis upon recent research, classification systems, modification of deviant behavior and developmental patterns of learning and motivation variables.

641 Clinical Interviewing and Psychotherapy I. 3 hours.

Selected theories and techniques of psychotherapy and counseling. Also covers group therapy, clinical topics, and professional and ethical issues.

642 Clinical Interviewing and Psychotherapy II. 3 hours.

Prerequisite: Psy 641. Continuation of 641 with emphasis on group, family, and marital psychotherapy.

660 Psychological Evaluation I. 3 hours.

Prerequisite: Psy 560. Personality diagnosis using objective and projective techniques with emphasis on current research interpretation, and communication of assessment information.	410G Psychology of Learning. 3 hours. Prerequisites: Psy 201 and 210 or permission of instructor. Facts and principles of human and animal learning, treated in theories attempting to provide a general framework for understanding what learning is and how it takes place.	behavioral manifestation and treatment programs.
661 Psychological Evaluation II. 3 hours. Prerequisite: Psy 660. A continuation of 660 with emphasis on personality measures and procedures for assessing psychological and neuropsychological disorders.	411G Psychology of Sensation and Perception. 3 hours. Prerequisites: Psy 201 and 210 or permission of instructor. Basic data and theories of psychophysics, illusions and other topics fundamental to the understanding of sensory and perceptual processes.	441G Psychological Aspects of Alcoholism. 3 hours. Prerequisites: Psy 440 and permission of instructor. Application of psychological theories and research to the treatment of alcoholism.
662 Practicum in Psychological Practice. 1 to 3 hours. Supervised practice in schools, clinics, specialized training centers and hospitals. Persons preparing for careers in school or clinical psychology will enroll in 662 for a minimum of two semesters.	412G Psychology of Motivation and Emotion. 3 hours. Prerequisites: Psy 201, 210 or 410 or permission of instructor. Needs, desires and incentives as they influence behavior. Includes review and analysis of research on motivational processes in human and animal behavior and the development of motivation and emotions.	443G Behavior Theory and Application. 3 hours. Prerequisite: Psy 410, or enrollment in special education sequence. Theory and application of techniques for modifying behavior in clinics, hospitals, child rearing and education. Cross-listed with Special Education 443.
The following 400-level courses may be taken for graduate credit	432G Psychology of the Gifted and Creative. 3 hours. Prerequisite: Psy 100. Identification of gifted children and adults with emphasis on educational programs for the maximum development of giftedness.	450G Introduction to Personality Theory. 3 hours. Prerequisite: Nine hours of psychology or permission. Major theoretical approaches to the study of personality. Includes historical as well as contemporary theorists and avenues of analysis and concepts in the field of personality.
400G History and Systems of Psychology. 3 hours. Prerequisite: Nine hours in psychology. Historical antecedents of contemporary psychology. Both the sequence of psychological theory evolution and personality of prominent theorists are emphasized.	440G Abnormal Psychology. 3 hours. Prerequisites: Six hours in psychology. Forms of abnormal behavior, etiology, developmental courses, interpretations.	460G Methods and Research in Social Psychology. 3 hours. Research methods of social psychology and examination of major research areas. Primarily for psychology majors and minors.
		490G Special Topics in Psychology. 3 hours. Faculty directed research and/or readings in psychology.

DEPARTMENT OF TEACHER EDUCATION

Curtis L. Englebright, Head

Graduate Faculty

Professors: K. Brenner, G. Crumb, C. Englebright, H. Hardin, J. Hicks, J. Koper, A. Laman, J. McGuire, R. Melville, A. Munson, W. Nolan, R. Pankratz, J. Scarborough, R. Steamaker, D. Watts
Associate Professors: C. Crooks, J. Davis, D. Geeslin, J. Gibbs, R. Hicks, J. Johnson, R. Otto, R. Panchyshyn, D. Reeves, E. Rich, R. Roberts, H. Simmons, R. Stevenson, D. Ritter
Assistant Professors: G. Dillingham, W. Greenlee, E. Hanes, J. Pollock, S. Taylor, J. Vokurka, J. Zamkoff

Degrees Offered: Master of Arts in Education, Specialist in Education.

Master of Arts in Education (Elementary Education major)

Since this program leads to the standard elementary certificate, applicants must hold a provisional teaching certificate valid at the elementary school level. (Course-work taken to endorse the secondary school certificate for teaching at the elementary level will not apply to the master's degree).

The student's program may be planned to include an emphasis in reading, early childhood education, elementary librarian, or exceptional child education (mental retardation, learning disabilities, emotionally disturbed).

Completion of the program outlined below, which meets the requirements of Kentucky law and the general regulations of the State Board of Education, qualifies the elementary teacher for the Master of Arts in Education degree and the standard certificate.

- A. Educational Foundations (6 hours)
Ed Fnd 500 Research Methods
El Ed 503 Org. of Elem. Curr.
- B. Professional Education (12 hours) in one of the following areas of emphasis:

1. General Elementary Education
3 hours in advanced reading instruction plus 3-9 hours selected from El Ed 505, 506, 507, and 445G. Any remaining hours may be chosen, with advisor approval, from Ed Fnd 548, 576, 598, and Cns Ed 550.
2. Emphasis in Early Childhood Education
3 hours in advanced reading plus Erl Ed 508, 509, and 412G. (Erl Ed 493 — Student Teaching, Kindergarten must also be taken, although graduate credit is not received.)
3. Emphasis in Reading
Rdg Ed 519, 520, 521, and 522.
4. Exceptional Child Education (see requirements, as outlined elsewhere)

C. Minor Area (12 hours)

1. Subject matter (non-education) courses, selected with advisor approval, from one, two or three areas (courses from a maximum of three areas may be used in the minor).
2. Elementary Librarian emphasis (available to general elementary students) — See Department of Library Science and Instructional Media.

Master of Arts in Education (Junior High/Middle School major)

This program leads to the standard junior high school certificate and requires the following:

- A. Professional Education (minimum of 9 hours) Ed Fnd 500 plus at least six additional hours chosen, with advisor approval, from the following areas:
 1. Curriculum development
 2. Advanced study in human growth and development
 3. The psychology of learning
 4. A seminar devoted to the methods of teaching
 5. Foundations in education — sociological, psychological, philosophical, and historical
- B. Area(s) of academic specialization (minimum of 12 hours)
- C. Any remaining hours are selected, with advisor approval, to meet the individual needs of the teacher

Master of Arts in Education (Secondary Education major or minor)

This program leads to the standard high school certificate. Applicants must declare both a major and a minor (one or the other must be in secondary education). The following majors are permitted: agriculture, art, biology, business education and office administration, chemistry, economics, English, English and allied language arts area, French, geography, German, government, health, health and safety, history, home economics, industrial education, library science, math, math-science area, music, physical education, psychology, reading, science area, secondary education, social science area, Spanish, and speech.

This program permits minors in the following areas: agriculture, art, biology, business education and office administration, chemistry, distributive education, drama/theatre, economics, English, folk studies, French, geography, German, government, health, health and safety, history, home economics, industrial education, library

science, mathematics, music, physical education, physics, psychology, secondary education, sociology, Spanish and speech.

(An emphasis in exceptional child education — see requirements outlined elsewhere — is also available to the secondary education applicant for the Master of Arts in Education degree)

General requirements

- A. Professional Education (minimum of nine hours). Ed Fnd 500 plus at least six additional hours, chosen with advisor approval, from the following areas:
 1. Curriculum development
 2. Advanced study in human growth and development
 3. The psychology of learning
 4. A seminar devoted to the methods of teaching
 5. Foundations in education — sociological, psychological, philosophical, and historical.

Note: If only nine hours in professional education are completed for the secondary education option, all nine hours must be in courses open only to graduate students.

- B. Area of academic specialization (at least 12 hours); student must meet the requirements for the declared, academic major/minor, as outlined by the administering department.

Reading Major Requirements

- A. Professional Education, as above
- B. Rdg Ed 519, 520, 521, and 522 (12 hours)
- C. Non-professional Education coursework, individually prescribed (12 hours)

Master of Arts in Education (Secondary or Elementary, with an emphasis in exceptional child education)

The following curriculum leads to the Master of Arts in Education degree and endorsement of the elementary or secondary certificate for exceptional child education.

- A. Educational foundations courses (6 hours)
 - Ed Fnd 500 Research Methods
 - El Ed 503 or Sec Ed 580 Curriculum
- B. Exceptional child education courses (12 hours)
 - Exc Ed 516 Exceptional Child: Perspectives and Issues
 - Exc Ed 518 Seminar: Problems in Special Education
 - Rdg Ed 519 Foundations of Reading Instruction
 - Rdg Ed 520 Diagnosis of Reading Difficulties OR
 - Exc Ed 440G Diagnostic Instructional Planning
- C. Non-professional education courses, individually prescribed (6 hours)
 - Students majoring in EMR plus TMR must take Psy 443 — Techniques of Behavior Modification — for three of the six hours.
- D. Student teaching or lecture in lieu of student teaching
- E. Exceptional child educational courses in area of interest (9 hours)
 1. **Educable Mentally Retarded**

Exc Ed 517 Characteristics of Mental Retardation
 Two courses from:
 Exc Ed 440G Diagnostic Instructional Planning
 Exc Ed 441G Methods and Materials for Teaching the Educable Handicapped Child
 Exc Ed 442G Teaching the Educable Handicapped Young Adult

2. Educable Mentally Retarded plus Trainable Mentally Retarded

Exc Ed 415G Methods and Materials for Teaching the Trainable Mentally Retarded Child
 Exc Ed 517 Characteristics of Mental Retardation
 Exc Ed 441G Methods and Materials for Teaching the Educable Handicapped Child OR
 Exc Ed 442G Methods and Materials for Teaching the Educable Handicapped Young Adult

3. Learning Disabilities

Exc Ed 440G Diagnostic Instructional Planning
 Exc Ed 447G Nature and Needs of Children with Learning Disabilities
 Exc Ed 448G Prescriptive Teaching for Children with Learning Disabilities

4. Emotionally Disturbed

Exc Ed 449G The Emotionally Disturbed Child in the Classroom
 Exc Ed 451G Prescriptive Teaching for Individuals with Emotional Disurbance
 Psyc 440G Abnormal Psychology OR
 Psyc 540 Behavior Problems in Childhood and Adolescence

Specialist Degree in Education (Elementary Education, Secondary Education)

This post-master's degree provides opportunity for the advanced graduate student to improve the foundations and competencies for teaching. The program may also be structured to meet Rank I requirements under Kentucky's minimum foundation program of education. The following emphases or specializations are available to the elementary education major: reading, early childhood education, general curriculum and instruction. Available concentration areas for secondary education majors are science, social science, language arts, and vocational education.

In addition to meeting the admission requirements of the Graduate College, applicants must meet the following departmental requirements:

1. Three years (two years for secondary education majors) of teaching experience at the appropriate level. (For elementary education majors, up to two years of experience may be waived in favor of equivalent experience)
2. Four letters of recommendation: two from graduate faculty members and two from professional associates in administrative and/or supervisory roles.

The student's program is individually planned to include educational foundations and professional education coursework, cognate area coursework and the specialist project.

The student's graduate committee will assist in the development of the program, supervise the research project, and administer the final comprehensive examination.

Graduate Courses in Teacher Education

Early Childhood Education (Erl Ch Ed)

508 Child Development and Child Study for Elementary Teachers. 3 hours
 Prerequisite: Ed Fnd 500 or permission of instructor.
 Educational implications of major theories of child development. Includes an intensive study of a child or children and interpretation of the collected data in terms of educational techniques and practices.

509 Curriculum Trends in Early Childhood Education. 3 hours.
 Current national and international issues and problems in preschool and early elementary education with emphasis on program planning for curriculum improvement.

The following 400-level Erl Ch course may be taken for graduate credit

412G Materials and Methods in Preschools. 3 hours.
 Prerequisites: El Ed 508 and 509.
 Organization of educational programs for

kindergartens and nursery schools; planning and use of materials; individual and group needs. Lecture and lab.

543 Interactive Teaching Skills. 3 hours.
 Opportunity for elementary and secondary teachers to develop interactive teaching skills by selecting and completing two or four minicourses developed by Far West Laboratory for Educational Research and Development.

Elementary Education (El Ed)

503 Organization of the Elementary School Curriculum. 3 hours.
 Principles and practices in elementary school curriculum construction. Emphasis on forces affecting curriculum, current innovations, and trends.

505 Advanced Materials and Methods in Modern Mathematics for Elementary Teachers. 3 hours.
 Kindergarten through grade eight. Involves the conceptual, the computational and application aspects of mathematics with emphasis on the structural aspects of mathematics and on the "why" of arithmetic computation.

506 Seminar in Elementary School Science. 3 hours.
 Advanced methods and materials for teaching science in the elementary school.

507 Advanced Materials and Methods in Social Studies. 3 hours.
 Concepts and objectives, classroom organization for instruction, current strategies in teaching content, and materials available.

544 Classroom Teaching Strategies. 3 hours.
 Opportunity for elementary and secondary teachers to extend their teaching strategies by completing two of five minicourses developed by the Far West Laboratory for Educational Research and Development.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

699 Specialist Project. 6 hours.

699c Maintaining Matriculation. 1 to 6 hours.

The following 400-level El Ed courses may be taken for graduate credit

420G Reading in the Primary Grades. 3 hours.
 Prerequisite: Ed 220.
 Principles and methodologies currently in use at the primary (K-3) school levels.

421G Reading in the Intermediate Grades. 3 hours. Prerequisite: Ed 220. Principles and methodologies currently in use at the intermediate (4-6) school levels.

445G Audio-Visual Materials and Methods. 3 hours. Instruction and laboratory experience in the operation and maintenance of equipment; theory relative to effective practices in audio-visual techniques.

446G Selection, Acquisition and Evaluation of Non-Print Material. 3 hours. Prerequisite: Permission of instructor. Instruction and experience in locating sources of supply for non-print materials and use of appropriate selection aids; acquisition procedures and evaluative techniques appropriate to non-print materials. Cross-listed with LSIM.

Exceptional Child Education (Ex Ch Ed)

516 The Exceptional Child: Perspectives and Issues. 3 hours. Characteristics, needs, and problems of children who are atypical in the mental, physical, sensory, emotional, and social areas of development.

517 Characteristics of Mental Retardation. 3 hours. Prerequisite: Rdg Ed 516. Issues in mental retardation including classification, etiology, psycho-educational characteristics, sociological aspects, and programs.

518 Seminar: Problems in Special Education. 3 hours. Prerequisite: Rdg Ed 516. Issues in Special Education. Classroom experiences to develop awareness of and sensitivity to educational needs.

The following 400-level Ex Ch Ed courses may be taken for graduate credit

415G Prescriptive Programming for the Trainable Mentally Handicapped. 3 hours. Design, implementation, and evaluation of individualized programs in curricula for trainable mentally handicapped individuals.

440G Diagnostic Instructional Planning. 3 hours. Prerequisite: Sequential enrollment in Exceptional Child Education Program. Diagnosis and remediation of specific impairments to the learning process in children and youth. Use of tests, instructional planning and evaluation methods appropriate for children with learning disabilities.

441G Methods and Materials in Teaching the Educable Handicapped Child.

3 hours. Prerequisite: Sequential enrollment in Exceptional Child Education Program. Current trends in teaching the mentally retarded with emphasis on objectives, methodology and materials in effective curriculum planning.

442G Methods and Materials in Teaching the Educable Handicapped Young Adult. 3 hours. Prerequisite: Sequential enrollment in Exceptional Child Education Program. Methodology, materials, and curriculum for the older retarded individual. Emphasis on programming for successful vocational and social adjustment.

443G Behavior Theory and Application. 3 hours. Cross-listed with the Department of Psychology.

447G Nature and Needs of Children with Learning Disabilities. 3 hours. Characteristics and needs of children with learning disabilities or neurological, visual, or motor handicaps. Emphasis on current issues relating to overall programming in school and society.

448G Prescriptive Teaching for Children with Learning Disabilities. 3 hours. Affective and cognitive processes in prescriptive teaching. Emphasis on current methods and materials relating to overall programming for these children.

449G The Emotionally Disturbed Child in the Classroom. 3 hours. Emotional disturbance in the classroom including causes, characteristics, and implications for educational planning.

451G Prescriptive Teaching for Individuals with Emotional Disturbance. 3 hours. Intervention techniques for the teacher of the emotionally disturbed. Includes assessment, curriculum, methodology, and behavior management.

460G Special Problems. 1 to 3 hours. Investigation of special problem from an area of individual interest.

Reading Education (Rdg Ed)

519 Foundations of Reading Instruction. 3 hours. Analysis of the reading process with emphasis on the psychological and physiological foundations of the reading act.

520 Clinical Diagnosis of Reading Disabilities. 3 hours. The nature and causes of reading disabilities and investigation of general and specific principles and approaches to diagnosis. Actual case studies using both group and individual tests in diagnosis.

521 Correction of Reading Difficulties (Practicum). 3 hours. Instructional techniques for use with individuals or groups involved in remedial reading instruction; materials and procedures; clinical experiences with remedial students.

522 Investigations in Reading. 1, 2, or 3 hours. Prerequisite: Permission of instructor. Maximum total credit allowed 3 hours. Individual investigation of the research and descriptive literature in the field of reading.

523 Diagnostic Reading Procedures for Classroom Teachers. 3 hours. Emphasizes practical methods of reading appraisal, diagnostic procedures, and materials essential for developing teaching strategies in reading instruction.

620 Advanced Diagnosis of Reading Problems. 3 hours. Provides experience in advanced testing materials in diagnosing severely retarded readers.

624 Seminar in Reading Problems. 3 hours. Covers research and descriptive literature related to specific reading problems.

Secondary Education (Sec Ed)

528 Seminar in the Teaching of Secretarial Subjects. 3 hours. Materials, methods, techniques, and devices for teaching typewriting, shorthand, and the related skilled subjects. Review and application of research findings to this area.

529 Seminar in the Teaching of Bookkeeping and Basic Business. 3 hours. Purposes, materials, methods, and techniques for teaching bookkeeping and basic business. Review and application of research findings to this area.

530 Seminar in English Education. 3 hours. Prerequisite: Permission of the instructor. Current methods and materials for junior and senior high school English courses; research and professional trends.

531 Seminar in Art Education. 3 hours. Prerequisite: Permission of the instructor. Curricular trends in art education; methods and materials for teaching and supervising art in the public schools.

532 Seminar in Foreign Language Education. 3 hours. Prerequisite: Permission of the instructor. Trends in foreign language education methods and materials for teaching a foreign language at the secondary and advanced levels of instruction.

533 Seminar in Industrial Arts Education. 3 hours. Prerequisite: Permission of the instructor. Includes historical development, exploration of curricular trends and innovations, methods and materials of teaching, and current research and problems related to teaching industrial arts.

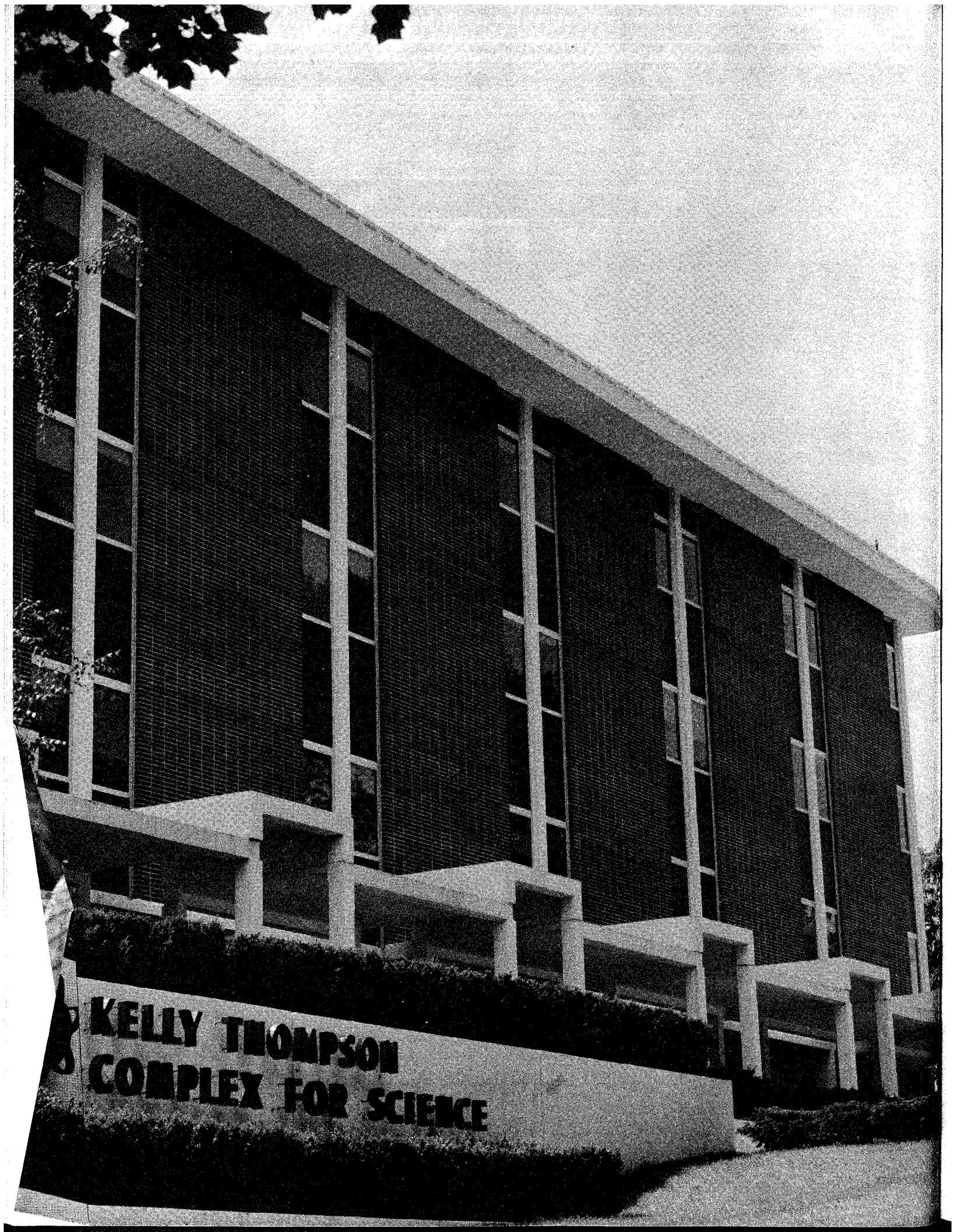
534 Seminar in Mathematics Education. 3 hours. Prerequisite: Permission of the instructor.

	Covers newer concepts in curriculum and methods of instruction, current research and problems in mathematics education.		
535	Seminar in Music Education. 3 hours. Historical, philosophical and psychological foundations of music education: application of the principles of education to the music program. Emphasis on current trends in educational thought and their implications for instruction, supervision, administration and evaluation in music education.	539	Seminar in Agriculture Education. 3 hours. Current problems in the organization, teaching supervision, administration and evaluation of agricultural education programs. Investigation, papers, and reports.
536	Seminar in the Teaching of Physical Education. 3 hours. Traditional and recent techniques, methods and knowledge in the practical application of scientific principles to the teaching of physical education and the coaching of sports and games. Investigation in specific problems through lectures, discussion groups, demonstrations, and use of audiovisual aids.	540	Seminar in Home Economics Education. 3 hours. Prerequisite: HE 572 or consent of instructor. Current trends in family life education with emphasis on individualized instruction, team teaching and audiovisual aids and their use in improved learning.
537	Seminar in Science Education. 3 hours. Prerequisite: Permission of instructor. Includes the history and comparative study of science teaching, curriculum and course content changes, materials available, evaluation, methods in science teaching, professional organizations, and research in science education.	541	School Media Programs. 3 hours. Historical development, exploration of curricular trends and innovations, organizations for library services, materials and equipment available, and problems in school librarianship.
538	Seminar in Social Studies Education. 3 hours. Prerequisite: Permission of instructor. Covers newer concepts in curriculum and methods of instruction as well as current research in social studies education.	542	Seminar in Speech Education. 3 hours. Includes historical development, exploration of curricular trends and innovations and current research and problems.
		543	Interactive Teaching Skills. 3 hours. Cross-listed with EI Ed
		544	Classroom Teaching Strategies. 3 hours. Cross-listed with EI Ed
		571	Junior High School Curriculum. 3 hours. Examination of programs designed for the young adolescent. Functions, organization, planning and evaluation of the curriculum. Includes special curricular areas.
		580	The Curriculum. 3 hours. Philosophy, principles and practices of curriculum improvement.
		599	Thesis Research and Writing. 6 hours.
		599c	Maintaining Matriculation. 1 to 6 hours.
		699	Specialist Project. 6 hours.
		699c	Maintaining Matriculation. 1 to 6 hours.

The following 400-level Sec Ed courses may be taken for graduate credit

444G	Reading Instruction in Junior and Senior High Schools. 3 hours. Principles, psychology and methodologies for teaching both the general and specialized reading skills in the secondary grades.
455G	The Junior High School. 3 hours. The junior high/middle school and its role in American education. Philosophy, functions, and total program of early adolescent education.
477G	Materials and Methods in Library Science. 3 hours. Prerequisites: Ed 280, Psy 220. Laboratory experiences for the prospective librarian.





**KELLY THOMPSON
COMPLEX FOR SCIENCE**

COLLEGE OF SCIENCE AND TECHNOLOGY

DEPARTMENTS

Agriculture
Biology
Chemistry
Engineering Technology
Geography and Geology
Mathematics and Computer Science
Physics and Astronomy

DEGREES OFFERED

Master of Public Service (Agriculture, City and Regional Planning)
Master of Science (Agriculture, Biology, Chemistry, Geography, Mathematics, Physics)
Master of Science in Engineering Physics

JOINT-DOCTORAL (With University of Louisville)

Doctor of Philosophy
(Aquatic Biology, Chemistry of Free Radicals)

Majors and Minors Offered Under the Master of Arts in Education Degree

Agriculture
Biology
Chemistry
Geography
Mathematics
Mathematics-Science (major only)
Physics (minor only)
Science (major only)

Major Offered Under the Specialist in Education Degree

Vocational Agriculture

DEPARTMENT OF AGRICULTURE

ENVIRONMENTAL SCIENCE AND TECHNOLOGY BUILDING ROOM 269 (502) 745-3151

L. D. Brown, Head

Graduate Faculty

Professors: L. Brown, E. Gray, W. Hourigan, R. Johnson,

J. McGuire, W. Normand, W. Stroube

Associate Professors: A. Bedel, G. Jones, R. Schneider,

J. Worthington

Degrees Offered: Master of Science in Agriculture, Master of Arts in Education (Agriculture major or minor), Master of Public Service (Agriculture option), Specialist in Education (for secondary teachers in the area of vocational agriculture).

Master of Science in Agriculture

Applicants for this degree should have an undergraduate major in agriculture or a related science. The research tool requirement must be fulfilled by demonstrating competency in research techniques. Both Plan A (thesis) and Plan B (non-thesis) are available. Students who expect to continue graduate work toward an advanced degree should pursue Plan A.

Master of Arts in Education (Agriculture major or minor)

This program provides graduate coursework in agricultural

Graduate Courses in Agriculture

533 Physiology of Lactation. 3 hours.
Prerequisite: Ag 243, 330 or Biol 430 or permission of instructor.
Anatomy of the mammary gland, hormonal control of mammogenesis, initiation and maintenance of milk secretion, factors affecting level and composition of milk, synthesis of milk. Lecture, 2 hours; lab, 2 hours.

545 Ruminant Nutrition. 3 hours.
Prerequisite: Ag 448, Biol 446 or equivalent, or permission of instructor.
Rumen development and function, products of fermentation, nutrient requirements, absorption and metabolism, symptoms of deficiency and toxicity.

546 Advanced Animal Breeding. 3 hours.
Prerequisites: Ag 446 and 428 or permission of instructor.
Application of population genetics to the economic improvement of farm animals, phenotypic and genetic relationships,

role of selection in changing populations, formulation and application of breeding plans. Lecture, 2 hours; lab, 2 hours.

547 Advanced Animal Nutrition. 3 hours.
Prerequisite: Ag 448, Biol 446 or equivalent, or permission of instructor.
Individual nutrient requirements of monogastric animals, structure, metabolism and function of each nutrient class, interrelationship of nutrient classes, deficiency and toxicity symptoms.

551 Advanced Soil Fertility. 3 hours.
Prerequisite: Ag 351 or permission of instructor.
Evaluation of soil fertility and fertilizers; soil-plant relationships; composition and properties of soil in relation to ion intake, nutrition and growth of plants.

561 Agricultural Production Economics. 3 hours.
Production and cost functions, programming and decision-making principles and their application to agriculture.

583 Curriculum Development and Determining Content in Vocational

ture and meets certification requirements. The student majoring in agriculture shall take a minimum of 18 hours in the major area; the student minoring in agriculture shall take a minimum of 12 hours in agriculture and related areas as designated by the departmental advisor. The remaining hours, in both cases, will be taken in professional education.

Master of Public Service (Agriculture option)

This program is designed to meet the needs of students in, or planning to enter, agricultural or agriculturally oriented professions that involve public service (e.g., agricultural extension, conservation, governmental-agricultural programs, and agricultural representatives of banks and other financing organizations).

The applicant should have an undergraduate major in agriculture or a closely related area or be engaged in an agriculturally related profession of the public service nature.

All candidates for the Master of Public Service degree (regardless of the option chosen) are required to complete a core area of nine to 12 hours including PSI 540 — Public Administration (required of all).

The remaining hours of the core may be selected from the following courses:

Econ 550 — Government Financial Policy and Administration

Geog 580 — Problems in Urban Geography

Govt 511 — Seminar in State and Local Government

Soc 565 — Studies in the Community

Psy 551 — Social Psychology of Organizations

In addition to the core, 15 of the required 30 hours should be in agriculture or in related departments approved by the student's advisor. At least eight hours of agriculture should be in courses open only to graduate students.

Specialist in Education (See Department of Teacher Education)

Agriculture. 3 hours.

Principles of curriculum development, a local survey, and development of a course of study.

589 Special Problems in Agriculture Education. 1 to 3 hours.

Prerequisite or corequisite: Student teaching.
Supervised individual study in vocational agriculture education. May be repeated to a maximum of 6 hours.

590 Experimental Design and Data Analysis. 3 hours.

Prerequisite: Ag 491 or permission of instructor.
Statistical consideration in experimental design: Covariance, multiple regression, factorial design, incomplete block designs, etc.

597 Special Problems in Agriculture.

1 to 3 hours.
Prerequisites: Graduate standing and permission of instructor.
Supervised individual study in agriculture. May be repeated to a maximum of 9 hours.

598 Seminar. 1 hour.
Problems and research in agriculture. Required of all graduate students. May be repeated to a maximum of 3 hours.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

675 Advanced Topics in Agriculture. 1 to 3 hours.
Prerequisites: Graduate standing and permission of instructor.
Significant problems and scientific developments of current interest. Special topic titles assigned. May be repeated to a maximum of 10 hours with different topics.

The following 400-level courses may be taken for graduate credit

400G Plant Physiology. 3 hours.
Prerequisites: Biol 248, 249 and two semesters of chemistry.
The function of plant systems. Lecture, 2 hours; lab, 2 hours.

410G Crop Protection. 3 hours.
Prerequisites: Chem 107 or equivalent and two plant science courses.
Control of insects, weeds, diseases, and animal pests which reduce the yields or values of Kentucky crops.

411G Turfgrass Management. 3 hours.
Prerequisite: Ag 110.
Adaptation, identification, uses and fundamental principles for establishing and maintaining quality turf.

412G Modern Fruit Science. 3 hours.
Prerequisite: Ag 311 or 312 or permission of instructor.
Selected problems in planting, management, production and varieties of deciduous fruits and nuts.

413G Principles and Practices of Plant Propagation. 3 hours.
Prerequisite: Biol 248 or Ag 312 or permission of instructor.
Fundamental principles and basic techniques of plant propagation.

414G Plant Breeding. 3 hours.
(Cross-listed with Biology 414)
Prerequisite: Biol 327 or permission of instructor.
Methods and techniques in the application of genetic principles to improve crop plants.

416G Commercial Floriculture I. 3 hours.
Prerequisite: Ag 415 or permission of instructor.
Cultural requirements and propagation of plants commonly grown during the fall season in commercial greenhouses. Lecture, 2 hours; lab, 2 hours.

417G Commercial Floriculture II. 3 hours.
Prerequisite: Ag 415 or permission of instructor.
Cultural requirements and propagation of

plants commonly grown during the spring season in commercial greenhouses. Lecture, 2 hours; lab, 2 hours.

418G Landscaping For Modern Living. 3 hours.
Prerequisite: Ag 312 or permission of instructor.
Blending of house and lawn, building materials, and plant selection to create attractive surroundings for everyday living.

419G Vegetable Production. 3 hours.
Prerequisites: Ag 110, 250, and Biol 148.
Production and utilization of vegetable crops with emphasis on environmental factors influencing growth and handling of vegetables.

421G Forage Crops. 3 hours.
Prerequisites: Ag 110, 250, and Biol 148.
Distribution, improvement, establishment, production and storage of forage crops, soil-plant-animal complex as relates to the morphology, physiology and utilization of forage.

422G Field Crops. 3 hours.
Prerequisites: Ag 110, 250, and Biol 148 or permission of instructor.
Distribution, improvement, morphology, culture, harvesting, and utilization of field crops.

428G Population Genetics. 3 hours.
(Cross-listed with Biology 428).
Prerequisite: Biol 327 or equivalent.
Application of statistical principles to biological population in relation to give frequency, zygotic frequency, mating systems and the effects of selection, mutation and migration on equilibrium population.

430G Dairy Technology. 3 hours.
Prerequisite: Ag 140.
Dairy cattle in modern agriculture. Nutrition, breeding and management of dairy cattle.

438G Dairy Microbiology. 3 hours.
Prerequisite: Biol 207 or equivalent, or permission of instructor.
Microbiological principles and their application to production and processing of milk and milk products, identification, and control of microorganisms in dairy products.

443G Physiology of Reproduction in Domestic Animals. 3 hours.
Prerequisite: Ag 243 or Biol 330 or permission of instructor.
Physiology and endocrinology of reproductive systems; anatomical, physiological, and biochemical basis of reproduction; artificial breeding, synchronized estrus and related topics.

446G Animal Breeding. 3 hours.
Prerequisites: Ag 140 and Biol 148. Application of genetic and statistical principles to breeding and improvement of farm animals; the role of selection in changing populations.

448G Principles of Animal Nutrition. 3 hours.
Prerequisite: Ag 345.
Principles of nutrition basic to animal feeding, chemical and physiological aspects of nutrition, techniques in nutrition research.

449G Laboratory Methods and Techniques in Animal Nutrition. 3 hours.
Prerequisites: Ag 448, Chem 122 or equivalent, or permission of instructor.

Laboratory methods for determining major minerals and vitamins in feeds, proximate analysis of feeds, products of fermentation, feed residues and contamination. Lecture, 1 hour, lab 4 hours.

450G Soil Chemistry. 3 hours.
Prerequisites: Ag 250, Chem 107 or 122, or permission of instructor.
Analytical techniques in soil chemistry and soil fertility studies and nutrient determination; colloidal systems; chemical properties related to plant nutrition.

451G Soil Management. 3 hours.
Evaluation of characteristics which determine the productive potential of soils and use of this knowledge and the prevailing climate to maximize production or net income.

452G Soil Microbiology. 4 hours.
Prerequisites: Ag 250 and Biol 207, or permission of instructor.
Soil microbial populations and systems and their influence on plant nutrition. Soil organic matter, its decomposition and associated microorganisms; oxidation-reduction process; nitrogen fixation.

453G Soil Formation, Classification and Mapping. 3 hours.
Prerequisite: Ag 250.
Soil origin; methods of soil survey; classification schemes; profile description, mapping and interpretation information, with emphasis on Kentucky soils.

454G Land-Use and Conservation. 3 hours.
Prerequisite: Ag 250 or permission of instructor.
Economic utilization of land for agricultural recreation and public purposes; interpretation and application of soil conservation; public and industrial use; practice in designing land-use maps.

455G Soil Physics. 3 hours.
Prerequisites: Ag 250, Physics 201 and 207, or permission of instructor.
Relation of physical properties of soil to plant growth, particle-size distribution, soil structure, moisture, and temperature.

460G Agricultural Policy. 3 hours.
Prerequisite: Ag 260.
The place of agriculture in the national economy; objectives of agricultural policy; appraisal and proposed agricultural programs; legislation for economic action.

461G Advanced Farm Management. 3 hours.
Prerequisite: Ag 361 or permission of instructor.
Identification, analysis, and solution of problems of farm organization and operation. Case studies and field trips to situation farms in South Central Kentucky. Lecture, 2 hours; lab 2 hours.

463G Agricultural Finance. 3 hours.
Prerequisite: Ag 361 or permission of instructor.
Farm finance problems including capital requirements, investment decisions, budgeting techniques, etc. Lending agencies and alternative means of acquiring capital.

470G Agricultural Materials Handling. 3 hours.
Prerequisite: Ag 374 or permission of instructor.
Principles of operation. Functional analysis and design of agricultural handling systems. Includes conveyance, drying, sizing, mixing and sorting machines for handling of farm crops and animals.

471G Farm Machinery. 3 hours.
Prerequisite: Ag 270 or permission of instructor.
Design, principles, operation, selection and management of agricultural tillage and harvesting equipment.

475G Selected Topics in Agriculture. 1 to 3 hours.
Prerequisite: Permission of instructor.
Design, principles, operation, selection and management of agricultural tillage and harvesting equipment.

478G Geography of Agriculture. 3 hours.
Prerequisite: Geog 250 or Ag 260, or permission of instructor.
Regional patterns of world agricultural production. Ecological and economic factors and cultural preferences as related to the spatial patterns of crops and agricultural types.

482G Development of Agricultural Resources for Rural Recreation. 3 hours.
Developing facilities for recreational enterprises. Topics include enterprise selection, program planning, site selection, financing, and construction.

486G Agriculture Sales and Service. 3 hours.
Exploration, investigation, and application of principles and concepts of sales and service applied to agriculture.

487G Methods in Teaching Vocational Agriculture. 3 hours.
Course organization, methods, farming programs, employment training, and Future Farmers of America activities.

488G Young Farmer and Adult Education in Agriculture. 4 hours.
Organization and program planning for classes in post-high school vocational agriculture and technical programs for young and adult farmers.

491G Data Analysis and Interpretation. 3 hours.
Prerequisite: Math 100 or permission of instructor.
Statistical models and use of samples, variation, statistical measures, distributions, tests of significance, analysis of variance, regression, correlation and chi square as related to interpretation and use of scientific data.

BIOCHEMISTRY

THOMPSON COMPLEX - CENTRAL WING
(502) 745-3457

Graduate Faculty

Professor: R. Farina

Associate Professors: J. Craig, D. Hartman, M. Houston, F. Toman

Biochemistry is the study of the most intricate of all chemical systems, living matter, and attempts to determine the chemical nature and chemical reactions in protoplasm — the basic material of living matter. Training in biochemistry provides many opportunities in teaching, research, and public service and provides excellent preparation for many other areas of basic and applied sciences.

Biochemistry courses are administered jointly by the Departments of Biology and Chemistry. The student should enroll either in the Department of Biology or the Department of Chemistry, depending upon the major emphasis. Enrollment requires the completion of proper prerequisites in biology and chemistry.

For further information, contact Dr. Toman in the Department of Biology or Dr. Hartman in the Department of Chemistry.

Graduate Courses in Biochemistry

562 Intermediate Metabolism. 3 hours.
Prerequisite: Biochem 446.
The metabolic pathways of carbohydrates, lipids, and proteins. Lecture. (Fall)

563 Enzymology. 3 hours.
Prerequisites: Biochem 446 and 447.
Includes kinetics and mechanisms for reactions of biological significance. Lecture. (On demand)

564 Enzymology Laboratory. 1 hour.
Corequisite or prerequisite: Biochem 563.
The techniques of enzyme isolation and purification coupled with kinetic studies. Three hours per week. (On demand)

580 Plant Biochemistry. 3 hours.
Prerequisite: Chem 314 or 340.
The occurrence, properties, function, and metabolism of many organic compounds found in plants. Lecture. (Summer of odd-numbered years)

The following 400-level courses may be taken for graduate credit

400G Plant Physiology. 3 hours.
See Department of Biology.

411G Cell Biology. 3 hours.
See Department of Biology.

412G Cell Biology Laboratory. 1 hour.
See Department of Biology.

446G Biochemistry. 3 hours.
Prerequisite: Chem 314 or 340.
Biochemical compounds and their role in metabolism. Lecture. (Fall, spring)

447G Biochemistry Laboratory. 2 hours.
Corequisite or prerequisite: Biochem 446.
Selected experiments which illustrate biochemical principles. Six hours per week. (Spring)

462G Bioinorganic Chemistry. 3 hours.
Prerequisite: Chem 314 or 340.
The coordinating properties and reactivity of metal ions in living organisms. Lecture. (Fall)

467G Biochemistry II. 3 hours.
Prerequisite: Biochem 446.
The reactions of living systems and an introduction to the mechanisms and energetics of metabolism. Lecture. (Spring)

DEPARTMENT OF BIOLOGY

THOMPSON COMPLEX — NORTH WING
ROOM 201 (502) 745-3696

Jeff W. Jenkins, Acting Head

Graduate Faculty

Professors: D. Bailey, E. Beal, G. Dillard, J. Jenkins, K. Nicely, R. Prins, H. Puckett, H. Shadowen
Associate Professors: T. Coohill, L. Elliott, S. Ford, L. Gleason, E. Hoffman, M. Houston, R. Hoyt, J. Skean, F. Toman, J. Winstead, A. Yungbluth
Adjunct Professor: L. Lockwood

Degrees Offered: Master of Science in Biology, Master of Arts in Education (Biology major or minor), Doctor of Philosophy (in cooperation with the University of Louisville) in Aquatic Biology.

Admission requires the equivalent of an undergraduate major in biology including two laboratory courses each in inorganic chemistry and physics and one course in organic chemistry. Exceptions are made in favor of superior students whose undergraduate degrees are in allied subject matter fields.

Master of Science in Biology

Both Plan A (Thesis) and Plan B (non-thesis) are available. Students needing specialization within biology and desiring a related research experience should follow Plan A. The thesis is based upon original research conducted under the direction of a departmental graduate faculty member. The Plan B program is designed for students who desire additional training for biological or biologically-related professions. Candidates following Plan B are required to take Biology 516 — Investigations in Biology (2 or 3 hours) as an introduction to research.

The research tool, under both plans, may be met by demonstrating (1) a reading knowledge of a foreign language or (2) competency in statistical methodology, computer programming, or electron microscopy.

Graduate Courses in Biology

501 Biological Perspectives I. 3 hours.
Prerequisite: Science area major or minor.
Designed for in-service teachers. Advances in the biological sciences; practical applications of biological principles. Includes the chemical and cellular basis of life, metabolism, reproduction, and development. Not acceptable to MS in biology. Lecture, 2 hours; lab, 2 hours. (Fall semesters and summer term of even-numbered years)

502 Biological Perspectives II. 3 hours.
Prerequisite: Science area major or minor; Biol 501 desirable.
Designed for in-service teachers. Advances in the biological sciences; practical applications of biological principles. Includes the origin and early evolution of life, viruses and monera, the plant kingdom, the animal kingdom, biological evolution, and ecology. Not applicable to MS in biology. Lecture, 2 hours; lab, 2 hours. (Spring semesters and summer term of odd-numbered years)

505 Biogeography. 3 hours.
See Department of Geography and Geology.

511 Limnology. 4 hours.
Prerequisite: Permission of instructor.
Physical, chemical, and biological aspects of bodies of freshwaters with emphasis on water as a biological environment. Lecture, 2 hours; lab, 4 hours. (Fall of even-numbered years)

515 Plant Ecology. 4 hours.
Prerequisites: Biol 248 and permission of instructor.
Ecological concepts and their application to experimental approaches for studying the interaction of plants with their environment. Lecture, 2 hours; lab, 4 hours. (Spring of even-numbered years)

516 Investigations in Biology. 1 to 3 hours.
Prerequisite: Permission of research project director.
Research project completed under faculty supervision. Not applicable to MS Plan A. (Every semester and summer)

Master of Arts in Education (Biology major or minor)

This program is designed for the preparation and strengthening of secondary school science teachers. The major requires 21 hours of coursework in biology, and the minor requires 12 to 15 hours in biology. In both cases, the remainder of the required 30 hours is taken in professional education.

Students who desire a breadth of coursework in the sciences may major in the Science Area of Concentration under the MA in Education program. Students following this option must have all biology courses approved by the appropriate advisor in the Department of Biology.

Doctor of Philosophy

A cooperative graduate program leading to the Doctor of Philosophy with specialization in Aquatic Biology is administered by the departments of biology of Western Kentucky University and the University of Louisville. Interested students may obtain detailed information about the program from:

Dr. J. E. Winstead
Department of Biology
Western Kentucky University
Bowling Green, Ky. 42101
OR
Dr. B. L. Monroe
Department of Biology
University of Louisville
Louisville, Ky. 40208

Adjunct Faculty (University of Louisville)

Professors: A. Hotchkiss, A. Krumholz, L. Monroe, E. Neff, E. Wiedeman
Associate Professor: J. Karpoff

TECH AQUA BIOLOGICAL STATION

Western Kentucky University is a charter member of the Tech Aqua Development Consortium which operates a biological station on Center Hill Lake near Cookeville, Tennessee. A variety of field biology courses is offered during two five-week sessions each summer. Students interested in the Tech Aqua Program should contact Dr. H. Shadowen of the Department of Biology for additional information.

527	Advanced Genetics. 4 hours. Prerequisite: Biol 327 or permission of instructor. Advanced Mendelian principles and post-Mendelian genetics with emphasis on recently developed areas of research. Lecture 2 hours; lab, 4 hours. (Spring of odd-numbered years, summer of even-numbered years)	600	Internship in College Instruction. 1 hour. Designed for prospective teachers of biology. Staff direction in preparing and giving lectures. Includes analyses of presentation and techniques. May be repeated.	Variation, phylogeny, classification and identification of flowering plants. (Summer of even-numbered years)
540	Algal Systematics and Ecology. 4 hours. Prerequisite: Biol 419 or permission of instructor. Systematics and ecology of freshwater algae with emphasis on the composition, periodicity, and succession of regional phytoplankton and periphyton communities. Lecture, 2 hours; lab, 4 hours. (Fall of even-numbered years)	675	Advanced Topics in Biology. 1 to 3 hours. Selected topics in Biology. (On demand)	418G Mycology. 4 hours. Pre/corequisites: A comparative morphological and physiological study of fungi. Lecture, 3 hours; lab, 2 hours. (Fall of odd-numbered years)
550	Aquatic Invertebrates. 3 hours. Prerequisite: Biol 408 or permission of instructor. Taxonomy and ecology of invertebrates in lakes, ponds, and streams. Lecture, 1 hour; lab, 4 hours. (On demand)	799	Doctoral Research. 1 to 6 hours.	419G Freshwater Algae. 3 hours. Morphology and systematics of freshwater algae. Emphasis on regional flora. Lecture, 1 hour; lab, 4 hours. (Spring of even-numbered years)
560	Advanced Parasitology. 4 hours. Prerequisite: Biol 460 or permission of instructor. The culture, determination of physiological requirements, experimental infection of hosts, and host-specificity of parasites. Lecture, 2 hours; lab, 4 hours. (Spring of odd-numbered years)	799c	Maintaining Matriculation. 1 to 6 hours.	428G Population Genetics. 3 hours. See Department of Agriculture.
562	Intermediary Metabolism. 3 hours. See Biochemistry.	400G	Plant Physiology. 3 hours. Prerequisites: Biol 248, 249, and two semesters of chemistry. The functioning of plant systems. Lecture, 2 hours; lab 2 hours. (Fall of odd-numbered years)	431G Radiation Biophysics. 4 hours. See Department of Physics and Astronomy.
563	Enzymology. 3 hours. See Biochemistry.	404G	Techniques and Theory of Electron Microscopy. 3 hours. Fundamentals of electron microscopy including basic theory, techniques for specimen preparation and photography and operation of the electron microscope. Requires independent research project involving interpretation of data obtained by using the electron microscope. Lecture, 2 hours; lab, 2 hours. (Every semester and summer)	432G Advanced Animal Physiology. 3 hours. Prerequisites: Biol 330, 331. Selected systems and topics in physiology with emphasis on the biophysical approach. Lecture. (Spring)
564	Enzymology Laboratory. 1 hour. See Biochemistry.	407G	Virology. 3 hours. Prerequisites: Biol 158 and 159, or permission of instructor. Bacterial, animal, and plant viruses with special emphasis on the chemistry and replication of bacterial viruses. (Spring of even-numbered years, summer of odd-numbered years)	436G Biophysics Seminar. 1 hour. See Department of Physics and Astronomy.
570	Immunology. 4 hours. Prerequisite: Permission of instructor. The biology of the immune response; the mechanism, manipulation, and effects of this major means by which higher animals maintain their organic integrity. Lecture, 2 hours; lab, 4 hours. (Spring of even-numbered years)	408G	Invertebrate Zoology. 4 hours. Prerequisites: Biol 258, 259. Phyla of invertebrate animals, including their taxonomy, morphology, physiology, development, and evolution. Lecture, 2 hours; lab, 4 hours. (Spring)	446G Biochemistry. 3 hours. See Biochemistry.
580	Plant Biochemistry. 3 hours. Prerequisite: Chem 314 or 342. The occurrence, properties, function, and metabolism of organic compounds found in plants. Lecture. (Summer of odd-numbered years)	411G	Cell Biology. 3 hours. Prerequisites: Biol 148, 149 and Organic Chemistry. Morphological and chemical makeup of cells, physical and chemical properties of the cell and modern techniques for investigation of cellular functions. Lecture. (Every semester and summer)	447G Biochemistry Laboratory. 2 hours. See Biochemistry.
591	Aquatic Biology. 4 hours. Prerequisite: Permission of instructor. Plant and animal communities of freshwater lotic and lentic habitats. Lecture, 2 hours; lab, 4 hours. (Fall of odd-numbered years)	412G	Cell Biology. 1 hour. Pre/corequisite: 411G. Laboratory correlated with Biol 411G. Two hours per week. (Every semester and summer)	456G Ichthyology. 4 hours. Prerequisites: Biol 258, 259, and permission of instructor. Fishes of the world, their physiology, structure, behavior, and ecology. Emphasis on the collection and identification of freshwater species of Kentucky. Lecture, 2 hours; lab, 4 hours. (Fall of even-numbered years)
592	Freshwater Ecology. 4 hours. Prerequisite: Permission of instructor. Principles of ecology employing the aquatic ecosystem as the area of investigation. (Summers on demand)	416G	Systematic Botany. 4 hours. Prerequisite: Biol 348 or permission of instructor.	458G Fishery Biology. 3 hours. Prerequisite: Permission of instructor. Biological aspects of population of freshwater fishes. Emphasizes reproduction and development, food and feeding habits, pollution effects, etc. Lecture, 2 hours; lab, 2 hours. (Spring of odd-numbered years)
598	Graduate Seminar. 1 hour. Special topics in biology.			459G Mammalogy. 3 hours. Prerequisites: Biol 258, 259. Taxonomy, life history and ecology of the mammals. Laboratory work includes field studies and collection and study of specimens in the laboratory. Lecture, 2 hours; lab, 2 hours.
599	Thesis Research and Writing. 6 hours.			460G Parasitology. 4 hours. Prerequisites: Biol 258, 259. The morphology, physiology, life histories, control and economic significance of representative species. Lecture, 2 hours; lab, 4 hours. (Fall)
599c	Maintaining Matriculation. 1 to 6 hours.			462G Bioinorganic Chemistry. 3 hours. See Biochemistry.

communication and regulation. (Spring of even-numbered years)

465G Endocrinology. 1 hour.
Corequisite: Biol 464G.
Laboratory correlated with Biology 464G.
Two hours per week (Spring of even-numbered years)

467G Biochemistry II. 3 hours.
See Biochemistry.

470G Pathogenic Microbiology. 4 hours.
Prerequisites: Biol 309, 310, and permission of instructor.
Organisms causing disease with emphasis on bacteria. Includes pathogenic bacteria, viruses, rickettsiae, fungi and protozoa. Lecture, 2 hours; lab, 4 hours. (Fall of even-numbered years)

472G Food Microbiology. 4 hours.
Prerequisites: Biol 158 and 159 or 207 and 208.
Preservation, fermentation and spoilage of foods including a study of food and milk microbiology. Lecture, 2 hours; lab, 4 hours. (Spring of even-numbered years)

475G Selected Topics in Biology.
1 to 3 hours.
Prerequisite: Permission of instructor.
Significant problems and developments of current interest in biology. (Every semester and summer)

477G Morphology of Non-Vascular Plants.
4 hours.
Prerequisites: Biol 158, 159 and 248, 249.
Structure, development and phylogenetic relationships of the algae, fungi and bryophytes. Lecture, 3 hours; lab, 2 hours. (Fall)

478G Morphology of Vascular Plants.
4 hours.
Prerequisites: Biol 248 and 249 or 477.
Structure, development and phylogenetic relationships of the primitive vascular plants, gymnosperms and angiosperms. Lecture, 2 hours; lab, 4 hours. (Spring of odd-numbered years)

485G Field Biology. 3 hours.
Two-week camping field experience on a specific biological topic, preceded and followed by introductory and evaluative sessions. (Offered only in May or summer sessions)

491G Data Analysis and Interpretation.
3 hours.
See Department of Agriculture.

DEPARTMENT OF CHEMISTRY

THOMPSON COMPLEX — CENTRAL WING
ROOM 444 (502) 745-3547

Gordon Wilson, Head

Graduate Faculty

Professors: R. Farina, N. Holy, J. Reasoner, C. Wilkins, G. Wilson

Associate Professors: J. Craig, D. Hartman, C. Henrickson, N. Hunter, E. Pearson, J. Riley, L. Shank

Degrees Offered: Master of Science in Chemistry, Master of Arts in Education (Chemistry major or minor), Doctor of Philosophy in Chemistry (in cooperation with the University of Louisville).

Master of Science in Chemistry

Candidates for admission to this program must submit evidence of satisfactory completion of undergraduate curricula in chemistry. Graduates of American colleges and universities are urged to submit, at the time of application, test scores from the Graduate Record Examination Advanced Test in Chemistry and the Graduate Record Examination Aptitude Test. Students admitted without these scores should take the tests during their first semester on campus. Graduates of foreign colleges and universities are required to submit test scores from Graduate Record Exam (Aptitude Test), Graduate Record Exam (Advanced Test in Chemistry), and the Test of English as a Foreign Language (TOEFL) as a part of their applications for admission to graduate studies in chemistry.

At the beginning of each semester the Department administers a series of entrance examinations to all incoming graduate students in chemistry. These examinations cover the areas of undergraduate instruction in analytical, inorganic, organic, and physical chemistry. Students whose test scores indicate weakness in one or more areas will be required to complete satisfactorily the appropriate undergraduate courses (not for graduate credit).

Requirements for the MS degree in chemistry constitute a minimum of 24 hours of coursework other than research, including one course each from four of the five major areas of chemistry: analytical, biochemistry, inorganic, organic, and physical. Students electing biochemistry must take or have taken Chem. 446G and 467G or equivalent to satisfy this requirement. In addition, Chem. 435G is required for all students who have not successfully completed an undergraduate instrumental methods course. All graduate students will take Chem. 598 (seminar) each semester; a minimum of two seminars is required, with one hour of credit being applied toward the degree.

Candidates for this degree are expected to take at least 18 hours of coursework within the Department of Chemistry. At least half of these hours must be in courses open only to graduate students (500 level or above). A student wishing to pursue an interdisciplinary program of study may obtain permission from the Head of the Department of Chemistry to take less than 18 hours in chemistry, provided that the "outside" coursework is in an allied science and that all other departmental requirements are met. Candidates for the MS must maintain a grade point average of at least 3.0 in their chemistry courses, including research.

A thesis is required and is based on the results of an experimental laboratory investigation performed under the direction of a member of the graduate faculty within the Department of Chemistry. The research tool may be met by demonstrating the ability to translate a modern foreign language (German, Russian, or French). If the candidate elects another research tool in lieu of the language requirement, it must be approved by his/her research advisor and the head of the Chemistry Department.

Master of Arts in Education (Chemistry major or minor)

This program is designed especially for the preparation and strengthening of secondary school science teachers.

For a subject-matter major in chemistry, the MA in Education student must complete a minimum of 12 hours of coursework in chemistry. The remaining six hours of the 18-hour major may be taken in chemistry or in a related subject-matter area. The student pursuing a major in an allied subject-matter area may qualify for a minor in chemistry with the completion of a minimum of eight hours of coursework in chemistry. Students who have not previously completed a year of physical chemistry are strongly urged to take Chemistry 350 and 352; with prior approval these courses may be counted for credit toward the MA in Education degree.

Students desiring a breadth of coursework in the sciences may major in the Science Area of Concentration. The chemistry courses taken under this option must be approved by the advisor in the science area and by the advisor in secondary education.

Doctor of Philosophy

A cooperative graduate program leading to the Ph.D. with specialization in chemistry of free radicals and spectroscopy is administered by the Departments of Chemistry of Western Kentucky University and the University of Louisville.

Graduate Courses in Chemistry

500	Fundamentals of Chemistry. 3 hours. Prerequisite: Undergraduate minor in chemistry. Fundamental principles, theories, and laws of chemistry. (Not applicable to the MS degree)	Modern synthetic methods used in organic chemistry.	Modern topics in analytical, biological, inorganic and physical chemistry. May be repeated with a different topic.
502	Fundamentals of Modern Chemical Analysis. 3 hours. Prerequisite: Undergraduate minor in chemistry. Modern methods of chemical analysis including an introduction to instrumental analysis. (Not applicable to the MS degree)	541 Theoretical Organic Chemistry. 3 hours. Prerequisites: Chem 352 and 440 or permission of instructor. Modern theories of organic reaction pathways.	799 Doctoral Research in Chemistry. 1 to 6 hours.
503	Fundamentals of Modern Chemical Analysis Laboratory. 1 hour. Corequisite: Chem 502. Includes experiments using the instruments and techniques discussed in the lecture.	550 Chemical Thermodynamics. 3 hours. Prerequisites: Chem 352 and Math 228 or equivalents. Thermodynamics with emphasis on chemical applications.	799c Maintaining Matriculation. 1 to 6 hours.
516	Investigations in Chemistry. 1 to 3 hours. Review of chemical literature on topics of individual interest. Includes reports and proposals for further research. (Not applicable to the MS degree)	551 Chemical Kinetics. 3 hours. Prerequisites: Chem 352 and Math 228 or equivalents. Chemical reaction rates and theory of reaction rates.	The following 400-level courses may be taken for graduate credit.
520	Advanced Inorganic Chemistry I. 3 hours. Prerequisites: Chem 352 and 420 or equivalent. Various aspects of coordination chemistry.	562 Intermediary Metabolism. 3 hours. See Biochemistry.	412G Introduction to Physical Chemistry. 4 hours. Prerequisites: Chem 122-123 and Math 125. Chemical principles involved in thermodynamics, kinetics, equilibrium, etc. Specifically for secondary education majors and those students not qualifying for the Chemistry 350-352 sequence.
521	Advanced Inorganic Chemistry II. 3 hours. Prerequisite: Chem 520 or permission of instructor. Current theories of inorganic reaction mechanisms.	570 Lecture Demonstration Techniques. 3 hours. Prerequisite: Chem 352 or equivalent. The design and operation of meaningful lecture demonstrations in chemistry. (Not applicable to the MS degree)	413G Introductory Physical Laboratory. 1 hour. Prerequisites: Chem 230, Math 125. Corequisite: Chem 412.
530	Instrumental Analysis I. 3 hours. Prerequisite: Chem 435 or permission of instructor. Theory and applications of modern instrumental methods of analysis.	598 Graduate Seminar. 1 hour. Reports and discussions of recent research in chemistry. Required each semester but only one credit applicable to the MS degree.	420G Inorganic Chemistry. 3 hours. Prerequisites or corequisites: Chem 352-353. Atomic and molecular structure, bonding theory, ionic substances, electron deficient compounds, acid-base theory and coordination chemistry.
531	Instrumental Analysis II. 3 hours. Prerequisite: Chem 530. Continuation of modern instrumental methods of analysis.	599 Thesis Research and Writing. 6 hours.	435G Analytical Chemistry. 4 hours. Prerequisites: Chem 352-353. Modern instrumental methods of analysis including spectro photometric, electroanalytical and chromatographic techniques.
540	Organic Reactions. 3 hours. Prerequisite: Permission of instructor.	599c Maintaining Matriculation. 1 to 6 hours.	446G Biochemistry. 3 hours. See Biochemistry.
675		632 Principles of Analytical Chemistry. 3 hours. Prerequisite: Chem 435 or permission of instructor. Theory and practice of modern quantitative analysis.	447G Biochemistry Laboratory. 2 hours. See Biochemistry.
		652 Introductory Quantum Mechanics. 3 hours. Prerequisites: Chem 352 and Math 228 or equivalents. Quantum mechanics with emphasis on the aspects most related to chemistry.	462G Bioinorganic Chemistry. 3 hours. See Biochemistry.

467G Biochemistry II. 3 hours.
See Biochemistry.

470G Chemistry for the "Middle School."
4 hours.
Prerequisite: Chem 108 or 123 or permission of instructor.

Chemical theories and principles in the middle school science curricula. (Elective credit only)

475G Advanced Topics in Chemistry.
1 to 3 hours.
Prerequisite: Permission of instructor.
Topics in analytical, biological, inorganic, organic, physical and polymer chemistry.

May be repeated with a different topic.

476G Advanced Laboratory Investigations in Chemistry. 2 hours.

Prerequisite: Permission of instructor.
Work in analytical, biological, inorganic, organic or physical chemistry. May be repeated with a different topic. (Not acceptable for MS degree)

ENGINEERING TECHNOLOGY

SCIENCE AND TECHNOLOGY HALL
ROOM 200a (502) 745-2641

Graduate Faculty

Professor: D. Rowe

Assistant Professor: J. Russell

The following 400-level courses may be taken for graduate credit

405G Atmospheric Pollution: Sources, Effects, Monitoring and Control.
3 hours.
Prerequisite: Permission of instructor.
Includes sources; effects; monitoring; legal aspects of air pollution; and air pollution control. Lecture, 2 hours; lab, 2 hours.

406G Water Pollution for Science Teachers.
3 hours.
Prerequisite: Permission of instructor.
The importance of water in the environment. Topics include water resources, water pollutants; origins, characteristics and effects, water pollution legislation and standards, and water and waste water treatment. Lecture 2 hours; lab 2 hours.

410G Water Supply. 3 hours.
Prerequisite: Permission of instructor.
Includes the planning, operation and design of water supply systems. Emphasizes testing procedures for carrying out water quality surveys and water treatment plant operation. Lecture.

415G Water Supply Laboratory. 1 hour.
Corequisite: ET 410G.

Correlated with ET 410G. Three hours per week.

420G Waste Water Treatment. 3 hours.
Prerequisite: Permission of instructor.
Theory, design and operation of waste water collection and disposal systems. Chemical and biological characteristics of waste water. Lecture.

425G Waste Water Treatment Laboratory.
1 hour.
Corequisite: ET 420G.
Correlated with ET 420G. Three hours per week.

430G Radiological Health. 3 hours.
Prerequisite: Permission of instructor.
Principles of radiation protection. Topics include nature and origins of radiation, radiation dosimetry, effects of radiation, and standards and methods for protection. Lecture.

440G Industrial Hygiene. 3 hours.
Prerequisite: Permission of instructor.
Principles of recognition, evaluation, and control of stresses in the industrial environment. Topics include legislation and standards as well as physical, chemical, biological and ergonomic stresses. Lecture.

470G Industrial Waste Treatment.
3 hours.
Prerequisite ET 410 or ET 420 or permission of instructor.

Prerequisite: Permission of instructor.
Basic principles involved in the treatment of industrial and domestic waste waters. Includes the design of various waste water treatment processes. Lecture.

475G Selected Topics. 1 to 3 hours.
Prerequisite: Permission of instructor.
Current problems and development in engineering technology. Topics will vary.

480G Solid Waste Treatment. 3 hours.
Prerequisite: Permission of instructor.
Characteristics and extent of the solid waste problem. Emphasizes methods of disposal of solid waste including sanitary landfill, incineration, recycling and reclamation and conversion processes. Lecture.

490G Sanitation. 3 hours.
Prerequisite: Permission of instructor.
Sanitary principles involved in the processing and distribution of milk and milk products, meat, shellfish and other foods. Lecture, 2 hours; lab 3 hours.

495G Environmental Impact Statements.
3 hours.
Prerequisite: Permission of instructor.
Preparation of assessments of environmental impacts as outlined by the National Environmental Policy Act. Resource information provided.

DEPARTMENT OF GEOGRAPHY AND GEOLOGY

ENVIRONMENTAL SCIENCE AND TECHNOLOGY BUILDING ROOM 305 (502) 745-4555

Wayne L. Hoffman, Head

Graduate Faculty

Professors: R. Ahsan, W. Cockrill, J. Davis, E. Hegen,

W. Hoffman, J. McGregor, C. Pickard, J. Taylor

Associate Professors: R. Dilamarter, N. Fields, M. Lowry,
A. Petersen, R. Seeger

Degrees Offered: Master of Science in Geography, Master of Arts in Education (Geography major or minor), Master of Public Service (City and Regional Planning option).

The graduate programs in geography provide a solid background for students who plan to continue advanced studies toward the Ph.D. degree, to pursue careers in junior (community) college teaching or teaching in middle and high schools, or to enter public service as city and regional planners. Graduates are prepared for a variety of other employment areas such as rangers or naturalists in national and state parks, cartographers, airphoto interpreters, and similar positions in business and industry.

Master of Science in Geography

The Master of Science in Geography requires a minimum of 30 hours of graduate credit, including Geog. 500, 502, 504, and 491G or 590. With approval from the advisory committee, a student may take a maximum of six hours outside the department. The thesis (required) must be based upon original research directed by the advisor.

Graduate Courses in Geography

500 Introduction to Geographic Research.

3 hours.

Development of geographic research skills with emphasis on posing of research problems, documentation, organization, and presentation.

501 Geography, Science, Civilization.

3 hours.

Topical seminar examining current issues and trends of the discipline and related fields, recent research, and the role of science in society, technology and culture.

502 Geographic Techniques for Field Investigations.

3 hours.

504 Historical and Philosophical Bases

The candidate must meet the research tool requirement by demonstrating either (1) reading proficiency in a foreign language appropriate for the major area, or (2) competency in the appropriate research techniques.

Master of Arts in Education (Geography major or minor)

Students following this program must meet all requirements for standard high school certification. The major requires a minimum of 18 hours including Geog. 500, 502, 504, and 491G or 590. The minor requires a minimum of 12 hours. The remaining hours (within the required 30) are taken in professional education.

Master of Public Service. (City and Regional Planning Option)

This interdisciplinary program consists of offerings from several departments and prepares individuals to serve in governmental positions requiring administrative training as well as knowledge of the particular areas they are to administer.

This option provides academic and practical training in city and regional planning and prepares students for employment with local, state, and federal agencies, as well as for positions within the private sector economy.

All candidates for the Master of Public Service degree (regardless of the option chosen) are required to complete a core area of 9 to 12 hours including PSI 540 — Public Administration (required of all).

The remaining hours of the core may be selected from the following courses:

Econ 550 — Government Financial Policy and Administration

Geog 5480 — Problems in Urban Geography

Govt 511 — Seminar in State and Local Government

Soc 565 — Studies in the Community

Psy 551 — Social Psychology of Organizations

Individual programs are planned in accordance with specific needs of the student. The thesis is optional. Required courses (within the 30-hour minimum) are:

Geog 484G Planning: Theory and Application

Geog 500 Introduction to Research

Geog 584 Advanced Planning

Geog 595 Planning Practicum

of Geography.

3 hours.
The evolution of geography as a distinct discipline through study of the writings of outstanding scholars.

505 Biogeography.

3 hours.
Prerequisites: Introductory courses in geography and/or biology, and permission of instructor.

The evolutionary, geographical, ecological, pedagogical, and edaphic factors involved in the naturalization, acclimatization, and distribution of plant and animal life.

510 Selected Topics in Geography.

3 hours.
Topics will vary according to student needs.

521 Advanced Studies in Geomorphology.

3 hours.

Prerequisites: Geomorphology 420, or equivalent, and 3 hours in upper-level physical geography or geology.

A review of topics in advanced geomorphology, field and laboratory procedures, and an introduction to research in landform analysis. Research in instructor-approved geomorphic topics.

522 Advanced Studies in Climatology.

3 hours.

Prerequisites: Geog 422 and permission of instructor.

The effects of climatic controls on microclimates and climatic anomalies. Detailed use of environmental characteristics, i.e., rainfall patterns, etc.

524 Meteorology for Science Teachers.

3 hours.

Basic weather course with emphasis on new developments and applications.

525 Advanced Political Geography. 3 hours.

530 Selected Problems in Cultural Geography. 3 hours. Prerequisite: Geog 430 or permission of instructor. Seminar-field experience. Covers cultural origins and dispersals, environmental perception and behavior, and resulting consequence upon the geographic landscape.

532 Studies in Geographic Exploration. 3 hours. Eighteenth, 19th, and 20th century scientific exploration of the "terrae incognitae" through examination of firsthand accounts.

540 Advanced Regional Geography. 3 hours. Prerequisites: Two courses in regional geography and consent of instructor. The regional method as a basic approach to geographic research via one or more major regional units.

541 Seminar in Tropical Geography. 3 hours. Prerequisites: Geog 210, 422, or 430 and permission of instructor. Specific problems of the man-environment relationships of the American, African, and Asian Tropics.

550 Advanced Studies in Economic Geography. 3 hours. Prerequisites: Geog 250, 478 or 479 and permission of instructor. An examination of the major theories in economic geography.

560 Settlement Geography. 3 hours. Prerequisite: Geog 430 or consent of instructor. Sources and philosophies of settlement studies. Investigations of selected settlement patterns with emphasis on rural and rural non-farm settlement; farmstead, hamlet, village and town, and functionally related features, architectural style, and functional rationale.

571 Quality of Life: Environmental Problems and Ecological Solutions. 3 hours. Prerequisite: Consent of instructor. Seminar approach to developing critical ecological sensitivity through analysis of past and present environmental problems, implemented and alternative solutions.

580 Problems in Urban Geography. 3 hours. Prerequisite: Consent of instructor.

584 Advanced Planning. 3 hours. Prerequisite: Geog 484. Analysis of advanced topics and results of recent research in city and regional planning.

585 Advanced Studies in Population Geography. 3 hours. Prerequisites: Geog 485 and permission of instructor. Seminar approach to regional and world problems in human population.

590 Experimental Design and Data Analysis. 3 hours. Prerequisite: Geog 491 or permission of instructor. (Cross-listed with Agriculture 590) Statistical consideration in experimental design: Covariance, multiple regression, factorial design, incomplete block designs, etc.

595 Planning Practicum. 3 to 6 hours. Prerequisites: Geog 484, 584, and permission of instructor. Supervised planning experience in a co-operating government or private agency.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

The following 400-level Geography courses may be taken for graduate credit

402G Physiography of North America. 3 hours. Prerequisites: Geog 106 and 108 or Geology 102 or 111 and 113.

410G Cartography II. 3 hours. Prerequisite: Cartography I (215) or Maps and Diagrams (324) History of cartography, map compilation, lettering and typography; cartographic design, map reproduction, use of color, map projections, scribing techniques.

415G Air Photo Interpretation. 3 hours. Characteristics of aerial photographs; use of air photos for analysis of the earth's physical and cultural features; air photo approach to urban and regional planning. (Spring)

416G Remote Sensing: Principles and Applications to Environment and Planning. 3 hours. Prerequisite: Permission of instructor. Remote sensing techniques and their application in the study of man's bio-physical environment through the use of infrared, thermal infrared, radar and space photography.

420G Geomorphology. 4 hours. Prerequisites: Geog 106 or 106-K and 108 or Geol 102, 111, and 113. The origin, history and characteristics of land-forms produced by fluvial, glacial, wind and wave erosion and by mass-wasting and ground-water.

421G Advanced Geomorphology. 3 hours. Prerequisite: Geog 420. Landform development under processes associated with running water. Principal topics are: climate and geomorphic processes; weathering; the drainage basis as a geomorphic unit; channel form; hill-slope characteristics; drainage pattern evolution, etc.

422G Climatology. 4 hours. Prerequisite: Geog 100, 105, or 121. The elements of climate and their world distribution with emphasis on the climatic controls.

423G Transportation. 3 hours.

Prerequisite: Permission of instructor. The problems of interaction, diffusion and information transfer as they appear in a spatial context.

424G Weather Analysis and Forecasting. 3 hours. Prerequisite: Geog 100, 105, 121, or permission of instructor. Analysis of air masses; principles of weather forecasting; drawing and interpretation of the daily weather map; and making weather forecasts.

425G Political Geography. 3 hours. Prerequisite: Geog 101 or permission of instructor. The political system as a spatial phenomenon. Examples from local, metropolitan-regional, national and international levels.

430G Cultural Geography. 3 hours. Concepts of culture and the interaction between various cultures and their environments.

452G Field Studies in Geography. 1 to 3 hours.

453G Geography of the Soviet Union. 3 hours.

454G Geography of Middle America. 3 hours. Prerequisite: Geog 101 or permission of instructor. A regional analysis of Mexico, Central America and the West Indies.

455G Geography of Australia and Islands of the Western Pacific. 3 hours. Prerequisite: Geog 101 or permission of instructor.

462G Geography of South America. 3 hours. Prerequisite: Geog 101 or permission of instructor. Physical and cultural bases of South America's geographic patterns with emphasis on problems of resource development.

464G Geography of Europe. 3 hours. Prerequisite: Geog 101 or permission of instructor.

465G Geography of Asia. 3 hours. Prerequisite: Geog 101 or permission of instructor. Regional differences with emphasis on the distribution and activities of the peoples relative to the natural and economic setting and to problems of development.

466G Geography of Africa. 3 hours. Prerequisite: Geog 101 or permission of instructor. Geographic survey, assessing the relationships of the physical and cultural patterns to actual and potential economic development.

467G Geography of the Bible Lands. 3 hours. Prerequisite: Permission of instructor. Various aspects of the sequester occupancy of Southwestern Asia and surrounding regions mentioned in the Bible.

470G Geography of Cities. 3 hours.
Prerequisite: Permission of instructor.

478G Geography of Agriculture. 3 hours.
Prerequisite: Geog 250, Ag 260, or permission of instructor.
Regional patterns of world agricultural production.

479G Industrial and Commercial Geography. 3 hours.
Prerequisite: Geog 250 or permission of instructor.
Manufacturing and the commercial activities and facilities related to assembling of raw materials and distribution of products.

484G Planning Theory and Application. 3 hours.
Planning theory, practice, and organizational structure.

485G Population and Resources. 3 hours.
Prerequisite: Permission of instructor.
Distribution of population and population characteristics as related to world resources and cultures. Problem regions are identified.

491G Data Analysis and Interpretation. 3 hours.
Prerequisite: Math 100 or permission of instructor.
Statistical models and use of samples; variation, statistical measures, distributions, tests of significance, analysis of variance, regression, correlation and chi-square as related to interpretation and use of scientific data. (Fall, spring)

The following graduate course, specifically designed for teachers of natural and earth science, is offered in Geology

511 The Dynamic Earth. 3 hours.
Prerequisites: Geol 102 and 112, or one year of earth sciences teaching at secondary school level.
Topics include plate tectonics, the surface features of Earth, physical properties of Earth and its interior, geological processes and the geological time scale, continental drift, paleomagnetism, etc.

The following 400-level Geology courses may be taken for graduate credit

405G Paleontology. 4 hours.
Prerequisites: Geol 112 and Biol 148-9 or permission of instructor. (Cross-listed with Biology)
Nature of the fossil record, preservation, basic factors and theories relating to the origin and development of living systems and the processes of evolution, the species concept, systematics and paleoecology.

411G Special Topics in Geology. 3 hours.
Prerequisite: Permission of instructor.

415G Environmental Geology. 3 hours.
Prerequisite: Geol 111-113 or 106-108 or permission of instructor.
Geologic factors as related to site selection, energy production, land use, waste disposal, planning, water resources, engineering practices, and the recognition and control of geologic hazards.

420G Geomorphology. 3 hours.
Prerequisites: Geog 106 or Geol 102 or 111 and 113.
Origin, history and characteristics of landforms produced by fluvial, glacial, wind and wave erosion, and by mass-wasting and ground-water.

421G Advanced Geomorphology. 3 hours.
Prerequisite: Geol 420G.
Landform development under processes associated with running water. Principal topics are: climate and geomorphic processes; weathering; channel form, hill-slope characteristics; drainage pattern evolution, etc.

424G Field Geology. 7 hours.
Prerequisites: Geol 111, 112, 113, 114, 308, and 330.
Six-weeks summer field course.

440G Hydrogeology. 3 hours.
Origin, occurrence and movement of ground water; wells and aquifer evaluations; quality of ground water supplies; legal aspects.

450G Stratigraphy-Sedimentology. 3 hours.
Prerequisite: Geol 350, Geol 405.
Origin, characteristics, occurrence and classification of sedimentary rocks; characteristics and relationships of sedimentary strata including stratigraphic principles and practice.

465G Geophysics. 3 hours.
Prerequisites: Geol 111 and one year of college physics or instructor permission.
General and exploration geophysics. Topics include the origin of the earth and solar system, the earth's interior, gravity and isostasy, seismology, upper atmosphere, continents and ocean basins, etc.

467G Exploration Geophysics. 3 hours.
Fundamentals of general geophysics and practical experience in the major methods of exploration geophysics, such as gravity, magnetic, seismic, and electrical methods.

470G Tectonics. 3 hours.
Prerequisite: Geol 308.
Plate Tectonics, the unifying theory of modern earth sciences. Emphasizes the contribution of previous hypotheses and research (i.e., continental drift, sea-floor spreading, paleomagnetics, magnetic reversals, geosynclines, etc.)

475G General Oceanography. 3 hours.
Prerequisite: Geol 325 or 350 or permission of instructor.
Geological, chemical, physical and biological aspects of the marine environment. Topics include the topography, structure and history of the ocean basins and their margins; ocean waters and oceanic circulation; marine geochemistry; the ocean as a bio-geochemical system, etc.

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

THOMPSON COMPLEX, CENTRAL WING
ROOM 357 (502) 745-3651

Robert C. Bueker, Head

Graduate Faculty

Professors: R. Bueker, C. Davis, B. Detwiler, W. Feibes, M. Watson

Associate Professors: J. Barksdale, R. Crawford, J. Crenshaw, W. Jones, J. Stokes, K. Wallace, C. Wells, R. York

Assistant Professor: D. St. Clair

Degrees Offered: Master of Science in Mathematics, Master of Arts in Education (Mathematics major or minor, Math-Science Area major).

Applicants for departmental programs must have the appropriate background in mathematics. In addition to the general Graduate College requirements, students must meet departmental requirements.

Master of Science in Mathematics

This program is designed to give the student a general but thorough understanding of the main areas of mathematics. Admission requirements include a background equivalent to an undergraduate liberal arts major in mathematics. The prospective student is expected to have satisfactorily completed, at a minimum, courses in real analysis or advanced calculus, abstract algebra, and linear algebra.

Both thesis and non-thesis options are available. Each student's program must satisfy the following requirements:

- (1) Analysis: Six hours from Math 431G, 432G, 532, 450G, 550. Either 532 or 550 must be included.
- (2) Topology-Geometry: Six hours from Math 423G, 523, 439G, 539.
- (3) Applied Mathematics: Six hours from Math 405G, 406G, 435G, 470G, 529, 530, 570.
- (4) Algebra: Math 517.

Graduate Courses in Mathematics

500 Readings in Mathematics. 1-3 hours.
Prerequisite: Undergraduate major in mathematics.

Students read and present papers that have appeared in (or have been accepted by) mathematical journals. Topics covered are determined by areas of interest.

517 Topics From Algebra. 3 hours.
Prerequisite: Math 417.

Theory of rings, fields, and vector spaces. Topics include: polynomial rings; principal ideal domains; unique factorization domains; field extensions; Galois theory.

523 Topics from Geometry. 3 hours.
Prerequisite: Math 423 or permission of instructor.
Geometry of special lines and points; isometries; similarities; inversion; applications.

529 Mathematical Statistics I. 3 hours.
Prerequisite: Math 431 or 327.

Probability models; combinatorial analysis; random variables and their distributions; moments of probability distributions; moment generating functions and sampling distributions.

530 Mathematical Statistics II. 3 hours.
Prerequisite: Math 529.
Properties and determination of point estimation; interval estimation; testing hypothesis; multivariate normal distribution; nonparametric statistics and linear models.

Courses in each area and electives are selected by the student, in consultation with the advisor.

The research tool requirement may be fulfilled with a foreign language, a mathematics reading course, or computer science. For specific details, contact a graduate student advisor in the Department of Mathematics and Computer Science.

Final examinations, both written and oral, are required. The written examination is based on coursework taken in each of three mathematical areas of study. The eligible candidate is allowed to select the three areas from Algebra, Applied Mathematics, Real Analysis, Complex Analysis, Geometry, and Topology; subject to the following conditions:

- (1) The areas chosen must include at least two from Algebra, Applied Mathematics, and Real Analysis.
- (2) The candidate must have completed (or be scheduled to complete by the end of the current academic term) at least six semester hours of coursework in each of the areas selected.

The oral examination is based on the thesis (if applicable), coursework, and related concepts.

Master of Arts in Education (Mathematics major or minor)

Since this program is designed for the public school mathematics teacher, students following it must satisfy all requirements for standard high school certification. Adequate preparation for a major in mathematics consists of an undergraduate teaching major in mathematics which includes, in addition to a calculus sequence, coursework in linear algebra and at least two of the following three areas: abstract algebra, geometry, analysis or advanced calculus. For a minor in mathematics, preparation should include at least an undergraduate teaching minor in mathematics with post-calculus coursework including linear algebra and one of the three areas.

Students majoring in mathematics must take 21 hours of mathematics including a course in each of the following areas: geometry, analysis, algebra. Upon approval of the graduate committee, 18 hours may satisfy the above requirement provided the student has previously completed Math 317, 323, and 327 (or the equivalent). A minor in mathematics must include at least 12 hours of mathematics. The remainder of the required 30 hours will be taken in professional education courses.

Neither a thesis nor a research tool is required; however, Education 500 — Research Methods is required as one of the professional education courses. An oral final examination, based on the coursework and related concepts, is required.

(See mathematics courses specifically for students pursuing the Master of Arts in Education degree)

531 Advanced Differential Equations. 3 hours.
Prerequisites: Math 331, 431.
Power series solutions; existence and uniqueness theorems; stability and Liapunov's method; regular singular points; perturbations of periodic solutions.

532 Real Analysis. 3 hours.
Prerequisite: Math 432.
Function spaces; additive set functions; outer measure; measurable functions; integration.

535 Advanced Applied Mathematics I. 3 hours.
Prerequisite: Math 331, 431.
Eigenvalue and boundary value problems; orthogonal expansions in function spaces; classical polynomials; Sturm-Liouville theory; Fourier and Laplace transforms.

536 Advanced Applied Mathematics II. 3 hours.
Prerequisite: Math 535.
Integral equations; calculus of variations; maximization of linear functionals; maximum gradient method.

539 Topology II. 3 hours.
Prerequisite: Math 439.
Convergence; function spaces; complete spaces; homotopy; homology theory.

550 Complex Analysis. 3 hours.
Prerequisites: Math 450 and 432.
Analytic continuation; conformal mapping; Riemann surfaces; univalent functions.

560 Functional Analysis. 3 hours.
Prerequisite: Math 432.
Theory of abstract linear spaces. Topics include: normed vector spaces; inner product spaces; Hilbert spaces; open mapping and closed graph theorems; Banach-Steinhaus theorem; weak and weak-* topologies.

570 Advanced Topics in Operations Research. 3 hours.
Prerequisite: Math 432, 470, or consent of instructor.
Specific area(s) of operations research.

590 Special Topics in Mathematics. 3 hours.
Prerequisite: Math 432.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

Additional 500-level Math courses acceptable for the Master of Arts in Education

501 Introduction to Probability and Statistics I. 3 hours.
Prerequisite: Permission of instructor.
Combinations and permutations; basic theorems of probability; mathematical expectations; random variable and basic probability distributions; central limit theorem.

502 Introduction to Probability and Statistics II. 3 hours.
Prerequisite: Math 501.
Review of linear algebra; Markov chains; decision theory; linear programming and game theory.

503 Introduction to Analysis. 3 hours.
Examination of selected topics in elementary calculus including sequences, series, limits, continuity, the derivative, and the Riemann integral. Introductory material includes logic, set theory, and functions.

504 Computer Applications to Problems in Mathematics. 3 hours.
Computer techniques and solutions of problems in mathematics including calculus, applied statistics, simulation, linear programming, game theory and linear algebra.

The following 400-level Math courses may be taken for graduate credit

405G Numerical Analysis I. 3 hours.
Prerequisites: CS 240, Math 237 or 410.
Roots of equations, linear operators, polynomial approximation, interpolation, numerical differentiation and integration, difference equations, and numerical solution of initial value problems in ordinary differential equations. Algorithmic computer solutions of problems will be required.

406G Numerical Analysis II. 3 hours.
Prerequisites: Math 405 and 327 or 431.
The solution of linear systems by direct and iterative methods, matrix inversion, the calculation of eigenvalues and eigenvectors of matrices. Boundary value problems in ordinary differential equations. Algorithmic computer solution of problems will be required.

413G Algebra for Elementary Teachers. 3 hours.
Prerequisite: Math 102 or 303 or equivalent.
Properties of real numbers, linear equations and inequalities, systems of equations, complex numbers, algebraic structures. For elementary education majors only.

415G Algebra and Number Theory. 3 hours.
Prerequisite: Math 315 or 317.
Survey of modern algebra and number theory. Includes number systems, divisibility, congruences, groups and their application to number theory.

417G Algebraic Systems. 3 hours.
Prerequisite: Math 317. Theory of groups.

423G Geometry II. 3 hours.
Prerequisite: Math 323.
An axiomatic development of plane hyperbolic geometry which presupposes a development of absolute geometry.

429G Probability and Statistics II. 3 hours.
Prerequisite: Math 329.
Sampling distributions from normal populations; point estimations, interval esti-

mation, theory and application of hypothesis testing; regression and correlation; analysis of variance.

431G Intermediate Analysis I. 3 hours.
Prerequisite: Math 317.
Introductory set theory; sequences; series; limits; continuity.

432G Intermediate Analysis II. 3 hours.
Prerequisite: Math 431.
Elementary topological concepts; Riemann integral; differentiation; sequences and series of functions.

435G Partial Differential Equations. 3 hours.
Prerequisite: Math 331.
Equations of first and second order; elliptic, hyperbolic and parabolic equations; Sturm-Liouville theory; applications to equations of mathematical physics using separation of variables and Fourier series.

439G Topology. 3 hours.
Prerequisite: Math 431 or permission of instructor.
Orderings; topological spaces; mappings; separation axioms; compactness; connectedness; arcwise connectedness; metric spaces.

450G Complex Variables. 3 hours.
Prerequisite: Math 431 or 327.
Complex number plane; analytic functions of a complex variable; integration; power series; calculus of residues; conformal representation; applications of analytic function theory.

470G Introduction to Operations Research. 3 hours.
Prerequisite: Math 329 or 237 or consent of instructor.
Principles and techniques including linear programming, queuing theory, inventory models, deterioration and replacement theory, sensitivity analysis and dynamic programming.

475G Selected Topics in Mathematics. 1-3 hours.
Prerequisite: Permission of instructor.
Significant problems and developments of current interest.

Graduate Courses in Computer Science

405G Numerical Analysis I. 3 hours.
Prerequisite: CS 240, Math 237 or 410.
Cross-listed with Math 405G.

406G Numerical Analysis II. 3 hours.
Prerequisites: Math 405 and 327 or 431.
Cross-listed with Math 406G.

440G Computer Organization. 3 hours.
Prerequisites: CS 242 and CS 348.
Concepts involved in the logical design of computers and computer systems. Basic digital circuits, Boolean algebra, switching circuits, data representation and transfer, digital arithmetic, control functions, input-output facilities, system organization and reliability, simulation techniques.

442G Information Structures. 3 hours.

Prerequisite: CS 343 or CS 348.

Arrays, lists, trees, data structures, sorting and searching techniques, dynamic storage allocation, PL/1 capabilities: structures, pointers, bit and character strings, list processing, recursive programming for tree processing, use of macros.

444G Programming Languages. 3 hours.

Prerequisite: CS 442 or consent of instructor.

The syntactic and semantic structures of programming languages. Specific languages studied include ALGOL, SNOBOL, APL, and LISP.

445G Operating Systems Principles.

3 hours.

Prerequisites: CS 340 and CS 442.

An overview with particular emphasis on procedure libraries, storage management and protection, task scheduling, and linkage editing.

447G System Simulation. 3 hours.

Prerequisites: CS 241 and Math 329.

Computer simulation of systems and real-time processes. General purpose simulation languages such as GPSS and SIMSCRIPT are used to study simulation techniques.

475G Selected Topics in Computer Science. 1-3 hours.

Prerequisite: Permission of instructor. Significant problems and developments of current interest in computer science.

DEPARTMENT OF PHYSICS AND ASTRONOMY**THOMPSON COMPLEX — CENTRAL WING
ROOM 246 (502) 745-4357****N. Frank Six, Head****Graduate Faculty**

Professors: W. Buckman, D. Humphrey, G. Moore, M. Russell, F. Six

Associate Professors: T. Coohill, E. Dorman, R. Hackney, M. Longmire, J. Parks

Assistant Professors: T. Bohuski, A. Fennelly, K. Hackney, E. Hoffman, C. Wolff

Degrees Offered: Master of Science in Physics, Master of Science in Engineering Physics, Master of Arts in Education (Physics minor).

The Department of Physics and Astronomy requires that applicants to departmental programs have an undergraduate grade point average of at least 3.0 to be admitted in good standing. Other promising students will be considered; however, they may be required to take additional undergraduate courses in areas of deficiency.

The graduate programs in the Department of Physics and Astronomy are flexible to the extent that a student can select up to nine hours of related courses in biophysics, physical chemistry, geophysics, astronomy, or environmental science to prepare for a career in those fields which "bridge" two or more of the traditional disciplines.

Master of Science in Physics

This program is designed to prepare students to continue graduate work at the Ph.D. level in physics or a closely related discipline. Applicants should have physics preparation, at the undergraduate level, extensive enough to include an intermediate course in mechanics (Steven-

son or Symon), electricity and magnetism (Reitz and Milford), and modern physics (Weidner and Sells). Preparation in mathematics should include ordinary differential equations, vector analysis, and possibly functions of a complex variable.

Requirements for the MS in Physics Degree include a thesis, at least 18 hours (12 hours plus thesis) in courses numbered 500 and above, at least 15 hours of coursework in the student's major field of study, and the completion of two courses selected from Physics 540 (Electromagnetic Theory), 550 (Classical Mechanics), and 580 (Quantum Theory). The research tool may be met through (1) demonstrated competency in a modern foreign language or (2) an approved research tool (e.g., computer programming, statistics). The final examination (oral and/or written) includes defense of the thesis and may include other topics.

Master of Science in Engineering Physics

This program provides additional academic training for students who intend to assume positions in industrial or governmental laboratories. Emphasis is placed on the applied nature of physics. In addition to meeting general Graduate College requirements, applicants should have a major in one of the fields of physical science or engineering. Normally, 15 to 18 of the 30 hours required for the degree are taken in physics, and six to nine hours are taken in a minor.

The student's thesis advisor will be assigned when 15 hours of coursework have been completed and the thesis topic has been selected. The final examination (oral and/or written) includes defense of the thesis and may include other topics.

Master of Arts in Education

The Department offers three program options leading to the Master of Arts in Education: a physics minor of 12-15 hours, a science area major of 18-21 hours, and a math-science major of 18-21 hours. Each of these programs may include physics and astronomy courses which familiarize the teacher with modern instructional techniques and curricula and strengthen the academic background. In all cases, the remainder of the required 30 hours will be taken in professional education. (See physics and astronomy courses specifically for students pursuing the Master of Arts in Education degree)

Graduate Courses in Physics and Astronomy

510 Methods of Mathematical Physics I. 3 hours.
Prerequisite: Differential Equations.
Selected topics from the mathematical methods of classical physics.

520 Atomic and Molecular Spectra. 3 hours.
Prerequisite: Physics 480.
The structure of atomic and molecular spectra including quantum mechanical energy states, wave mechanical rules for combining momenta and magnetic moments, the Stark and the Zeeman effect.

530 Statistical Mechanics. 3 hours.
Prerequisites: Physics 450, 480.
Statistical theories of body systems and their thermodynamic consequences. Topics include the Boltzmann equation, Liouville's theorem, phase space, ensemble theory, entropy and probability, etc.

540 Electromagnetic Theory. 3 hours.
Prerequisite: Physics 440.
Electrostatics, magnetostatics, and potential theory; Maxwell's electrodynamics; the theory of wave optics, refraction, interference and diffraction; radiation of electric and magnetic multipole fields.

550 Classical Mechanics. 3 hours.
Prerequisite: Physics 450.
Dynamics of particles and rigid bodies, the methods of Lagrange and Hamilton, the Hamilton-Jacobi equation, and the theory of small vibrations.

580 Quantum Theory. 3 hours.
Prerequisite: Physics 480.
Wave and matrix mechanics, general operator methods, angular momentum, symmetry principles and conservation theorems, variational principle and elementary perturbation theory.

598 Graduate Seminar. 1 hour.
Discussion of recent and current literature on developments in experimental and theoretical physics.

599 Thesis Research and Writing. 6 hours.

599c Maintaining Matriculation. 1 to 6 hours.

660 Theory of Solids. 3 hours.
Prerequisite: Physics 480.
Matter in the condensed state emphasizing quantum mechanical aspects, the behavior of electrons in solids and the thermal and magnetic properties of matter.

670 Theoretical Nuclear Physics. 3 hours.
Prerequisite: Physics 480.
Static properties of nuclei; descriptive aspects of radioactivity and nuclear reactions; systematics of nuclear energies; nuclear models, decay, reactions, and forces.

675 Advanced Topics in Physics. 1 to 3 hours.
Prerequisites: Graduate standing and permission of the instructor.
Directed study under supervision of a faculty member. May be repeated with different topics.

The following 400-level courses may be taken for graduate credit

404G Experimental Physics 4. Optics. 1 hour.
Corequisite: Physics 441G.
The conclusions and concepts of optics and techniques of experimental optics.

406G Experimental Physics 5. Solid State. 1 hour.
Corequisite: Physics 460G.
Includes solid state experimental techniques and demonstrations from lecture material.

407G Experimental Physics 6. Nuclear. 1 hour.
Prerequisite: Physics 302.
Experience with modern nuclear detection equipment, examination of some nuclear properties via experimental methods, and demonstration of nuclear radiation as an analytical research tool.

409G Experimental Physics 7. Research Techniques. 2 hours.
Prerequisite: Two years of college physics.
Laboratory techniques in experimental research. Includes drawing and fabrication of apparatus, technical photography, and statistical treatment of data.

414G Introductory Astrophysics. 4 hours.
Prerequisites: Two years of college physics and permission of the instructor.
Topics in solar system and stellar astrophysics. Includes radiation theory, solar phenomena; the fundamentals of radio astronomy, pulsars, quasars, and cosmic X-ray sources, etc.

431G Radiation Biophysics. 4 hours.
(Also, Biology 431)
Prerequisites: Physics 201-202 or Physics 231-232.
The properties of the various forms of radiation and their interactions with, and effects on, living matter. Laboratory offers training in monitoring ionizing radiations and in techniques of radioactive isotopes.

440G Electricity and Magnetism. 3 hours.
Prerequisites: Physics 350 and Math 331.
Classical electricity and magnetism with emphasis on fields, potentials, conductors, dielectrics, etc.

441G Optics. 3 hours.
Corequisite: Physics 404G. Prerequisites: One year of college physics and one year of calculus.
Geometrical and physical optics including wave propagation, refraction, dispersion, defraction, and polarization.

450G Theoretical Mechanics. 3 hours.
Prerequisites: Physics 350, Math 331.
Rigid body motion, moving coordinate systems, continuous media, and Lagrange's equations.

460G Solid State Physics. 3 hours.
Prerequisite: Physics 320. Corequisite: Physics 406.
Theory of solids. Topics include geometrical and X-ray crystallography. Maxwell-Boltzmann and Fermi-Dirac statistics, free electron theory of metals, Bril-

louin zones, band model of semiconductors, and the Hall effect.

465G Geophysics. 3 hours.
(Also cross-listed as Geology 465)
Prerequisites: Geology 111 and one year of college physics or permission of the instructor.
General and exploration geophysics. Topics include the origin of the earth and the solar system, the earth's interior, gravity and isostacy, seismology, upper atmosphere, continents and ocean basins, etc.

470G Nuclear Physics. 3 hours.
Corequisite: Physics 407G. Prerequisite: Physics 320.
Properties of the nucleus including nuclear forces, alpha emission, radioactivity, fundamental particles, and particle accelerators.

475G Selected Topics in Physics. 1 to 3 hours.
Prerequisite: Permission of the instructor.
Directed study under the supervision of a faculty member. May be repeated with different topics.

480G Quantum Mechanics. 3 hours.
Prerequisites: Physics 320, 350, 450.
Fundamental principles of quantum mechanics including the hydrogen and helium atoms, the harmonic oscillator, and the Schroedinger wave equation.

Courses which may be taken for graduate credit toward the Physics minor, Science Area major, and Math-Science major under the MA in Education

501 Classical Developments in Physics. 3 hours.
Review of classical physics for junior high and high school teachers covers the discovery of physical laws, the origin of forces, motion, energy, momentum, conservation principles, wave phenomena, and electromagnetics.

502 Modern Developments in Physics. 3 hours.
Review of quantum physics for junior high and high school teachers. Covers atomic structure, the nucleus, elementary particles, probability and uncertainty, and special relativity. Emphasizes the impact of twentieth century discoveries on the foundations of physical law.

503 Physics Demonstrations and Laboratory Exercises. 3 hours.
Designed to acquaint the junior high and high school teacher with laboratory equipment and demonstrations for use in secondary education. Utilization of a laboratory library containing approximately sixty experiments, in place.

505 Investigations in Physics. 3 hours.
Topics of individual interest relating to the teaching of physics.

401G-402G Physical Science I and II. 3 hours.
Prerequisite: Permission of instructor.

The primary physical properties of matter and forms of energy. Emphasis on measurement process, symbolism, graphical analysis algebraic calculations, etc.

405G Astronomy for Teachers. 3 hours.
Selected topics in astronomy for elementary and secondary teachers. Not applica-

ble toward physics major.

410G Physics for Elementary Teachers.

3 hours.

Prerequisite: Permission of the instructor.
Covers the areas of physics relevant to the teaching of science in the elementary school. Includes laboratory experiences.

425G Modern Concepts in Physics.

3 hours.

Prerequisite: One year of college physics.
Current ideas in atomic and nuclear physics, astronomy and space physics, solid state and low temperature physics.
Includes demonstrations, experiments, and field trips.

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WINSTEAD, JOE EVERETT	Ph.D., University of Texas, Associate Professor of Biology
WITHEY, JOHN J.	Ph.D., Ohio State University, Associate Professor of Business Administration
WOLFF, CLARENCE N.	M.A., Western Kentucky University, Assistant Professor of Physics and Astronomy and Secondary Education
WOOD, WILLSON E.	Ph.D., George Peabody College, Professor of English
WOODRUFF, BENJAMIN W.	Ed.D., University of Illinois, Assistant Professor of Music
WORTHINGTON, JAMES P.	Ph.D., Ohio State University, Associate Professor of Agriculture
WOZNIAK, PAUL R.	Ph.D., University of Massachusetts, Associate Professor of Sociology
YOKLEY, RAYTHA L.	Ph.D., Indiana University, Professor of Sociology
YORK, RANDY J.	Ph.D., University of Wyoming, Associate Professor of Mathematics and Computer Science
YUNGBLUTH, T. ALAN	Ph.D., University of Minnesota, Associate Professor of Biology
ZAMKOFF, JOEL	Ed.D., Northern Colorado University, Assistant Professor of Education

GRADUATE COLLEGE STAFF

Elmer Gray, Ph.D.	Dean of the Graduate College
Faye Robinson, Ed.D.	Assistant Dean of the Graduate College
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Sue Sharber, B.S.	Staff Assistant to the Dean
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Bettie Johnson, B.S.	Credentials Analyst
Doris Tyree	Records Clerk

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**WESTERN KENTUCKY UNIVERSITY
GRADUATE COLLEGE**

(FORM A)

APPLICATION FOR ADMISSION

1. Full Legal Name	(Last)	(First)	(Middle)	(Maiden)	2. _____	(Soc. Sec. No.)
3. Address: Present	(Street Address)		(City)	(State)	(Zip Code)	
Home	(Street Address)		(City)	(State)	(Zip Code)	
4. In an emergency, notify	(Name)		(Relationship)	(City)	(State)	(Telephone No.)
5. Date of Birth	(Month/Day/Year)		6. Sex: ()M ()F	7. Telephone Nos: Home _____ Office _____		
8. Ethnic Group (check one): ()Black ()White ()Hispanic ()Asian or Pacific Islander ()American Indian or Alaskan Native						
9. Citizenship	(Country)		10. Current Occupation: (Please be specific)			
11. Location of Employment	(City)		(State)	12. Are you a veteran? ()Yes ()No		
13. Undergraduate Degree Information:	(Institution)		(Degree)		(Month and Year)	
14. Previous Graduate Study (if any)	(Institution)		(Degree or Hours)		(Year)	
15. Graduate Record Examination (Aptitude) taken? ()Yes ()No	16. Resident of Kentucky? ()Yes ()No					
17. Previous Enrollment at Western: Earliest date: _____	Most recent date: _____					
18. Present Enrollment Plans: ()On Campus ()Extended Campus _____	()Fall		()Spring	()Summer	(Year)	
19. Public School Certification Data (if applicable): Type held: Provisional Teacher: ()Elementary ()Secondary; Guidance: ()Provisional ()Standard Standard Teacher: ()Elementary ()Secondary Administrative endorsements (please list) _____						
Desire to earn: Standard Teacher: ()Elementary ()Secondary; Guidance: ()Provisional ()Standard Administrative endorsements (please list) _____						
20. For what student category are you applying? (See instructions, reverse side) ()Degree-seeking (Desired program must be indicated below.) ()Transient ()Unclassified ()Non-degree, seeking certification through: (check one) Rank I Rank II Certification coursework						

MASTER OF ARTS IN EDUCATION

()Elementary ()Early Childhood ()Librarian
()Junior High _____
()Secondary _____
(Major) (Minor)
()Reading: ()Elementary ()Secondary
()Special Education: ()Elementary ()Secondary
()School Counselor: ()Elementary ()Secondary
()School Business Administrator
()Student Personnel Services in Higher Education
()General: Area of Concentration _____

SPECIALIST IN EDUCATION

()Counseling: Emphasis _____
()Elementary: Emphasis _____
()Secondary: Emphasis _____
()School Administration

SPECIALIST IN COLLEGE TEACHING

()English
()History

MASTER OF ARTS

()Child Dev. and Family Living
()Economics
()English
()Folk Studies
()Government
()History
()Humanities
()Psychology
()Sociology
()Spanish
()Speech

MASTER OF PUBLIC SERVICE

()Agriculture
()Counseling
()Regional Development
()Administration
()City and Regional Planning

()MASTER OF BUSINESS ADMIN.

()MASTER OF MUSIC

MASTER OF SCIENCE

()Agriculture
()Biology
()Chemistry
()Engineering Physics
()Geography
()Health
()Library Science
()Mathematics
()Physical Education
()Physics
()Recreation
()Textiles and Clothing

COOPERATIVE-DOCTORAL

()Education-University of Kentucky
()Biology-University of Louisville
()Chemistry-University of Louisville

Mail to: Graduate College

Western Kentucky University
Bowling Green, Kentucky 42101

(Signature)

(Date)

(Date received in Graduate College)

APPLICATION INSTRUCTIONS

NOTE: Credentials submitted for admission purposes become the property of the University. If the applicant does not enroll within one year, the admission file is destroyed unless the student contacts the Graduate College.

Degree-seeking Students must have forwarded to the Graduate College two **official transcripts** each from the undergraduate degree-granting institution (unless WKU) and from any institution (except WKU) where graduate work has been pursued. The applicant who has not yet completed the undergraduate degree should have forwarded only one transcript now and two after the degree is completed. The **Graduate Record Examination—Aptitude Section** is required of all except M.B.A. applicants, who must take the Graduate Management Admission Test. If already taken, the scores should be forwarded to the Graduate College.

Non-degree Students Seeking Certification (e.g., students entering non-degree "Rank" teacher programs or school administrator programs) must submit transcripts, as outlined above.

Transient Students (pursuing advanced degrees at other institutions) will be mailed Form H, which must be completed and returned to the Graduate College by an official of the "home" institution.

Unclassified Students (pursuing coursework only) must have forwarded to the Graduate College an **official transcript** indicating completion of the undergraduate degree (unless earned at WKU).

VERIFICATION OF RESIDENCY STATUS

Please read the following statements carefully and sign below if you are claiming Kentucky residency status. The statements are from guidelines which were adopted by the Commonwealth of Kentucky Council on Public Higher Education to provide common definitions, interpretations, and administration among the state-supported institutions of higher learning in Kentucky.

The permanent dwelling place is a person's legal residence. A student who has not established residence in Kentucky is classified as an out-of-state resident. For tuition purposes, a person does not establish a legal residence merely by spending time in Kentucky, payment of taxes, owning real property, or by attending an institution of higher education. A student who is eligible to enroll as a resident student in another state cannot be enrolled as a resident student at a Kentucky state-supported institution of higher learning. A legal residence is never lost until a new one is established. Students attempting to establish residence are presumed to have met the requirements for residency when they have maintained continuous residence in Kentucky for at least one academic year exclusive of any time spent in attendance at any institution of higher learning in Kentucky. Thus, residence must be established in Kentucky for a purpose other than enrollment at an institution of higher education. No person shall be presumed to have gained or lost in-state residence in Kentucky while serving in the Armed Forces. Persons assigned to military duty and residing in Kentucky for an indefinite period of time shall be considered residents of the Commonwealth of Kentucky. Aliens lawfully admitted to the United States for permanent residence may establish Kentucky residence in the same manner as any other non-resident. An alien who possesses a student visa cannot be classified as a resident. The burden of proving legal residence rests with the student. Final responsibility for the classification of students as to residency and the assessment of appropriate enrollment fees is vested in the respective governing boards of the institutions of higher education.

I hereby affirm that, after reading the above statement, I qualify as a Resident of Kentucky.

(Signature)

(Date)

TITLE IX EDUCATION AMENDMENTS OF 1972

Prohibiting Sex Discrimination in Education

Title IX of the Education Amendments of 1972 requires that Western Kentucky University not discriminate on the basis of sex in its educational programs, admissions, employment practices, and activities which it operates. It is the policy of Western Kentucky University to comply with this requirement.

Any person having inquiries concerning Western Kentucky University's compliance with Title IX may contact the following persons who have been designated by the University President to coordinate Western's efforts to comply with Title IX:

Dr. John D. Minton
Vice President for Administrative Affairs
Wetherby Administration Building, 207E
Western Kentucky University
Telephone 745-2434

Dr. Faye Robinson
Assistant Dean, Graduate College
Cravens Graduate Center
Western Kentucky University
Telephone 745-2446

Inquiries about Title IX may also be made to the Director, Office for Civil Rights, U.S. Department of Health, Education, and Welfare, Washington, D.C. 20201.