## Western Kentucky University

A leading American university with international reach.


## Graduate Catalog 2007-2009

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## University Administration

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Sam Evans, College of Education and Behavioral Sciences
Blaine Ferrell, Ogden College of Science and Engineering

David D. Lee, Potter College of Arts and Letters Sherry Reid, Bowling Green Community College Donald Swoboda, Division of Extended Learning and Outreach (DELO)
William Tallon, Gordon Ford College of Business

College Heights Foundation—Foundation Building 203, (270) 745-4597
Dero G. Downing, Chair, Board of Directors
Tom Emberton, Vice President
H. Alexander Downing, President and Treasurer

Mary C. Sample, Executive Secretary

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Board of Directors
H. Alexander Downing
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Mary Sample

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Distinguished Professors (*Inactive Distinguished Professors)
*Dr. James Baker, Professor, History
*Dr. Melvin Borland, Professor, Economics
Dr. Nicholas Crawford, Professor, Geography and Geology
*Dr. Carol Crowe-Carraco, Professor, History
*Dr. Gary Dillard, Professor, Biology
Dr. Brian Goff, Professor, Economic
*Dr. Robert Hoyt, Professor, Biology
*Dr. Carlton Jackson, Professor, History
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*Dr. Marion B. Lucas, Professor, History
*Dr. Sam McFarland, Professor, Psychology
*Dr. Leroy Metze, Professor, Psychology
Dr. Sharon Mutter, Professor, Psychology
*Dr. Julia Roberts, Professor, Curriculum and Instruction
*Dr. Daniel Roenker, Professor, Psychology
*Dr. Richard Salisbury, Professor, History (deceased)
Dr. Michael Seidler, Professor, Philosophy and Religion
Dr. Vicki Stayton, Professor, Special Instructional Programs
Dr. Joseph Trafton, Professor, Philosophy and Religion
Dr. Michael Ann Williams, Professor, Folk Studies and Anthropology

## Graduate Studies \& Research

Richard G. Bowker, Interim Dean
graduate.studies@wku.edu http://www.wku.edu/graduate/

Wetherby Administration Building 207
(270) 745-2446 Office
(270) 745-6950 Fax

Graduate Studies and Research Staff
Richard G. Bowker, Interim-Dean Lisa Murrell, Assistant to the Dean Sarah Kessler, Graduate Specialist Crissy Priddy, Admissions Coordinator

Julie Harris, Admissions Assistant Barbara Chaffin, Admissions Team member
Paige Clark, Recruitment Specialist


## THE UNIVERSITY

## Historical Profile

Western Kentucky State Normal School, 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.

Western began offering the Master of Arts degree in 1931. This program was discontinued in 1936 but was resumed in 1941. 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 programs. In 1992 the Graduate College was renamed Graduate Studies.

The school's first president, Henry Hardin Cherry, expressed a theme for Western's educational commitment that is a constant inspiration to faculty, students and alumni: "The Spirit Makes the Master."

As a university, Western has produced educational opportunities to more than 110,000 alumni who proudly call WKU "the home of the Hilltoppers." WKU's campus crowns a hill overlooking the city of Bowling Green and is proclaimed as one of the most beautiful in the nation.

## University Information

Western Kentucky University is located in Bowling Green, Kentucky. The 2000 population of Bowling Green was about 50,000. Bowling Green is located 65 miles north of Nashville, Tennessee and 100 miles south of Louisville, Kentucky. Major highway access is provided with U.S. Interstate I-65, U.S. Highway 31-W, the Louie B. Nunn (Cumberland) Parkway, and the William H. Natcher Parkway.

Graduate Studies offers the following degrees: master of arts, master of arts in education, master of business administration, master of heath administration, master of public administration, master of public health, master of science, master of science in nursing and master of social work. Western also offers the specialist degree, Rank I and Rank II programs and a cooperative doctoral program with the University of Louisville. In addition, various graduate certificate programs are offered.

## VISION, MISSION, AND STATEMENT OF PURPOSE OF WESTERN KENTUCKY UNIVERSITY

## Vision

WKU—A Leading American University with International Reach.

## Mission

Western Kentucky University prepares students to be productive, engaged leaders in a global society. It provides service and lifelong learning opportunities for its constituents. WKU is responsible for stewarding a high quality of life throughout its region.

## Statement of Purpose

As a nationally prominent university, Western Kentucky University engages the globe in acclaimed, technologically enhanced academic programs. An inspiring faculty promotes entrepreneurial success and a unique campus spirit to attract an intellectually exciting and diverse family of the nation's best students.

WKU provides students with rigorous academic programs in education, the liberal arts and sciences, business, and traditional and emerging professional programs, with emphasis at the baccalaureate level, complemented by relevant associate and graduate-level programs.

The University places a premium on teaching and student learning. Its faculty engage in creative activity and diverse scholarship, including basic and applied research, designed to expand knowledge, improve instruction, increase learning, and provide optimum service to the state and nation. The University directly supports its constituents in its designated service areas of Kentucky with professional and technical expertise, cultural enrichment, and educational assistance. The University encourages applied research and public service in support of economic development, quality of life, and improvement of education at all levels, especially elementary and secondary schools. In particular, WKU faculty contribute to the identification and solution of key social, economic, scientific, health, and environmental problems within its reach, but particularly throughout its primary service area.

Maintaining a campus of distinctive history and character, WKU sustains a student population of increasing quality. It fulfills its responsibility for access through its community college, extended campus programs, and distance learning.

WKU's commitment is to ensure value in a holistic learning experience through high standards for student achievement and conduct, a strong faculty, technological innovation, personalized attention, broad access, and public accountability for actions and outcomes.

WKU recognizes that its mission continues to evolve in response to regional, national, and global changes, and the need for lifelong learning.

## POLICIES AND PROCEDURES

The Office of Graduate Studies and Research and all colleges and departments of the University have policies and procedures that must be met before a degree is granted. These requirements are described in this bulletin and in program documents provided by the academic departments.

## Student Responsibilities

The student is responsible for becoming informed of and for fulfilling all degree-related requirements. If requirements for graduation have not been met, the degree will not be granted. In no case will a regulation be waived or an exception granted because a student pleads ignorance of the regulation.

## Appeal of Graduate Regulations

The Graduate Council, which represents the graduate faculty, reviews and recommends policies pertinent to the graduate program. In that capacity, the Graduate Council functions as the hearing body for requests for waiver of graduate policies and regulations.

Requests for waiver of Graduate Studies regulations such as minimum admission requirements, time limit for program completion, candidacy requirements, etc., that apply to all graduate programs are considered by the Dean of Graduate Studies and the Graduate Council. The student must present the request in writing, along with supportive documentation, to the Office of Graduate Studies. Requests for waiver of departmental graduate requirements such as higher grade point average, undergraduate preparation, prior certification, demonstrated performance, etc., that are unique to the particular program are considered by the departmental graduate committee. The student must present the request in writing to the graduate advisor or department head for consideration by the departmental graduate committee. The graduate advisor or department head informs the student of the outcome. In the event that the student is not satisfied with the college committee's decision, the Graduate Council will act upon the appeal. The Office of Graduate Studies and Research informs the student of the outcome.

Students failing to meet admission requirements should consult the catalog statement on Alternate Admission Requirements.

## Student Complaint Procedure

The University student complaint procedure for resolving complaints concerning a faculty member is outlined in the general University Bulletin.

## STATEMENT OF COMPLIANCE

Western Kentucky University is committed to equal opportunity in its educational programs and employment. It is an equal opportunity-affirmative action employer and does not discriminate on the basis of age, race, color, religion, sex, sexual orientation, national orientation or disability. On request, the University will provide reasonable accommodations, including auxiliary aids and services, necessary to afford an individual with a disability an equal opportunity to participate in all services, programs, activities, and employment.

The University has published policies and procedures for investigating and/or addressing discrimination or harassment in its educational programs and/or employment. If you believe you have experienced discrimination in such programs, activities, or employment, the University's policies and procedures are published in the Western Kentucky University Student Handbook; the Western Kentucky University Personnel Policies and Procedures Manual; and the Catalog. These publications, including information about University procedures, are available in the following locations:

Equal Opportunity/ADA
Compliance Officer
Wetherby Administration
Building Room 13
Western Kentucky University
(270) 745-5121
Office of Human Resources
Wetherby Administration
Building Room 42
Western Kentucky University
(270) 745-5360

Office of the President Wetherby Administration Building Room 135 Western Kentucky University (270) 745-4346

Inquiries about alleged discrimination may also be made directly to the Office of Civil Rights, The Wanaker Building, Suite 515, 100 Penn Square East, Philadelphia, PA 19107, (215) 656-8548; the Kentucky Commission on Human Rights, 832 Capital Plaza, 500 Metro Street, Frankfort, KY 60601, (502) 564-5530; or the Equal Employment Opportunity Commission, 600 Martin Luther King, Jr. Place, Suite 268, Louisville, KY 40402, (502) 582-5851.

## ACADEMIC FACILITIES AND RESOURCES

## Graduate Studies and Research

Western Kentucky University offers graduate education in more than 40 degree and non-degree programs at the graduate level. The University confers masters degrees a specialist degree in selected areas of education, and various graduate certificates. The University reserves the right to make changes as required in course offerings, curricula, academic policies, and other rules and regulations affecting students, to be effective when determined by the University.

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 and graduate studies, recommends and reviews policies pertinent to the operation of Graduate Studies and Research. In addition, it regularly reviews admission requirements and makes recommendations regarding new graduate programs and alterations of existing programs.

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

## University Libraries

The University Libraries consist of the main library and three branch libraries to serve the academic community of Western Kentucky University. For more information about the libraries and the services offered visit their website at http://wkuweb1.wku.edu/Library.

## Information Technology

Dr. Richard H. Kirchmeyer, Vice President
Mass Media and Technology Hall 244
richard.kirchmeyer@wku.edu
(270) 745-2243 Office
(270) 745-6577 Fax

The Division of Information Technology supports the university's mission through the application of computing and telecommunications resources. The division is organized into five departmental areas: Academic Technology, Administrative Systems and Applications, Educational Telecommunications, Network and Computing Support, and Telecommunications. These services are described in more detail in the WKU web page (www.wku.edu) under Information Technology.

Academic Technology
John Bowers, Director Mass Media and Technology Hall 239
john.bowers@wku.edu
(270) 745-4278 Office
(270) 745-5267 Fax

Academic Technology Services provides a wide range of information technology for instruction. The unit is responsible for the operation of general access student open computing laboratories, including the principal labs in Helm Library, Grise Hall, and Thompson Complex-Central Wing, access to network computing services from residence hall rooms, and assisting faculty in the application of information technology resources in instruction.

## Administrative Systems and Applications <br> Gordon Johnson, Jr., Director <br> Mass Media and Technology Hall 374 <br> gordon.johnson@wku.edu <br> (270) 745-6455 Office <br> (270) 745-6402 Fax

Administrative Systems Applications (ASA), located on the third floor of Mass Media and Technology Hall (MMTH), is responsible for the implementation, maintenance and support of all the major line-ofbusiness administrative systems at the university. Recent implementations feature web interfaces, which allow students to register for classes, check financial aid, and access a host of other student information via a web browser.

## Educational Telecommunications

Jack Hanes, Director
Academic Complex 248
jack.hanes@wku.edu
(270) 745-6519 Office
(270) 745-2084 Fax

Educational Telecommunications comprises several areas, including Western's Public Radio, through its four radio stations -- WKYU-FM 88.9 in Bowling Green, WDCL-FM 89.7 in Somerset, WKPB-FM in Henderson-Owensboro, and WKUE-FM 90.9 in Elizabethtown - and provides the highest quality music and information services to more than $60 \%$ of Kentucky and parts of southern Indiana and northern Tennessee. The student radio station, WWHR, 91.7 Mhz , is operated in collaboration with Western's Public Radio. Educational Television (ETV) serves the professional video production and video distribution needs of Western Kentucky University by producing high-quality videos and video-based learning products, and maintaining two campus cable systems, reaching each residence hall room, faculty/staff office, and academic room on the main campus. The fifteen ITV classrooms maintained by IDE make up the extensive interactive television network transmitting courses to the University's extended campus sites in Fort Knox, Glasgow and Owensboro in addition to sites in Campbellsville and Elizabethtown. ETV also includes two campus cable systems. Western Cable provides 35 channels of entertainment and instructional cable programming to all student living areas. Academic Cables provides video access to all learning areas for classroom instruction and the delivery of satellite videoconferences.

WKYU-TV, the Public Television Service of Western Kentucky University, broadcasts informative, educational, and culturally diverse television programs within a high-quality, non-commercial broadcast format intended to promote intellectual excellence, cultural enrichment, participation in public life, character development, and returning value for the investors in Western's Public Television. WKYU-TV provides local, public television service to south central Kentucky on Channel 24, the only PBS station licensed to a Kentucky public institution.

## Network and Computing Support

David Beckley, Director

## Mass Media and Technology Hall 375 <br> (270) 745-4981 Office <br> (270) 745-6014 Fax

 dave.beckley@wku.edu(270) 745-7000 Help Desk

The Department of Network Computing and Communications consists of two units that work together to provide networking and desktop support for the University.

Networking issues are handled by Network Services, which supports campus-wide connectivity to all classrooms, laboratories, offices, and residence hall rooms.

Desktop issues are handled by Microcomputing Services, which provides support for both PC and Macintosh microcomputer users. The unit manages a Help Desk which is staffed Monday through Friday 8:00 a.m. - 4:30 p.m. with professional staff and student consultants who are available to answer users' questions and to provide assistance when required at the user's workstation.

Additional information about the department, as well as information related to other technology areas, can be accessed by visiting Western's home page at www.wku.edu and following the link to Information Technology.

## Telecommunications <br> Edwin.craft@wku.edu

Edwin Craft, Director Mass Media and Technology Hall 276
(270) 745-2017 Office
(270) 745-6500 Fax

The Department of Telecommunications provides and maintains a comprehensive voice communications system utilized to service the needs of Western Kentucky University faculty, staff, students, and correspondents. Services provided include: campus, local, and long distance calling; voice mail; facsimile reception and transmission; campus main switch board; wire communications pathways for the campus voice network and other signaling circuits; and planning and engineering for telephone services.

## Faculty Center for Excellence in Teaching (FaCET)

FaCET offers a variety of programs, activities and recourses to encourage and support all college instructors to strive for excellence in teaching. The center provides information on innovative teaching practices, training opportunities, consultation to individuals and administration, and access to some equipment. Seminars on effective teaching are scheduled throughout the year. Participation in these seminars is a prerequisite for graduate assistants who plan to become teaching associates and teach lower division courses. For more information, call (270) 745-6508, email facet@wku.edu or visit our webpage at http://wku.edu/Dept/Support/AcadAffairs/CTL/gtaweb.htm.

## Counseling and Testing Center

The Center, located in Potter Hall 409, provides personal counseling services and is responsible for the administration of national testing programs. Contact the Center for appointments and for test information at (270) 7453159 or see the website: http://www.wku.edu/Dept/Support/StuAffairs/COUNS/index.htm.

## Career Services Center

The Career Services Center provides a variety of developmental services and programs designed to assist students enrolled at Western Kentucky University. Career advisors assist Western students in developing and formulating realistic educational and career objectives and in identifying resources and strategies, which will aid in resolving their career and graduate study concerns. Career development sessions provide information on preparing resumes, interviewing and specific employers. The Career Library is designed to make available pertinent resources relating to career planning, employer literature, graduate and professional studies, job trends and other related placement information. All students are invited to become familiar with these library materials. Additional services include cooperative educational internships, campus interviews, and employment files. For more information, call (270) 7453095, email career.services@wku.edu, or visit Downing University Center, A230.

## PERSONAL FACILITIES AND RESOURCES

## Housing Facilities

Graduate housing is available for both men and women. To apply for housing, students need to submit a Residence Hall Housing Agreement, along with a deposit, to the Office of Housing. For more information, call (270) 745-4359.

## Dining Services

WKU Dining Services (DUC 124) is managed by Aramark Food Services and offers an enormous variety of options, tailor-made to meet all the dining needs of students while accommodating busy schedules. For more information call (270) 745-2416.

## Financial Assistance

Student Financial Assistance
Potter Hall 317
(270) 745-2755

For general information regarding loans, grants, and scholarships contact Student Financial Assistance.

## 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 Office of Graduate Studies and Reserach.

## Minority Assistantship Program

Consistent with the Commonwealth of Kentucky's desegregation plan, the University is committed to raising the proportion of African American Kentuckian residents receiving graduate degrees. Graduate assistantships are available to Kentucky resident minority students through this program.

## Senior Citizens' Scholarship

Kentucky residents who are 65 years of age and older on or before the day the semester begins are granted tuition scholarships for any college class for which they enroll, whether for credit or audit.

## Veterans Administration Benefits

Some of the programs offered by Western Kentucky University have been approved by the Kentucky Approving Agency for Veterans Education for persons eligible to receive VA educational benefits. There are several categories of educational benefits for eligible students including Montgomery GI Bill, both Chapter 30 (active duty) and Chapter 1606 (reserve/national guard); Chapter 35 (Dependents Educational Assistance Program); Chapter 32 (Veterans' Educational Assistance Program) and Chapter 31 (Vocational Rehabilitation). Contact the Veteran's Coordinator at (270) 745-3732 for assistance in using or applying for these benefits at Western Kentucky University.

## Air Force Reserve Officer Training Program

Students may participate in the Air Force Officer Training Corps (AFROTC) at Detachment 790 on the campus of Tennessee State University. AFRTOC provides pre-commissioning training to college students (male and female) who desire to serve as officers in the U.S. Air Force (USAF). For more information, visit www.AFROTC.com or telephone the Det., 790 Unit Admissions Officer at (615) 963-5931. Also visit the Det. 790 website at www.tnstate.edu/rotc.

## Graduate Assistantships

Graduate assistantships are available in various departments and service areas to qualified students. Stipends vary depending upon the student's qualifications and duties assigned. Interested students may contact Graduate Studies and Research for an assistantship packet.

## GENERAL INFORMATION

Academic Year
The University provides a year-round instructional program consisting of the fall and spring semesters and a summer term. WKU also offers a winter term, three summer sessions, and bi-term courses during the fall and spring semesters.

## Registration Procedures

Information regarding registration dates and procedures is published in each semester's schedule bulletin, which can be obtained from the Office of the Registrar. Registration is available through TopNet, Western's online registration system, to students who (1) have been admitted for the term, or (2) have been enrolled continuously, or (3) have been enrolled in any one of the previous three terms prior to the one for which the student is registering. Students who have not been enrolled for three or more consecutive terms (including the summer term) or who were previously admitted, but did not enroll, should contact the Office of Graduate Studies and Research.

## Schedule Changes

The University reserves the right to cancel any course having insufficient enrollment to justify its continuation. Other adjustments in the schedule may be made when necessary.

## Withdrawal from the University

For various reasons a student may withdraw from the University. In such cases the student should report to the Office of the Registrar to initiate the withdrawal procedures or may withdraw via TopNet. Students leaving the institution without an official withdrawal will receive failing grades in all courses in which they are enrolled and endanger their future status at the institution. Students withdrawing after the eighth week of the semester or the fourth week of a bi-term or comparable period during the summer session must consult with their instructors as to the withdrawal grade. The official date of the withdrawal is the date written notification is received in the Office of the Registrar. Students wishing to return to Western at a later date must submit an application for readmission.

## Student Schedule Changes

Changes in schedules may be made only within the first six class days of a semester or the first three days of a bi-term if such changes involve entering other classes. Courses not meeting at least twice during the first six class days may be added through, but not past, the day of the third class meeting.

During a semester, a student may withdraw from a course with a grade of W or F under the following conditions: A. A student is permitted to withdraw from any course with a grade of W through the 8th week of class. B. After the 8th week of class, any student dropping a course receives an automatic grade of F. However, when there are extenuating circumstances, and at the discretion of the faculty member and the department head, the student may be permitted to withdraw with a W instead of an F .

During a bi-term a student may drop a course with a grade of W or F under the following circumstances: A. A student is permitted to withdraw from any course with a grade of W through the 4th week of class; B. After the 4th week of class, any student dropping a course receives an automatic F. However, when there are extenuating circumstances, and at the discretion of the faculty member and the department head, the student may be permitted to withdraw with a W instead of an F .

## Division of Extended Learning and Outreach (DELO) \& Regional Campuses

The WKU Division of Extended Learning and Outreach (DELO) delivers quality credit and non-credit educational opportunities to individuals, organizations, and the public using flexible and accessible formats. Recognizing the challenges of today, DELO (a centralized administrative unit) partners with University faculty, departments and colleges to meet the diverse needs of WKU's local, regional and virtual communities in responsive and engaging ways.

DELO units work separately and together to support the mission of the University:

- Carroll Knicely Conference Center
- Center for Training and Development
- Cohort Programs
- Continuing Education
- Correspondence Study
- Distance Learning
- Summer/Winter Sessions
- WKU/Elizabethtown-Ft. Knox Regional Campuses
- WKU/Glasgow Regional Campus
- WKU/Owensboro Regional Campus

Go to our website http://www.wku.edu/delo for more information on DELO or any of our individual programs. Many courses are offered in each of the three WKU Centers and in other service locations. Registration is available through TopNet, Western's online registration system. Admission information, registration materials, and course offerings are available at each of the WKU Centers. Any questions may be directed to the appropriate WKU Center.

## Elizabethtown/Ft. Knox <br> Campus

http://www.wku.edu/etown-
ftknox/index.htm
(270) 769-1614 Elizabethtown
(270) 766-5133 Fax
(502) 942-8381 Ft. Knox
(502) 745-5079 Fax

Glasgow Campus<br>http://www.wku.edu/glasgow/<br>(270) 651-6399 Office<br>(270) 745-5080 Fax

Owensboro Campus
http://www.wku.edu/owensboro/
(270) 684-9797 Office
(270) 684-0104 Fax

## EXPENSES AND FEES

For information on expenses and fees, please contact the Bursar's Office at (270) 745-6381.
Tuition and fee schedule for academic year 2007
Note: Quoted tuition and fees are based upon the 2007-2008 academic year and are subject to change by the Kentucky Council on Postsecondary Education or Western Kentucky University.

| Graduate Tuition Fall 2007 | Full-time | Part-time <br> Per Credit Hour |
| :--- | ---: | ---: |
| Resident | $\$ 3,507.00$ | $\$ 351.00$ |
| Non-Resident (Domestic) | $\$ 3,839.00$ | $\$ 384.00$ |
| Non-Resident (International) (See Note 1*) | $\$ 8,487.00$ | $\$ 434.00$ |
| Graduate Distance Learning Course (See Note  $\$ 421.00$ <br> $\left.2^{* *}\right)$   |  |  |

*Note 1: The full-time, non-resident, international graduate tuition and fees rate will be assessed at a total of $\$ 8,487$. The University will award a \$4,150 graduate, non-resident scholarship for full-time, non-resident, international graduate students.
**Note 2: The Distance Learning Course rate is for all part-time students, regardless of residency, enrolling in on-line, web-based courses. Students enrolled exclusively in distance learning courses will be assessed the distance learning per hour rate regardless of the number of hours enrolled. There is no full-time distance learning rate.
A minimum of nine (9) graduate hours during fall or spring semester is required for classification as a full-time student.

## Out-of-State Tuition Waiver

Graduate students who are residents of Macon, Robertson, and Sumner counties in Tennessee are eligible to pay instate tuition by virtue of a reciprocity agreement between Kentucky and Tennessee. This agreement is through the states' legislatures and is subject to change or cancellation by those bodies. For additional information, students may contact the Office of Graduate Studies and Research.

## Alumni Grant Program

An alumni grant is available to any qualified non-resident student whose parent, stepparent, or grandparent holds an associate, baccalaureate, masters, or specialist degree or has completed a certificate program from Western Kentucky University. Tuition for qualified students will be assessed at 1.25 times the corresponding full-time resident rate. For qualifications, requirements, and procedures, students may contact the Office of Graduate Studies and Research.

## Application Fee

A first time WKU graduate applicant is charged a non-refundable application fee presently set at $\$ 35.00$. Previous WKU graduate applicants are not subject to this fee. This fee is subject to change at any time without prior notice. Under no circumstances will this fee be refunded (e.g., a student is not admitted into the program).

## Course Fees

Some courses require a course fee. These fees are non-refundable after the University's refund policy is less than $100 \%$. All fees are per course unless otherwise noted. Refer to the University's schedule bulletin for a current listing of all course fees.

## Late Registration Fee

Students who delay their registration until the first day of class or thereafter will be assessed an additional \$50 late registration fee.

## Auditing Course Fee

All students who audit a course are charged the same fee that they would pay if they took the course for credit.

## Graduation Fee

Candidates for graduate degrees will be charged a fee of $\$ 45$. This fee will cover the cost of cap, gown and hood, diploma and other necessary expenses. The degree candidate must complete an Application for Graduation and return it with the graduation fee to the Registrar's Office according to the dates established by the Registrar for each semester. Graduation fees should be paid no later than the semester prior to the semester of graduation. Applications not received by the Registrar's Office by the due date will result in the student's omission from the graduate ceremony bulletin. Applications are available from the Registrar's Office or Graduate Studies and Research. This fee is subject to change without prior notice.

Degrees are conferred for fall graduates in December, for spring graduates in May, and for summer graduates in August. Any degree requirements completed in the May/June/July summer sessions will result in the student receiving the degree in August.

## Transcript Fees

The following fees are assessed for transcript services for previously enrolled students:
\$4 per transcript, and \$6 per transcript for immediate over-the-counter service or fax service.
Contact the Office of the Registrar at (270) 745-5448 for additional information.

## Parking Fees

Students who register a vehicle should refer to WKU Student Handbook for vehicle regulations and assessments. Parking rules and regulations are distributed at the time student purchases parking permit. Contact the Parking and Transportation at (270) 745-2361 for additional information.

## Fee Payment

All registration fees, housing fees, course or laboratory fees, meal charges, student health service charges, and other assessments, fees and charges are due and payable in accordance with the statements rendered by the appropriate University office.

Registration and housing fees must be paid on the date a student registers or on other dates as specified by the Office of the Bursar. Students who do not make payment of required fees are not registered students.

The University offers a deferred payment plan, which is available for the fall and spring semesters. Fifty percent of the amount due for tuition, fees, housing and meal plans, plus a $\$ 20.00$ contract service fee, must be paid by the due date indicated on the bill. The student must sign a Deferred Payment Contract in the Bursar's Office or obtain the form from the WKU Tuition and Fees website. The remaining tuition and fees will be billed with the due date of October 15 for the fall semester or March 15 for the spring semester. A late fee of $\$ 100$ will be charged for failure to pay the balance by the due date. Students who fail to pay the balance will be obligated and not allowed to register for another semester or receive a transcript. A payment plan is not offered for the summer term.

The University expects the students to be financially responsible and not be delinquent in financial obligations to the University or to any department or division of the University. A student who fails to meet a financial obligation within ten (10) days after the date of notice from the appropriate university official will be subject to regulations promulgated by the University. If the student does not settle the obligation by the date designated on the notice, the appropriate business office shall notify the Registrar. After the Registrar has been notified that a student is delinquent, the Registrar shall not allow the student to register or obtain an official transcript until the Registrar has been notified that the obligation has been settled.

The University expects all students to register for classes and pay tuition prior to the first day of class. Class schedules will be cancelled for students who fail to pay or make arrangements to pay by the due date on the statement rendered by the University. A late payment charge of $\$ 100$ may be assessed. Failure to receive a bill does not relieve the student of the obligation to pay tuition and fees by the due date.

In the event that any tuition, fees and/or expenses are not paid when due, and the University undertakes collection of any unpaid portion, the student shall also be assessed and be responsible for any collection costs incurred by the University.

## Tuition and Fee Refund Policy

Tuition refunds or reductions in outstanding fee liabilities for students who officially withdraw through the Registrar's Office or TopNet, or who change their status from full-time to part-time or further reduce their part-time status through drop/add, will be made according to the schedules below. The refund percentage is applied to the number of credit hours dropped, not the dollar amount of the tuition and fees assessed.

To calculate a refund: Multiply the refund percentage by the number of hours dropped. This number is subtracted from the student's current liable hours.
For more information visit http://www.wku.edu/bursar/refund.html

## RESIDENCY

The determination of residency for admission and tuition assessment is governed by state regulation 13 KAR 2:045. The regulation can be reviewed on the Kentucky Council on Postsecondary Education website at www.cpe.state.ky.us/policies/ policies_student_residency.asp. Enrolled students may contact Undergraduate Admissions for additional information.

## ADMISSION

## Application and Fee

Students seeking a graduate degree must obtain an Application for Admission (Form A) from the Office of Graduate Studies or on the Graduate Studies website at http://www.wku.edu/graduate /. The completed form, along with a nonrefundable $\$ 35.00$ application fee (this fee is subject to change without prior notice), must be returned to the Office of Graduate Studies and Research.

Students may also apply online at
https://acsapps.wku.edu/pls/prod/twbkwbis.P_GenMenu?name=wkumenu.P_AdmUnsecMnu .
All students seeking admission into a graduate degree program should submit the Graduate Studies application by the following dates:

Fall Semester: June 15

## Spring Semester: November 15

(Some programs have earlier dates for application submission.)
Application and all supporting materials (i.e., transcripts, GRE/GMAT, teaching certificate) need to be received in Graduate Studies by the above dates to ensure adequate time for departmental review. To be eligible for any type of financial aid or a graduate assistantship, students must be admitted in good standing to a degree program. Non-degree seeking students are ineligible for financial aid and graduate assistantships.

## Transcript Record

Graduates of accredited institutions other than Western Kentucky University must request that one official transcript showing the completed undergraduate degree be sent to Western Kentucky University. The transcript must be forwarded from the college or university registrar directly to the Office of Graduate Studies and Research. Applicants who have not completed the undergraduate degree are required to submit one official transcript at the time of application and one official transcript upon completion of the degree. Transcript records should be submitted for any graduate and undergraduate courses taken at any institution other than WKU. Transcripts sent to Graduate Studies become the property of the University and will not be returned to the student under any circumstances nor will a copy of the transcript be given to the student.

## Standardized Examination Scores

All degree-seeking students must submit appropriate standardized test scores regardless of their undergraduate grade point average. With two exceptions, all degree programs require the Graduate Record Examination (GRE) General Test. The exceptions are the Master of Business Administration, which requires the Graduate Management Admission Test (GMAT), and the Master of Arts in Administrative Dynamics, which accepts either the GRE or GMAT.

As of October 1, 2002 the GRE General Test is comprised of the verbal and quantitative sections and an analytical writing assessment. Standardized test scores must be received by the Office of Graduate Studies and Research prior to admission. The admission decision will be based upon both the undergraduate transcript grade point average and the GRE score in its entirety.

Registration materials for the GRE and GMAT are available at the Counseling Service Center, the Office of Graduate Studies and Research, http://www.gre.org, or http://www.gmat.org, or by calling 1 (800) 473-2255.

If students have a master's degree from an accredited institution in a related field to their area of study, they may use this in place of the GRE General Test. Each department has the discretion to approve this exception to the GRE requirement.

## GAP Score

Admission decisions are based upon both the undergraduate grade point average and the GRE General Test score. The GAP score is the sum of the GRE Verbal \& Quantitative scores times the overall undergraduate grade point average. For example, a GRE score of 800 (Verbal + Quantitative) and a grade average of 3.5/4.0 would produce a GAP score of 2800 . Because GAP is a product of both the GRE score and undergraduate grade point average, both the GRE and transcript record are essential for making an admission decision. The GRE General Test also includes a writing component. The required GAP score is 2200 (individual degree programs may be higher). Previous graduate course work does not have any bearing on admission requirements, i.e., GAP score calculation. Students who took the GRE General Test prior to October 1, 2002 must have a GAP score of 3500 or better. This GRE General Test consisted of verbal, quantitative, and analytical sections. The GAP score is generated by the sum of the three parts of the GRE times the overall undergraduate grade point average.

## GMAT Score

Admission decisions to the Master of Business Administration are based upon the scores of the Graduate Management Admission Test. The requirements for general admission to the MBA program are a 500 total GMAT test score and a GAP score of 1050 (undergraduate grade point average times 200 plus GMAT score).

## ADMISSION REQUIREMENTS

Individual programs may have more stringent requirements than the Office of Graduate Studies, but all students must meet the minimum Graduate Studies requirements to be considered for admission.

## Master's Degrees

Applicants for a master's degree program must have:
A. The completed application, along with a $\$ 35.00$ (non-refundable) application fee by the admission deadline;
B. A bachelor's degree from an accredited college or university (Applicants from non-accredited institutions see Applicants from Non-Regionally Accredited Institutions);
C. An adequate preparation in the field of specialization;
D. All students who hold teacher certification or have a statement of eligibility must submit a copy of the current teaching certificate or statement of eligibility; and
E. A GAP score of 2200 for master's programs requiring the GRE. MBA students must have a GMAT score of 500 and a GAP score of 1050 .

## Specialist Degrees

Applicants for a specialist degree program must have:
A. The completed application, along with a $\$ 35.00$ (non-refundable) application fee by the admission deadline;
B. Hold a master's degree from an accredited college or university (Ed.S. in School Psychology does not require a applicants to hold a master's degree);
C. Have adequate preparation in the proposed field of specialization;
D. All students applying for the Ed.S. in Elementary Education, Secondary Education or School Administration must submit a copy of the current teaching certificate;
E. Score not less than 850 on the GRE General Test Verbal and Quantitative sections and a Writing Score of 4.0 or have a grade point average of not less than 3.5 on the course work for the master's degree program (The specialist degree in School Administration requires a 3.5 GPA and 850 GRE score); and
F. Present to the Office of Graduate Studies three letters of recommendation from graduate faculty and professional associates.

## Graduate Certificate Programs

Students may apply to a graduate certificate program; however, admission or completion of a graduate certificate does not guarantee admission to a graduate degree program. Admission to pursue a graduate certificate is based upon a bachelor's degree and adequate preparation in the area of study. A maximum of 12 hours of graduate certificate course work, if appropriate, may subsequently be applied toward graduate degree requirements.

## Applicants from Non-Regionally Accredited Institutions

Graduates of non-regionally accredited, four-year educational institutions may be considered for admission to a master's degree program with a minimum GAP score of 2200 and writing score of 3.5 , an adequate preparation in the field of specialization, and a minimum of 40 hours of general education course work including the following:

1. At least 6 semester hours (or the equivalent) in each of the areas of communication, humanities, and natural science.
2. At least 12 semester hours (or the equivalent) in social and behavioral studies, including history.
3. At least 2 semester hours (or the equivalent) in mathematics or logic.

## Transient Students

Students working toward a degree at other institutions must complete an Application for Admission and pay the required application fee, but are not required to submit transcripts. Instead, they must obtain a Visiting Student Form (Form H) from the Office of Graduate Studies. This form must be completed by the student and the graduate dean of the degree-granting institution, where the student is in good standing, and returned to Graduate Studies at WKU prior to enrollment.

## Non-degree Seeking Students

Students not seeking a graduate degree must complete an Application for Admission and, if not a Western graduate, submit all transcripts from colleges attended to the Graduate Studies Office. Should the non-degree seeking student later apply for and be granted admission into a degree program, no more than 12 hours taken while in the non-degree
category may be used to fulfill degree requirements. Non-degree seeking students are not eligible for financial aid or graduate assistantships.

## International Students

Applicants who are not U.S. citizens must submit the following materials for admission:

1. Properly completed International Application for Admission (Form I),
2. An official transcript indicating completion of a baccalaureate degree (or the equivalent),
3. GRE General Test Score or GMAT (if seeking admission to the MBA program),
4. Evidence of ability to communicate in English,
(A minimum of 550 on the paper based TOEFL, a minimum of 213 on the computer based TOEFL, or a minimum of 79 on the iBT TOEFL), and
5. Evidence of adequate financial resources.

After the international student has submitted these application materials, evaluation is made within the department offering the degree program. Official transcripts sent to WKU will not be returned to the student for any reason. Students wishing to keep an official transcript should request two copies from the undergraduate institution. International students must participate in orientation and testing of English proficiency three days prior to the beginning of the regular registration period. Students found to be deficient in English skills must take remedial course work. Health insurance must be purchased upon arrival at the University. For additional information, contact the Office of International Programs at (270) 745-4857.

## Senior Citizens

A senior citizen (65 years or older) who holds a bachelor's degree may be admitted to Graduate Studies as a Special Student. Upon completion of 12 hours of course work in a degree program with a minimum grade point average of 3.0, the student may be admitted to that degree program.

## Alternate Admission for Master's Degree

Applicants who do not meet GAP requirements may pursue alternate admission. In that process, the admission decision may be based upon consideration of accomplishments and qualifications as evidenced by a professional portfolio consisting of the record of vocational attainment and recognition; a statement of goals indicating commitment to pursue graduate education; letters of support from instructors, co-workers, or work supervisors; scholarly papers and/or projects; and any other supportive materials. This additional information is considered by the alternative admission committee and may result in one of three recommendations: full admission to Graduate Studies; conditional admission (full admission to be based upon performance in specified undergraduate/graduate course work); or denial of admission. Some departments may have more specific guidelines on alternate admission materials.

Appeal requests for admission requirements for the specialist degree program should follow the procedure outlined above for the master's program.

## 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 satisfy all requirements (specific course work, research tool, thesis, etc.) for the new degree. No more than 12 hours of previous course work, whether transferred from another university, from the previous master's degree at Western (or a combination of the two) or as a non-degree seeking student at WKU may be used to fulfill program and research tool requirements. Any course work used must be earned within the six years allowed for the second master's degree program.

## Seeking Dual Degrees

Students may not seek two degrees (master's or specialist) simultaneously nor can they pursue a master's or Rank I at the same time. A student can, however, pursue a certificate (i.e., Women's Studies Certificate) along with a master's program.

## Academic Common Market

Kentucky, along with 12 other southern states, participates in the Academic Common Market-an interstate agreement for sharing non-duplicative academic programs. Selected graduate programs are included in this cooperative arrangement. A Kentucky resident who has gained admission into one of these selected out-of-state programs can enroll and pay the respective state's resident tuition. A listing of the programs is available from the Director of Undergraduate Admissions.

## Program Residency

Graduate Studies and Research does not have a residency requirement for completing a master's/specialist degree. WKU courses offered by distance education are considered resident credit.

# GRADUATE PROGRAM INFORMATION 

Graduate Studies \& Research
(270) 745-2446 Office

Wetherby Administration Building 207
(270) 745-6950 Fax

Additional information about degree programs may be obtained from the department offering the degree.

## Privacy Policy

Graduate Studies and Research will not disclose information to a third party regardless of association to the student (e.g., spouse, parent, friend, or other family member). This is to protect the student's identification and ensure student information is not misused in any way.

## Course Load

In general, the number of semester hours of credit that may be earned during a given term may not exceed the number of weeks of instruction. During a regular semester, the course load for a full-time graduate student is 9-15 hours with 9 being the minimum and 15 the maximum. The Dean of Graduate Studies will not approve enrollment beyond the maximum of 15 hours.

Graduate assistants may carry a course load of 9-12 hours during each semester while holding an assistantship appointment.

## Course Numbering

## 500 to 800

Courses numbered 500 and above are open to graduate students only.

## 400G

Upper division undergraduate courses 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. However, a student who has taken a particular 400 -level course may not repeat that same course for 400 G level credit. A maximum of 12 hours of 400 G courses may be applied to the master's degree. Specialist degree candidates may not use any 400G-level courses to fulfill degree requirements.

## 400 and below

Courses numbered at the 400 -level or below cannot be taken for graduate credit. Courses of this nature will remain in a student's overall GPA, but will not affect the student's degree GPA.

## Course Descriptions

Course descriptions can be found in the back of the Graduate Catalog and are available through Western's TopNet online registration system. To view a course description, go to TopNet from Western's homepage Quick Links. Once at the TopNet Registration homepage, select Course Catalog then View Course Descriptions. To choose a course, locate the department in the drop-down menu and select $G o$, then choose the course number and select $G o$.

## Time Limitation for Completion of Degree

All requirements for the master's and specialist degrees must be completed within six years from the date the first course is taken. Failure to complete a degree in six years will result in the loss of all credits taken outside of the time limit. Students may request an extension to be approved by the Dean of Graduate Studies and Reserach. Extensions are considered on a case-by-case basis, and a student is not guaranteed approval. All records are purged after six years from the date of last enrollment at the university or degree completion.

## Credit Prior to Program Admission

The total number of credits students may apply to their degree program from credits earned prior to admission to the program (courses taken during the senior semester, unclassified status courses, transfer courses, previous master's courses, previous certificate courses) may not exceed twelve (12) hours.

## Transfer Credit

A maximum of 12 transfer credits may be used in any degree program. However, some programs have more restrictive policies regarding the number of hours that will be accepted in a particular program. In any case, the following requirements must be met:

1. The credit(s) must have been earned at an accredited graduate institution.
2. The course work to be transferred must be properly designated as having been taken for graduate credit.
3. The grade point average must be at least $3.0(4.0 \mathrm{scale})$ on all graduate course work appearing on the transcript before specific courses can be transferred.
4. Additionally, the courses to be transferred must carry a grade of 3.0 ( 4.0 scale) or better.
5. Credits earned during a given term must not exceed the number of weeks of instruction and must have been earned within the six-year time limit for degree completion.
6. Any course(s) to be transferred must be appropriate for degree completion.
7. At least 12 hours in the major area and at least 6 hours in the minor area must be taken at Western. The "Transfer Credit Practices" report published by the American Association of Registrar's and Admissions Officers is the reference used in evaluating credits.
Transfer credits taken during the final semester of a program will delay program completion until official transcripts have been received in the Office of Graduate Studies and Research. In cooperative or joint programs with other universities, credits earned in the program at these institutions are not considered transfer credits.
A majority of credits applied toward certificate requirements must be earned at Western.

## Independent Study Courses

A maximum of 6 hours of workshops, independent studies, special problems, individual special topics, and readings in the discipline may be used on any degree program.

## Graduate Advising

Upon admission to a graduate program, each student is assigned a major advisor from the graduate faculty in their respective department. Although student advising at Western Kentucky University is specifically designed to assist students as they progress through degree programs, it is the responsibility of all students to be thoroughly familiar with all rules, regulations, and requirements pertaining to graduate study.

## Readmission

If graduate students are not enrolled in the semester in which they initially applied or have not enrolled in more than three semesters, a Readmit Form is required. A Readmit Form may be obtained from the Office of Graduate Studies or via email at graduate.studies@wku.edu. Once admitted to a program or enrolled in courses, a student may complete a readmission application online at the following website:
https://acsapps.wku.edu/pls/prod/twbkwbis.P_GenMenu?name=wkumenu.P_GradReAdmUnsecMnu

## Program of Study (Form B/C)

All degree-seeking students must submit a planned program of study (Form B/C) to the Office of Graduate Studies and Research within the first semester (or up to 12 credit hours) of course work (inclusive of transfer credit). The degree program is to be developed in consultation with and approved by the advisor(s) assigned at the time of admission. If a program of study is not on file with the Office of Graduate Studies and Research, a student will not be permitted to enroll in a second semester or beyond 12 hours of courses (whichever comes first). Removal of this hold is contingent upon receipt and approval of the program of study (Form B/C). No exceptions will be made regarding this matter.

All degree programs must be reviewed and approved by the Office of Graduate Studies and Research. Students in education graduate programs must have degree programs approved by Teacher Certification prior to submitting the program to Graduate Studies. The total number of credits students may apply to their degree program from credits earned prior to admission to the program (courses taken during the senior semester, unclassified status courses, transfer courses, previous master's courses, previous certificate courses) may not exceed 12 hours.

Non-degree education programs are reviewed and approved in the Office of Teacher Certification. Students entering the planned fifth-year (Rank II) or sixth-year (Rank I) professional education programs must have an approved program of study on file in the Office of Teacher Certification. These planned programs lead to the Rank II or Rank I salary classifications as recognized by the Kentucky Department of Education. The approved program must be on file before a letter certifying completion of hours can be sent to the appropriate board of education.

## Course Substitutions

Any change in the approved program of study must be specified on a Course Change Form, approved by the advisor and submitted to Graduate Studies for final approval. Course changes include the addition or deletion of a course, the substitution of a transfer course, or substitution of another course offered by Western for a course on the program. The final approval should be obtained prior to enrollment in the course(s) to be submitted.

## Change of Program

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 course for their applicability to the new program. Students may submit a change of program online at the following website:
https://acsapps.wku.edu/pls/prod/twbkwbis.P_GenMenu?name=wkumenu.P_GradReAdmUnsecMnu

## GRADUATE STUDIES POLICIES AND PROCEDURES

## Grading and the Quality Point System

The letters A, B, C, D, F, P and X are used by the University to indicate the student's academic proficiency. These letters have the following significance:

A - Excellent, four quality points per semester hour
B - Good, three quality points per semester hour
C - Average, two quality points per semester hour
D - Below Average, Unsatisfactory, one quality point per semester hour.
F - Failure, no semester hours earned and no quality points
$\mathbf{P}$ - Pass, credit is awarded towards a degree, but no quality points are assigned. The " P " designation is restricted to specific courses approved for its use.
$\mathbf{X}$ - Incomplete. A grade of " X " (incomplete) is given only when a relatively small amount of work is not completed because of illness or other reason satisfactory to the instructor. A grade of " X " received by a graduate student, with the exception of thesis courses or similar projects, will automatically become an "F" unless removed within twelve (12) weeks of the next full term (summer term excluded). An incomplete must be removed within this twelve-week period regardless of whether the student is registered for additional work in the next term. A student should work with the instructor who assigned the incomplete on an independent basis to complete the necessary assignments. The grade of " X " will continue to appear as the initial grade on the student's transcript, along with the revised grade. A grade of incomplete is not used under any circumstances as a substitute for " F " or "W".

The designations of AU, W, NR, ER, and NG are not included in the determination of grade point average and are used in the following cases:

AU - Auditor of a course (See below for additional information).
W - Officially withdrew
NR - No report. Grades for an entire class were not received by the Office of the Registrar in time for processing. The designation "NR" is not to be used as a grade for individual students.
ER - Error in reporting. This designation is used by the Office of the Registrar when a grade is not reported for an individual student.
NG - No grade. A grade is not appropriate to the course. The "NG" designation is restricted to specific courses approved for its use.
IP - In Progress. The IP designation is restricted to specific courses designed to span more than one term. Unless approved otherwise, an IP designation unresolved at the end of one year after its assignment will be converted to an F .

## Auditing of Courses

An auditor is one who enrolls and participates in a course without expecting to receive academic credit. The same registration procedure is followed and the same fees are charged as for courses taken for credit. An audited course is not applicable to any degree or certificate program. Regular class attendance is expected of an auditor. Other course requirements, which may be obtained in writing from the instructor, will vary depending on the nature of the course. Students interested in auditing a course should secure permission from the instructor and discuss course requirements prior to enrolling. Failure to meet course requirements may result in the auditor being withdrawn from the course at the request of the instructor. A successful audit will be recorded on the transcript with the designation of AU. Any change from audit to credit must be done by the last day to add a class. Changes from credit to audit must be done by the last day to drop a class with a grade of "W". Refunds for withdrawals from audited courses will be prorated on the same basis as refunds for withdrawals from courses taken for credit.

## Recording of Grades

Grades are recorded in the Office of the Registrar as reported by the faculty at the end of each term. No grade filed in that office may be changed except on a written statement from the instructor certifying that an error has been made, or in the case of an incomplete, that the work was completed within the time limit. All conditions must be removed before the student will be recommended for any certificate or degree.

## Grades

Candidates for graduate degrees and/or certificates are required to maintain a combined average grade of B (3.0 grade point average) in all course work. Grades lower than a C may not be used in meeting degree or non-degree requirements. Graduate students must maintain a 3.0 cumulative GPA in all courses taken as a graduate student (including all transfer courses and undergraduate level courses). Students who fail to meet the 3.0 GPA requirements for the graduate program GPA (courses on approved Form C) and overall cumulative GPA will not be awarded a degree or certificate.

## Graduate Academic Probation and Dismissal

Graduate students must maintain a 3.0 grade point average (GPA) for all courses taken at WKU and those graduate courses transferred to WKU to fulfill graduate program requirements. Students must maintain a minimum grade point average of 3.0 in both the major and the cumulative (overall) GPA to earn a degree or certificate. If a student's overall GPA falls below 3.0, the student will receive a letter of academic warning informing the student that the GPA is below 3.0. The student will have one additional full-time semester or the equivalent ( 9 hours) to remove the academic probation by attaining a 3.0 cumulative GPA. If the GPA remains below a 3.0 after completing the one semester of fulltime course work or the equivalent ( 9 hours), the student may not register for any additional graduate credit at WKU and will be dismissed from the graduate program. Students placed on academic probation are not eligible for graduate assistantship appointments.

Any student failing to obtain the required 3.0 GPA after the probationary period who wishes to be readmitted to Graduate Studies must submit a written academic plan detailing how the required GPA can be obtained. The request for readmission must have the support of the graduate faculty in the academic program before being reviewed/considered in Graduate Studies. This request for readmission must be submitted with a new application following the semester of academic probation. Each case will be reviewed by the Dean of Graduate Studies and Research for a determination regarding readmission to the desired academic program. If they are accepted for readmission to the program, readmitted students will have one full-time semester or the equivalent ( 9 hours) to remove the academic probation by attaining a 3.0 cumulative GPA. Please note that each program reserves the right to apply more restrictive requirements to graduate students regarding probation and dismissal.

## Dismissal

Graduate students may be dismissed from the program for having failed twice the final comprehensive examination for the master's degree. A graduate student may also be dismissed from the graduate program if the overall GPA, as a graduate student, (including graduate and undergraduate course work) falls below 3.0 as described in the academic probation section above.

Students may also be dismissed from programs for reasons other than failure to maintain a satisfactory grade point average. Expectations regarding student conduct are described in the Western Kentucky University Student Handbook and apply to students in all programs. Additional program-specific policies regarding student conduct and dismissal from a program for non-academic reasons may also apply. Students should contact their advisors for more information regarding expectations for appropriate student conduct.

## Repeating a Course

A course in which a student has received a passing grade (C or better) may not be repeated for the purpose of raising the grade. If a course is repeated in which a passing grade was received, the course credit(s) will only count once toward the program and both grades will be used in calculating the GPA. A course in which a grade of D or F is received must be repeated if the course is used in meeting degree requirements. When the course is repeated, the course credit(s) will only count once toward the program and both grades are used in calculating the GPA. If the course is not being used to fulfill degree requirements it may be repeated and both grades are used in computing the overall grade point average. In graduate education, grades are not replaced by repeating courses.

## Research Tool Grades

For those students who choose programs that allow course work in lieu of the foreign language requirement, a minimum grade of B must be attained for the research tool. The research tool is included in the grade point average. Research tool requirements must be met prior to obtaining admission to candidacy. The research tool should be completed within the first 15 hours of the graduate program.

## Foreign Language Examination

Students may choose to complete the research tool requirement by taking a foreign language examination. The foreign language application must be filed and approved prior to the completion of the examination. Applications for the foreign language examination can be obtained in the Graduate Studies and Research office or in the Department of Modern Languages \& Intercultural Studies.

## Admission to Candidacy (Form D)

Admission to candidacy is a traditional component of graduate study; the purpose of which is to provide a planned, formal review of the student's progress toward the specified program of study. The review enables the student, in consultation with appropriate University officials, to make warranted changes in the program. Admission to candidacy should be an expression of confidence that the student will (with appropriate, continued effort) be able to complete all requirements for the degree.
All degree-seeking graduate students must apply for and be admitted to candidacy by submitting an Admission to Candidacy Form (Form D) to the Office of Graduate Studies. Admission to Graduate Studies and Research and admission to candidacy are two separate procedures. Students seeking master's or specialist degrees should submit a Form D before the completion of 21 credit hours and after completing at least 15 hours of course work and, if
applicable, completing the research tool and removing any deficiencies with a grade of A or B. The Form D MUST be submitted no later than one semester prior to the intended semester of planned degree completion. Failure to meet the filing deadline for the Form D may delay graduation by at least one semester.
Students who have not filed a Form D prior to the completion of 21 hours of course work are subject to a registration hold. This hold will not be removed until the Form D is signed by the major advisor, and received in the Graduate Studies office. Failure to complete this requirement can delay graduation by at least one semester.

## Admission to Candidacy requirements:

1. An approved program of study,
2. Removal of any deficiencies or conditions for admission,
3. Attainment of at least a 3.0 grade point average on all graduate course work and at least a 3.0 overall GPA at the time of admission to candidacy,
4. Completion of the foreign language examination or research tool as specified for the program, and
5. Approval of the major advisor and Dean of Graduate Studies.

Note: Master's or specialist degree students who enroll in 12 to 15 hours of course work (applicable to their approved degree programs) during their first semester should submit their applications for candidacy (Form D) to the Office of Graduate Studies at the end of that semester.

## Comprehensive Examination

All graduate degree programs require that either a written or an oral examination be satisfactorily completed, or that an approved capstone course be successfully completed. For students in master's degree programs with thesis (Plan A), an oral defense of the thesis is required. Students must meet the following guidelines before they are permitted to attempt the comprehensive examination:

1. Gain admission to candidacy (Form D on file with Graduate Studies and Research)
2. Complete at least one half of the course work in an approved program minor (if applicable),
3. Have no more than nine hours remaining on the approved program, and
4. Complete any additional requirements as specified by faculty in the department in which the program is housed.
The major advisor, in consultation with the student, appoints the oral examination committee consisting of three graduate faculty members. If the student's program includes a minor, or a significant amount of course work in an area outside the major, one of the committee members must represent that area. The chairperson will notify Graduate Studies of the results of the examination by sending a Comprehensive Examination Report (Form E). The department is responsible for turning in the results of the examination to Graduate Studies. Failure to receive the Form E can delay graduation by at least one semester. Form E's will not be accepted by students.

## Undergraduate Seniors Earning Graduate Credit

Undergraduate seniors at Western may enroll in graduate course work (i.e., courses requiring graduate standing) during their final semester provided they meet the following conditions:

1. Admission requirements (see Standard Examination Scores for admission to graduate studies and to the program of interest) except for completion of the bachelor's degree,
2. Make formal application to graduate study (Form A should be submitted to Graduate Studies at least four weeks prior to the beginning of the semester),
3. Seniors lacking no more than 9 hours to complete a bachelor's degree may enroll in a maximum of 6 hours of graduate credit. Seniors lacking no more than 12 hours may enroll in a maximum of 3 hours of graduate credit.
4. Carry a final semester course load of no more than 15 hours (combined undergraduate and graduate hours), and
5. Do not, in any way, attempt to apply the graduate course(s) to the undergraduate degree.

Students wishing to pursue graduate credit must file the appropriate paper work, which can be obtained in the Office of Graduate Studies and Research. Requests for enrolling in graduate courses will not be considered without this form.

## Thesis and Specialist Project Committees

Students pursuing graduate programs requiring the thesis or specialist project are assisted by a thesis or specialist project committee. The student in conjunction with the thesis chairperson selects at least two additional graduate faculty members.

In some cases, an individual who is not a part of Western's faculty may be asked to serve on a thesis or specialist project committee. Prior to this service, such an individual must qualify and be recommended for adjunct membership on Western's graduate faculty. An individual who has expertise in a pertinent area, but who does not meet the requirements for appointment to regular or associate membership on the graduate faculty, may serve as a fourth member of the committee with approval of the Dean of Graduate Studies.

## Thesis or Specialist Project

The program of a student pursuing the master's thesis or specialist project must contain 6 hours of credit in 599Thesis Research and Writing or in 699-Specialist Project.

The thesis/project must be submitted to the Office of Graduate Studies following approval by the student's committee members. Contact Graduate Studies for semester dates.

Instructions and requirements for preparing, submitting, and distributing the thesis or specialist project are given in the Guidelines for Master's Theses and Specialist Projects. Copies are available in the Office of Graduate Studies or on the website. It is the student's responsibility to obtain and comply with these guidelines.

## Maintaining Matriculation

If the thesis, specialist, or dissertation project is not completed during the initial period of registration for this credit, the student must maintain matriculation until the thesis or project has been submitted and approved. To maintain matriculation, the student must register for 600 (thesis), 700 (project), or 800 (dissertation) during any semester or summer term in which he/she will be actively pursuing the thesis/project or will be submitting it for approval. Enrollment in matriculation courses does not result in a grade or credit toward any degree or non-degree program.

## GRADUATION CHECKLIST

## Approved degree program (Form B/C) on file

Approved for Admission to Candidacy (Form D)Successful completion of all course work for the programAny and all course changes made to the degree programAll transcripts for transfer credit received and approvedApplication for Graduation/fee received in the Registrar's OfficeSuccessful completion of the comprehensive examination or capstone experienceReport on Comprehensive Exam/Capstone (Form E) received by Graduate Studies and Research$\square$ All grades posted on transcript
Note: The Registrar's Office has 6 to 8 weeks after the end of the semester to post degrees and mail diplomas to all graduating students. Failure to submit all required documents by university deadlines may result in delayed graduation.

The Graduate Studies and Research office does its best to notify students of missing requirements; however, it is the responsibility of the student to file all paperwork as specified by the guidelines set forth in this catalog. Failure to do so will result in delays of official degree completion.

# College of Education and Behavioral Sciences 

Sam Evans, Dean

## Departments

Counseling \& Student Affairs
Curriculum \& Instruction
Elementary Education
Middle Grades Education
Secondary Education
Educational Administration, Leadership \& Research
Psychology
Special Instructional Programs

## Degrees Offered

Master of Arts in Education
Elementary Education
Middle Grades Education
Secondary Education
Exceptional Education

- Learning \& Behavior Disorders
- Moderate \& Severe Disabilities

Education and Behavioral Science Studies
Interdisciplinary Early Childhood Education
Adult Education

School Counseling
Business Education
Student Affairs in Higher Education
Counseling:

- Mental Health Counseling
- Marriage/Family Therapy

Instructional Leader (School Principal),
All Grades
Literacy Education

## Master of Arts

Psychology (Industrial/Organizational, Experimental, Clinical, and General)

## Master of Science

Library Media Education

## Specialist in Education

Counselor Education
Elementary Education
Secondary Education
School Administration
School Psychology

## Doctorate of Education (EdD) ${ }^{1}$

Educational Leadership

## Cooperative Doctorate (PhD)

Education (In conjunction with the University of Louisville)

[^0]
## Certificate Programs

Addictions Counseling and Education
Autism Spectrum Disorders
Educational Technology
International Student Services ${ }^{2}$

## Non-Degree Programs

Planned-Fifth-Year/Rank II<br>Elementary, Middle Grades, and Secondary Education<br>Planned Sixth-Year/Rank I<br>Guidance, Interdisciplinary Early Childhood Education, School Administration, Elementary Education and Secondary Education

## CEBS Contact Information:

201 Tate Page Hall
Phone: (270) 745-4662
FAX: (270) 745-6474
Website: http://edtech.wku.edu/\#

Course work associated with degree programs at Western Kentucky University may be used to meet certification requirements established by the Commonwealth of Kentucky; however, the Commonwealth may institute changes in certification requirements. When the Commonwealth initiates such changes, students seeking certification may be required to modify their programs of study to meet the new certification requirements.

## Degree Programs

Specific admission requirements for each program are described in the respective departmental listings. All MAE programs except Counseling (Mental Health and Marriage/Family Therapy) require a minimum GAP score of 2200 and a minimum GRE Analytical Writing score of 3.5. Applicants to programs that lead to advanced certification by Kentucky's Education Professional Standards Board must also submit current, valid teaching certificates.

Information about all programs in the college may be found at the following site:
http://edtech.wku.edu/academics_and_advising.htm.

## Admission Requirements for Graduate Programs Leading to Initial Certification

In order to be admitted to professional education and be recommended for initial certification after program completion, graduate students must be admitted to a program and possess an overall undergraduate GPA of 2.5 or higher, or a cumulative GPA of at least 3.0 in the last 60 hours (graduate hours plus as many undergraduate hours as are needed to total 60). Specific programs may impose higher minimum GPA requirements as well as other requirements for program admission, and candidates for degrees must maintain a minimum 3.0 GPA overall and in the graduate major in order to receive a degree. Contact program advisor for program-specific requirements.

This policy applies to some or all students in the following programs: MAE: Interdisciplinary Early Childhood Education; MS: Library Media Education; MAE: Exceptional Education, Learning and Behavior Disorders Alternate Route to Teacher Certification; EdS: School Psychology; MS: Communication Disorders; and MAE: Middle Grades/Secondary Education - Alternate Route to Teacher Certification.

## Alternate Admission

An applicant for alternate admission to graduate study in the College of Education and Behavioral Sciences must submit a professional portfolio. Further information about alternate admission to CEBS programs may be found on the college's website: http://edtech.wku.edu/programs/AlternateAdmission.htm.

[^1]
## Alternate Route to Teacher/Principal/Superintendent Certification

The College of Education and Behavioral Sciences offers approved Alternate Route to Teacher Certification MAE programs in the following areas:

- Exceptional Education, Learning and Behavior Disorders (Grades P-12)
- Music Education (Integrated, Instrumental, Vocal) (Grades P-12)
- French Education (Grades P-12)
- German Education (Grades P-12)
- Spanish Education (Grades P-12)
- Middle Grades Education, with certification in two of the following content areas: Language Arts, Social Studies, Science, Mathematics; or with single subject certification in Science or Mathematics (Grades 5-9)
- Agriculture Education (Grades 5-12)
- Business and Marketing Education (Grades 5-12)
- Family and Consumer Sciences Education (Grades 5-12)
- Technology Education (Grades 5-12)
- Biology Education (Grades 8-12)
- Chemistry Education (Grades 8-12)
- Earth and Space Science Education (Grades 8-12)
- English/Allied Language Arts Education (Grades 8-12)
- Mathematics Education (Grades 8-12)
- Physics Education (Grades 8-12)
- Social Studies Education (Grades 8-12)

Further information about the Alternate Route to Teacher Certification (ARTC) programs may be found at the following website, http://edtech.wku.edu/\~teachsvs/alternate route.htm, or by contacting the Office of Teacher Services at (270) 745-4897. Applicants to ARTC MAE programs must meet all standard program admission requirements as well as additional requirements; further details are provided in the departmental sections for Middle Grades Education, Secondary Education, and Exceptional Education. Those admitted to ARTC MAE programs may be eligible for a recommendation for a one-year temporary provisional teaching certificate, renewable for two additional one-year terms.

At the time of admission to an ARTC MAE program, students will be expected to sign a document to signify their understanding of and agreement to abide by the following expectations:

- The student must maintain a minimum GPA of 3.0. If the semester GPA drops below 3.0, the student may be dropped from the program or, with evidence of extenuating circumstances and at the discretion of the program faculty, the student may be allowed to remain on a probationary status. If the student's GPA falls below 3.0 for a second time, the student will be dropped from the program.
- The student must be continuously enrolled (Fall, Spring, and Summer terms), completing a minimum of 3 hours per term unless prior approval of the program advisor is obtained. Regardless of hours completed in any given semester, the student must complete all degree requirements within three years from the date of the notice of eligibility to be issued the initial temporary provisional certificate.
- In addition to satisfactory academic achievement, the student must demonstrate acceptable professional behavior in all school settings.

The college also offers approved Alternate Route to Principal Certification and Alternate Route to Superintendent Certification programs. Further information about these programs may be found in the departmental section for the Department of Educational Administration, Leadership, and Research.

## Comprehensive Examination Policy

All MAE programs require the successful completion of a comprehensive exam. General information regarding the policy for eligibility and administration of comprehensive exams may be found on the college's website: http://edtech.wku.edu/programs/ComprehensiveExamPolicyCEBS.htm. Eligibility requirements include successful completion of EDFN 500 or other research foundations course.

## Non-Degree Programs

Students who wish to pursue a Planned Fifth-Year/Rank II or Planned Sixth-Year/Rank I program must submit an application to the Office of Graduate Studies. Upon completion of the non-degree program, individuals must contact the certification officer in the College of Education and Behavioral Sciences. The certification officer will then certify to Kentucky's Education Professional Standards Board that rank requirements have been met. Completion of a Planned Fifth/Sixth-Year non-degree program may not be accepted in states other than Kentucky in determining pay status.

Candidates for the Planned Fifth-Year/Rank II, Planned Sixth-Year/Rank I, Advanced Certification, or Endorsement should furnish the WKU Office of Teacher Certification the following documents:

- A completed Application for Kentucky Teacher Certification or Change in Salary Rank (TC-1),
- Official transcripts of all graduate and undergraduate course work,
- Verification by the superintendent or personnel director of full-time classroom teaching experience at the appropriate grade level(s), and
- Passing PRAXIS II Specialty Area test scores for each area of certification and the Principles of Learning and Teaching test score for appropriate grade range (if applicable).


## Planned Fifth-Year/Rank II Programs

The Department of Curriculum and Instruction provides Planned Fifth-Year/Rank II programs in Elementary Education, Middle Grades Education, and Secondary Education 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 degree programs.

Although the Planned Fifth-Year/Rank II program does not result in the master’s degree, it does result in Rank II salary classification in Kentucky, renews the teaching certificate, and permits entry into a Planned Sixth-Year /Rank I program.

## General Guidelines:

(See specific program requirements described in the listing for the Department of Curriculum and Instruction.)

1. A minimum of 32 semester hours of graduate courses must be completed, with a minimum GPA of 2.5;
2. At least 18 of the required hours must be completed at Western Kentucky University;
3. A minimum of 12 hours must be in professional education courses, and a minimum of 9 hours must be in cognate areas;
4. Course work taken by correspondence is not accepted; and
5. With prior advisor approval, a maximum of 12 hours of professional development credit may be applied to the program requirement.

## Planned Sixth-Year/Rank I Programs

The Department of Curriculum and Instruction offers Planned Sixth-Year/Rank I programs in Elementary Education and Secondary Education. A Planned Sixth-Year/Rank I program in Interdisciplinary Early Childhood Education is offered in the Department of Special Instructional Programs, and a Planned Sixth-Year/Rank I program in Communication Disorders is offered in the College of Health and Human Services. The Department of Counseling and Student Affairs offers a Planned Sixth-Year/Rank I program in Guidance, and the Department of Educational Administration, Leadership, and Research offers Planned Sixth-Year/Rank I programs in principalship, pupil personnel administration, supervisor of instruction, general school administration, and special education director.

Planned Sixth-Year/Rank I programs lead to the Rank I salary change for certified teachers in Kentucky.

## General Guidelines:

(See specific program requirements described in the departmental listing for the desired program)

1. A minimum of either (a) 30 semester hours of approved graduate level credit in addition to the requirements for the Rank II salary classification, or (b) 60 semester hours of approved graduate level credit, including a master’s degree, must be completed;
2. All course work must be planned in consultation with the advisor and must be related to the professional needs of the student;
3. A minimum of 15 semester hours must be completed in courses numbered 500 or higher;
4. A "B" average must be maintained, and no course grade lower than a "C" may be counted;
5. At least 15 of the required hours must be completed at Western Kentucky University. With the approval of the advisor and the certification officer, the remaining hours may be taken at other institutions, provided that the grades earned are "B" or higher and other transfer regulations are met; and
6. A minimum of 24 hours of the total 60 ( 62 hours when based on Rank II salary classification) must be in academic work apart from professional education. These hours must be in the candidate's major or minor, area of preparation, or in supporting courses from other disciplines as approved by the institution.

## Master of Arts in Education (Education and Behavioral Science Studies), Ref. \# 042

This is an interdisciplinary program designed for qualified graduate students who wish to do advanced study of education (in a general sense) or behavioral sciences (in a general sense) but whose career goals are not addressed by existing programs at Western Kentucky University. The program is a flexible one that allows a faculty advisor to individually tailor a program of studies for a student who wants to pursue graduate study in an area of education or behavioral sciences for which the university does not presently offer a program. Completion of this program does not lead to initial or advanced certification by Kentucky's Education Professional Standards Board, nor does it lead to certification or licensure in counseling or psychology. Details about the program may be found on the program website: http://edtech.wku.edu/~ebss/.

Applicants for admission are expected to attain a GAP score consistent with the minimum established by the university (currently 2200); earn a GRE-Verbal score of at least 350; and achieve a GRE Analytical Writing score of at least 3.5. In addition, applicants are expected to have an undergraduate degree in an area related to education or behavioral sciences. Accompanying the application must be a personal statement that describes the applicant's professional/career goals, including a discussion of how the applicant believes completing the MAE in Education and Behavioral Science Studies will contribute to the realization of those goals. A form for the applicant statement is provided on the program website. International students who apply must achieve a minimum score of 79 on the Internet-based TOEFL (or 550 on the paper-based version or 213 on the computer-based version). The Listening subscale score must be at least 50 ( 16 on the computer-based version), and the essay writing subscale score must be at least 4.0.

A minimum of 30 semester hours of graduate level course work is required for the non-thesis option; 24 hours of course work is required for the thesis option. All students must pass a final comprehensive examination.

Selection of courses for each category of the core will be determined by the program advisory committee, based on an evaluation of the student's professional needs and goals.

## Required core

Research Foundations 3 hours
EDFN 500 Research Methods or equivalent, approved by advisory committee
Professional Foundations 3 hours
Strategies/Methodologies of Education or Behavioral Sciences 3 hours

Developmental Issues 3 hours


EDU 595 Directed Study in Education or Behavioral Sciences
*Note: A thesis (6 hours) may be substituted for the Professional Development and Capstone Course requirements.

Total for core: 18 hours

Option 1: Education Studies: 12 hours

- Advisor-approved pedagogy-related, strategies, or methods course 3 hours
- Content courses

9 hours
Courses from non-education fields; must be approved by advisor.

## Option 2: Behavioral Science Studies: 12 hours

- Courses selected with advisor approval from Counseling, Psychology, Consumer Family Sciences, Sociology, Social Work, or other behavioral science areas.

Program Total: 30 hours
Further information about the program may be obtained by contacting the Associate Dean for Academic Programs.

## Doctor of Education (EdD), Educational Leadership ${ }^{3}$

Contact for additional information:
Jeanne Fiene (270) 745-4890 Office
jeanne.fiene@wku.edu (270) 745-5445 FAX
The WKU Ed.D. in Educational Leadership:

- encourages participants to become practitioner scholars by promoting skills and knowledge in practice-based settings and to gain scholarship and experience in applied behaviors;
- provides opportunities to explore a range of career specialties in various settings so that participants can make sound career choices;
- models interdisciplinary and inter-institutional collaboration through the program's management and accountability structures;
- provides participants with leadership capacity to bring about changes that enhance student learning; and
- provides interdisciplinary research preparation focused on contextually based problems central to future global competitiveness.

Program admission will be based on a holistic evaluation of the candidate's application file. Intended candidates for the degree will be individuals who have completed at least a master's degree, have demonstrated leadership capacity within their organizational settings, and/or are committed to enhancing their abilities to learn and to enhance the educational missions of their organizations and communities.

The program consists of 60 hours above the master's degree. Each student's academic background and professional experience will be assessed at the time of admission. Students may be allowed to count up to 15 hours of applicable, previously completed, above the master's course work and/or experiential learning credits. If students stay on track in a part-time status averaging

[^2]six credit hours per semester (including summers), the program can be completed in approximately three calendar years.

Based on an evaluation of the candidate's background and strengths, as well as on the candidate's professional objectives and needs, students may choose from one of four specialty areas: P-12 Administrative Leadership primarily designed for public / district administrators; Teacher Leadership, primarily designed for educators serving in potential leadership roles related to areas such as Lead Teacher, Grade Coordinator, Curriculum Coordinator, Resource Teacher, and Staff Developer; Postsecondary Education Leadership, primarily designed for leaders in postsecondary, teachers/staff in 2-year and 4-year colleges, and KCTCS institutions; or Organizational Leadership, designed to prepare leaders in education-related organizations that are not classified as schools, colleges, or universities.

For more information on the program, as well as an update on the program's status, please go to: http://edtech.cebs.wku.edu/

## Department of Counseling and Student Affairs

Aaron W. Hughey, Head

Tate Page Hall 306
(270) 745-2157 Office
(270) 745-6322 Fax

## Graduate Faculty

Professors: D. Dinkmeyer, A. Hughey, D. Nims, V. Sheeley, F. Stickle
Associate Professors: C. Mason, N. Minatrea
Assistant Professors:, K. Burch-Ragan, A. Kinsvatter, T. Lara, J. Onedera, T. Shaffer Optional Retiree: J. Wilder

## Master of Arts in Education: School Counseling, Ref. \# 046

The School Counseling program is intended for the educator who plans to enter the field of school counseling or intends to upgrade personal relationship building. This 36-hour program leads to the Master of Arts in Education degree and provisional certification for school counselors in all grade levels, primary through grade twelve. Applicants for admission are expected to attain a GAP score consistent with the minimum established by the university (currently 2200) and achieve a GRE Analytical Writing score of at least 3.5.

After being admitted by Graduate Studies and Research applicants must also complete the Admission to the Counseling and Student Affairs Programs application packet. This application packet includes a letter of introduction/personal statement that addresses goals for the program, picture, signed statement, criminal background check, and two letters of recommendation. The application must be submitted after completing two CNS courses but before completing five courses. It is recommended that EDFN 500 be taken within the first 15 hours. Applications are available in the departmental office. All students must, in consultation with their advisor, complete the Program of Study (Form B/C) during the first 12 hours of course work. The Admission to Candidacy form (Form D) must be filed between 15 and 21 hours of completed course work.

All students must pass a final comprehensive examination. Comprehensive examinations are given in the fall, spring, and summer semesters. Students must meet the criteria established by the College of Education and Behavioral Sciences in order to be eligible to take the comprehensive examination.

EDFN 500 Research Methods 3 hours
CNS 550 Introduction to Counseling 3 hours
CNS 551 Classroom Guidance or PSY 519 Psychological
Perspectives on Classroom Behavior
3 hours
CNS 552 Testing and Assessment 3 hours
CNS 554 Group Counseling 3 hours
CNS 555 Social and Cultural Diversity or PSY 520 Individual Differences \& Human Diversity

3 hours
CNS 557 Human Development 3hours
CNS 558 Counseling Theories 3 hours
CNS 559 Counseling Techniques 3 hours
CNS 660 Administration of Counseling Services 3 hours
CNS 568 Counseling Children and Adolescents 3 hours
CNS 590 School Practicum
3 hours

Total 36 hours

## Rank I Standard Guidance, Ref. \# 048

For students with a master's degree in school counseling the Rank I leads to standard guidance certification. The Rank I is designed to provide additional preparation and competency for the school counselor. The combined master's and Rank I program requires a minimum of 60 hours and one year's experience as a school counselor. Many students complete the course work prior to completing the experience requirements.

## Rank I Program Course Work (students possessing a provisional school counseling certificate) <br> Master's in School Counseling 30-36 hours <br> CNS 556 Developmental Career Counseling 3 hours <br> CNS 666 Legal \& Ethical issues in Counseling 3 hours <br> CNS Electives <br> 6 hours <br> Advisor Approved Electives <br> 12 hours <br> Minimum Total Hours <br> 60 hours

Individuals who currently have Provisional Guidance Certification in either Elementary or Secondary Guidance may extend their certification to P-12 by taking two of the following courses: CNS 568, CNS 660, and CNS 590.

A certified teacher with a Master's Degree in a content area other than school counseling may obtain a Provisional Guidance Certificate P-12 by completing a second master’s degree in School Counseling. Up to 12 hours of acceptable previous graduate work may be applied to this program. A student may do a second master's degree in school counseling in conjunction with a Rank I in Guidance.

## Master of Arts in Education: Counseling, Ref. \# 043

The MAE in Counseling meets the educational requirements for licensure as a Licensed Professional Clinical Counselor and/or Licensed Marriage and Family Therapist in the Commonwealth of Kentucky and in states with reciprocal licensure agreements. Both the Mental Health Counseling and the Marriage and Family Therapy programs are accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP). Applicants to this 60-hour program must first meet Graduate Studies GAP score (GPA x GRE) requirements for admission. In addition, the student must have either a minimum score of 900 on the GRE (with a minimum of 4.0 on the Analytical Writing section) or a minimum grade point average of 2.9 on the last 30 hours in course work in the undergraduate degree program.

After acceptance into Graduate Studies the student meets with an advisor to complete a Form C that lists all of the courses the student must take to complete the degree program. The advisor also will go over a suggested course sequence to facilitate progression through the program. After completing approximately15 hours, the student completes Form D and submits it to the advisor who will send it to Graduate Studies.

The student should begin thinking about the Practicum and Internship experience when accepted into the program. The prerequisites for Practicum are CNS 554, 558, 559, and 560. These classes should be taken the first spring semester. If taking less than 12 hours, the student should take them during spring semesters until they are completed.

After acceptance into Graduate Studies, students also must apply for admission to Counseling and Student Affairs. This application includes a letter of introduction/personal statement that addresses goals for the program, picture, signed statement, criminal background check, and two letters of recommendation. The application must be submitted after completing two counseling courses, but before completing five courses. Applications are available in the departmental office.

A comprehensive exam is given during the student's last semester. The exam includes objective and essay questions over the core courses of the program. Students must complete

EDFN 500 at least one semester before taking the exam, preferably at the beginning of the program.

Students who enroll in courses prior to being accepted into Graduate Studies are advised to contact an advisor to discuss appropriate courses to take.

Substitutions for required courses must be approved by the student's advisor and the program faculty.
A. General Requirements (3 hours)

EDFN 500 Research Methods or PSY 512 Seminar in Experimental Design
B. Counseling Requirements (39 hours)

CNS 552 Testing \& Assess in Counseling (3 hours)
CNS 554 Group Counseling (3 hours)
CNS 555 Social and Cultural Diversity (3 hours)
CNS 556 Developmental Career Counseling ( 3 hours)
CNS 557 Human \& Family Development (3 hours)
CNS 558 Theories of Counseling ( 3 hours)
CNS 559 Techniques of Counseling (3 hours)
CNS 560 Professional Studies in Counseling and Marriage \& Family Therapy (3 hours)
CNS 567 Mental Health Counseling (3 hours)
CNS 637 Theories of Addictions (3hours)
CNS 591 Mental Health/Marriage and Family Practicum (3 hours)*
CNS 596 Mental Health/Marriage and Family Internship (6 hours)**
*To enroll in practicum the student must have completed the following prerequisites: Twelve hours in Counseling courses including the following: CNS 554, 558, 559, and 560. The student must also have been formally admitted to Counseling and Student Affairs.
**Internship must be taken over a period of two semesters

## C. Options (18 hours)

Concentration I - Mental Health Counseling, MNHC
Required courses:
CNS 553 Community Resources in Coun. (3 hours)
CNS 596 Internship (3 hours)
(These hours are in addition to the 6 hours listed in Section B)

One of the following:
CNS 561 Counseling Children (3 hours)
CNS 562 Counseling Adolescents (3 hours)
CNS 563 Counseling Adults (3 hours)
CNS 564 Counseling the Elderly (3 hours)
CNS 568 Counseling Children and Adolescents (3 hours)
Electives: 9 hours taken from counseling, psychology, sociology, or other behavioral science courses approved by advisor

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Concentration II - Marriage and Family Therapy, MHMF
CNS 580 Family Life Studies (3 hours)
CNS 582 Sex Therapy (3 hours)
CNS 583 Marriage Therapy (3 hours)
CNS 584 Counseling Violent & Dysfunctional Families (3 hours)
CNS 586 Parenting Issues (3 hours)
CNS 588 Family Systems Counseling (3 hours)
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Total Semester Hours $=60$

## Master of Arts in Education Student Affairs in Higher Education, Ref. \# 145

The MAE program in Student Affairs in Higher Education is designed to prepare individuals for entry and mid-level positions in the Student Affairs profession. Graduates of the program are qualified to work in a variety of higher education settings, ranging from community/technical institutions through comprehensive universities. The program is theoretically based, yet applications oriented. Applicants to this 48 -hour program must meet Graduate Studies requirements for admission.

After acceptance into Graduate Studies, students must also apply for admission to Counseling and Student Affairs. This application includes a letter of introduction/personal statement that addresses the goals for the program, picture, signed statement, criminal background check, and two letters of recommendation. The application must be submitted after completing two CNS courses, but before completing five courses. Applications are available in the departmental office.

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General Professional Requirements-15 hours
    EDFN 500 Research Methods
    CNS 556 Career Counseling
    CNS 555 Social and Cultural Diversity
    CNS 558 Counseling Theories
    CNS 577 Counseling Concepts and Applications for Student Affairs Professionals
Student Affairs Major-27 hours
    CNS 571 Introduction to Student Affairs
    CNS 572 American College Student
    CNS 573 Leadership in Student Affairs
    CNS 574 Student Development
    CNS 575 Administration of Student Affairs
    CNS 670 Parameters of Law in Student Affairs and Higher Education
    CNS 590 Practicum*
    CNS 595 Internship** (6 hours)
    * To enroll in the practicum the student must have completed the following prerequisites:
    formal admittance to the department and fifteen hours in counseling courses, including 571 and
    577.
    **Internship must be taken over a period of two semesters.
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Electives- 6 hours
Elective courses must be approved by advisor.

## Specialist in Education Counselor Education, Ref. \# 112

The Specialist Degree in Education (EdS) with a Counselor Education major is designed to incorporate the core elements of the master's degree in Counseling while expanding the academics emphasis within the student's profession. This degree requires a minimum of 30 semester hours of graduate course work beyond the master's degree. Specialist programs are tailored to meet the academic goals of the individual student. The EdS culminates with the completion of a specialist project, which reflects satisfactory research in an area of particular interest to the student.

An applicant desiring to pursue this program must first meet the admission requirements of the Office of Graduate Studies, and then must also be admitted to the department. The EdS (Counselor Education Major) requires a 3.5 GPA in the master's program or a 1350 GRE score (if test is taken on or before October 1, 2002) or 850 GRE score and a 4.0 Analytical Writing score (if taken after October 1, 2002). A departmental application, personal statement, and references are required along with a personal interview. A departmental admission committee will review the information and make final recommendations regarding the applicant's eligibility.

Before pursuing a specialist degree, the student must possess a master's degree in counseling or a related subject area. Eighteen hours of core prerequisite courses (or equivalents) must be included in previous graduate course work. If the course work was not a part of the student's master's degree, the following 18 hours must be completed before a student begins the specialist program. It should also be noted that these courses cannot be used toward the specialist program.

EDFN 500 Research Methods<br>CNS 550 Introduction to Counseling<br>CNS 552 Testing and Assessment in Counseling<br>CNS 554 Group Counseling<br>CNS 558 Counseling Theories<br>CNS 590* Practicum in Counseling<br>*To enroll in CNS 590 Practicum the student must have completed the following prerequisites: Fifteen (15) hours in counseling courses, including CNS 550, 554, and 558. The student must also have been formally admitted to Counseling and Student Affairs.

The student's committee directs the selection of course work, the required specialist project, and a final oral examination.

Degree Program Requirements
Research Core (3 hours)
EDFN 501 Educational Statistics or PSY 512 Seminar in Experimental Design
Major Emphasis (minimum of 21 hours)
Counseling courses approved by the student's committee

Thesis Research and Writing (6 hours)
CNS 699-Specialist Project

## Certificate in Addictions Counseling and Education, Ref. \# 218

This interdisciplinary certificate program is open to students admitted to any of the following graduate programs: Psychology (Clinical option), Marriage and Family Therapy, Mental Health Counseling, Nursing, Public Health, School Psychology, or Social Work. A second category of eligible students includes individuals who are licensed or license-eligible in any of the above areas. The Department of Counseling and Student Affairs provides program administration and primary advisement. Prospective students must submit an application to the Department of Counseling and Student Affairs, Coordinator of the certificate in Addictions Counseling and Education. The intent is to provide education and training that is consistent with the students’ major programs; that is, the development of counseling skills is emphasized for those with appropriate counseling credentials, whereas the development of health education skills is the focus for others.

This 15 hour interdisciplinary program prepares students to provide counseling or education services to individuals abusing or addicted to mood altering chemicals. Individuals who complete the program will be knowledgeable about physical and psychological effects of various chemicals and the etiology of addictions, and will have skills in prevention strategies, assessment procedures, intervention skills, and treatment of individuals abusing or addicted to drugs.

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Required core- 9 hours (taken sequentially)
    CNS/PSY/SWRK 637 Theories of Addictions
    CNS/PSY/SWRK }647\mathrm{ Addictions: Assessment, Diagnosis,
        and Treatment Planning
    CNS/PSY/SWRK }667\mathrm{ Substance Abuse and Dependency
        Counseling
        3 hours
```



```
        3 hours
        3 hours
```

Internship-3 hours
After completion of core courses the student will complete an internship with at least 300 hours of supervised experience related to addictions in the area of prevention, health education, intervention or treatment. The student's major program advisor and the certificate program coordinator must approve the internship site. Credit may be earned in any of the following courses: CNS 596 Internship; PSY 592 Psychology Internship; PH 546 Graduate Internship; or SWRK 560, 561, 660, 661.

Restricted elective--3 hours
Students must choose 3 credit hours from the following restricted electives in collaboration with the certificate program coordinator and the student's program advisor. All courses are worth 3 credits unless otherwise noted.

CNS 554 Group Counseling
CNS 567 Diagnosis in Counseling
CNS 559 Techniques in Counseling
CNS 584 Counseling Violent and Dysfunctional Families
CNS 588 Family Systems Counseling
CNS 653 Brief Counseling
NURS 500 Advanced Physiological and Pathophysiological Concepts
PSY 514 Program Evaluation (must be taken with PSY 515)
PSY 515 Program Evaluation \& Laboratory (must be taken with PSY 514)
1 credit hour course
PSY 552 Advanced Social Psychology
PSY 640 Psychopathology
PH 568 STD/HIV Prevention: A Public Health Approach

PH 572 Practice of Drug Abuse Prevention
PH 586 Violence Prevention: A Public Health Approach
PH 591 Health Program Evaluation
SWRK 521 Social Work Clinical Assessment and Intervention
SWRK 585 Spirituality and Religion in Social Work

## Certificate in International Student Services ${ }^{4}$

The Certificate in International Student Services (CISS) program offers preparation to provide international student services as a component of campus internationalization. Students will gain theoretical and applied knowledge regarding student services (international and domestic), expanded cross-cultural awareness and global consciousness, as well as enhanced intercultural communication skills. Recognizing the unique contribution of international students to the learning environment, students who complete the certificate program will be prepared to provide services and programs to meet the needs of international students. The 15 hour certificate program includes 9 hours of required core courses and 6 hours of electives. The program requires a study abroad course and/or an internship abroad depending on student's international experience (as determined by the advisor upon initial admission to the program). The CISS may be completed as a stand alone program, or students admitted into the MAE in Student Affairs may incorporate up to 12 hours of the certificate program into their program of study.

Admission to the CISS program is based on completion of a bachelor's degree and adequate preparation in the area of study. This certificate program welcomes applicants from all graduate programs at Western Kentucky University and elsewhere.

Students seeking admission to a University graduate degree program must apply to and meet admissions requirements of the program.

Required Courses (9 hours)
CNS 571 Introduction to Student Affairs (3 hours)
CNS 581 International Students and Services in Higher Education (3 hours)
CNS 595 Internship in Student Affairs, with placement in an Office of International Student Services or placement at a higher education institution abroad (3 hours)

Restricted Electives (6 hours)
To be selected with advisor approval in advance from the following list:
CNS 572 American College Student (3 hours)
CNS 574 Student Development (3 hours)
CNS 670 Parameters of Law in Student Affairs and Higher Education (3 hours)
CNS 555 Social and Cultural Diversity (3 hours)
WOMN 555 Global/Cultural Perspective on Women (3 hours)
CNS 578 Special Topics in Student Affairs
(with a focus on international students/student services)
CNS 579 Seminar in Student Affairs
(with a focus on international students/student services)
Or other course(s) approved by faculty advisor.

[^3]
## Graduate Courses in Counseling

All courses worth 3 credits unless otherwise noted.
*Courses may be used as subject matter course work.
CNS 550 Introduction to Counseling
CNS 551 Classroom Guidance
CNS 552 Testing and Assessment in Counseling
CNS 553 Community Resources in Counseling
CNS 554 Group Counseling
CNS 555 Social and Cultural Diversity in Counseling
CNS 556 Developmental Career Counseling
*CNS 557 Human and Family Development in Counseling
CNS 558 Counseling Theories
CNS 559 Techniques of Counseling
CNS 560 Professional Studies in Counseling and Marriage and Family Therapy
CNS 561 Counseling Children
CNS 562 Counseling Adolescents
CNS 563 Counseling Adults
CNS 564 Counseling the Elderly
CNS 565 Elementary Guidance Services
CNS 566 Secondary Guidance Services
CNS 567 Mental Health Diagnosis \& Treatment In Counseling
CNS 568 Counseling Children and Adolescents
CNS 570W Workshop in Counseling
CNS 571 Introduction to Student Affairs in
Higher Education
CNS 572 American College Student
CNS 573 Leadership in Student Affairs
CNS 574 Student Development in Higher
Education
CNS 575 Administration of Student Affairs
CNS 576 Technology in Student Affairs
CNS 577 Counseling Concepts and Applications for Student Affairs Professionals
CNS 579 Seminar in Student Affairs
*CNS 580 Family Life Studies
CNS 581 International Students and Services in Higher Education
CNS 582 Sex Therapy
CNS 583 Marriage Therapy
*CNS 584 Counseling Violent and Dysfunctional
*CNS 586 Parenting Issues
CNS 588 Family Systems Counseling
CNS 590 Practicum
CNS 591 Mental Health Counseling/Marriage and Family Therapy Practicum
CNS 595 Internship (3 to 6 hours)
CNS 596 Mental Health Counseling/Marriage and Family Therapy Internship
CNS 599 Thesis Research \& Writing (6 hours)
CNS 600 Maintaining Matriculation (1 to 6 hours)
CNS 637 Theories of Addiction
CNS 647 Addictions: Assessment, Diagnosis and Treatment Planning
CNS 651 Readings in Contemporary Counseling
CNS 652 Research in Counseling
CNS 653 Brief Counseling
CNS 654 Educational and Intellectual Analysis of Children and Adults
CNS 655 Advanced Appraisal of Children
CNS 656 Seminar in Career Guidance
CNS 658 Seminar in Counseling
CNS 660 Administration of Counseling Services
CNS 661 Introduction to Rehabilitation Counseling
CNS 662 Seminar in Disability and Rehabilitation Counseling
CNS 666 Legal and Ethical Issues in Counseling
CNS 667 Drug Abuse Counseling
CNS 669 Special Topics in Counseling and Guidance (May be repeated up to 6 hours with a different topic)
CNS 670 Parameters of Law in Student Affairs And Higher Education
CNS 699 Specialist Project (6 hours)
CNS 700 Maintaining Matriculation
(1 to 6 hours)

## Department of Curriculum and Instruction

Tabitha Daniel, Head

Tate Page Hall 306
(270) 745-2157 Office
(270) 745-6322 Fax

## Graduate Faculty

Professors: B. Burch, T. Daniel, S. Evans, K. Matthew, J. Pierce, J. Roberts, T. Wilson

Associate Professors: B. Kacer, P. Jukes, J. Moore
Assistant Professors: J. Davison, K. Gandy, T. McCain, M. McDonald
Optional Retirees: J. Becker, R. Roberts

## Non-Degree Programs

For information on the general requirements for Non Degree Planned Fifth-Year/Rank II and Non Degree Planned Sixth-Year/Rank I programs, refer to the section on Non-Degree Programs at the beginning of the College of Education and Behavioral Sciences section.

## Graduate Courses in Education

All courses worth 3 credits unless otherwise noted.
+EDU 501 Seminar: Designing Professional
Development Plan (1 hour)
EDU 522 Foundations of Differentiated
Instruction
EDU 524 Educational Assessment
EDU 544 Classroom Teaching Strategies
EDU 590 Advanced Teaching Internship
EDU 595 Directed Study in Education or Behavioral Sciences
++EDU 596 Seminar: Portfolio Development and Professional Education Growth Plan (2 hours)

EDU 597 Organization and Supervision of Student Teaching
+EDU 598 Seminar: Evaluation of Professional Development Plan (1 hour)
$\wedge$ EDU 601 Seminar: Advanced Professional Development Plan (1 hour)
EDU 603 Advanced Seminar in Elementary Education
EDU 604 Management of the Learning Environment
^EDU 698 Seminar: Advanced Portfolio Project (2 hours)
${ }^{+}$Students should enroll in EDU 501 within the first 7 hours of course work in the Non Degree Planned Fifth Year or Master's Degree.
${ }^{++}$Students should enroll in EDU 596 after completing at least 24 hours of course work in the Non Degree Planned Fifth Year or Master's Degree.
${ }^{\wedge}$ Students should enroll in EDU 601 within the first 7 hours of course work in the Non Degree Planned Rank I or Specialist Degree.
${ }^{\wedge}$ Students should enroll in EDU 698 after completing at least 24 hours of course work in the Non Degree Planned Rank I or Specialist Degree.

## Master of Arts in Education Elementary Education, Ref. \# 065

Because this program leads to a professional teaching certificate, applicants must

1. Hold or be eligible to hold a teaching certificate at the elementary level, or
2. Have a valid elementary conversion program on file with the Office of Teacher Services.
(Note: Conversion program must be completed prior to or simultaneously with the MA in Education.)
The MAE in Elementary Education may be planned to include a certification endorsement for literacy, gifted education, English as a second language, or Instructional Computer Technology. The MAE in Elementary Education requires 30 hours.
[^4]
## Education Specialist Degree - Elementary Education, Ref. \# 118

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 salary requirements under Kentucky's minimum foundation program of education. The following emphases or specializations are available to the elementary education major: literacy, general curriculum and instruction, English as a second language, gifted education, and Instructional Computer Technology. The EdS in Elementary Education requires 30 hours beyond a master's degree.

In addition to meeting the admission requirements of Graduate Studies, applicants must meet the following departmental requirements:

1. Three years of teaching experience at the appropriate level. Up to two years of experience may be waived in favor of equivalent experience; and
2. Four letters of recommendation: Two from graduate faculty members and two from professional associates in administrative and/or supervisory roles.

## Degree Requirements

A Professional Education Component-9 hours: EDU 601, ELED 603, EDU 604, EDU 698;
B Related Professional Education Courses-9 hours: EXED 516*, ELED 699, plus 3-6
hours of advisor approved, professional education graduate-level courses.
*An approved elective may be substituted if an Exceptional Education course is on the student's transcript.
C Related Non-Professional Education Courses-12 hours: Twelve hours of advisor approved graduate level, subject-related course work.
Note: There is a limit of 6 of hours workshop and independent study credit that can be used on a Specialist Degree program. Only three of those 6 hours can be one credit hour courses. A total of 24 hours non-professional education courses are required for MAE and the Specialist Degree combined.

## Non Degree Planned Fifth-Year/Rank II Elementary Education, Ref. \# 091

This program requires 32 hours.
Required Professional Education Component-20 hours
Required Professional Education Courses-5-8 hours
+EDU 501, ELED 503, EXED 516*, ++EDU 596/598
${ }^{+}$Students should enroll in EDU 501 within the first 7 hours of course work.
${ }^{++}$Students should enroll in EDU 596/598 after completing at least 24 hours of course work.
Restricted Elective-3 hours
PSY 510, PSY 511, PSY 519, or PSY 540
**Restricted Elective-3 hours (Choose one of the following)
ELED 505, ELED 506, ELED 507, ELED 509, LTCY 519, EDU 522, EDU 524
Professional Education Electives-6-9 hours
Six - nine hours of advisor-approved related professional education courses.
Specialization Component (12 hours)
Twelve hours of advisor-approved specialization courses.
*An approved elective may be substituted if an introductory Exceptional Education course is on the student's transcript.
**Not required for students seeking Gifted Education endorsement

## Non-Degree Planned Sixth-Year Rank I Elementary Education, Ref. \# 084

This program requires 30 semester hours in addition to the requirements for a Planned Fifth-Year program, or 60 semester hours including a master's degree.

Required Professional Education Component-9-12 hours
EDU 601, ELED 603, EDU 604, EXED 516*, EDU 698
Related Professional Courses-6-9 hours
Courses must be approved by advisor.
Related Specialization Courses-12 hours
Advisor must approve courses.
*An approved elective may be substituted if an introductory Exceptional Education course is on the student's transcript.

## Graduate Courses in Elementary Education

All courses worth 3 credits unless otherwise noted.

ELED 503 Organization of Elementary School Curriculum
ELED 505 Advanced Materials and Methods in Modern Mathematics for Elementary Teachers
ELED 506 Seminar in Elementary School Science
ELED 507 Advanced Materials \& Methods in Social Studies
ELED 509 Advanced Methods and Materials for Early Childhood Education
ELED 545 Investigations in Classroom Teaching (1 to 3 hours)

ELED 570 Workshop--Elementary Education (1 to 3 hours)
ELED 599 Thesis Research and Writing (6 hours)
ELED 600 Maintaining Matriculation (1 to 6 hours)
ELED 603 Advanced Seminar Elementary
Curriculum
ELED 604 Management of the Learning Environment
ELED 699 Specialist Project (6 hours)
ELED 700 Maintaining Matriculation (1 to 6 hours)

Master of Arts in Education Middle Grades Education, Ref. \# 139
Because this program leads to a professional teaching certificate, applicants must

1. Hold or be eligible to hold a teaching certificate at the middle grades level, or
2. Have a valid Middle Grades program on file with the Office of Teacher Services.
(Note: Conversion program must be completed prior to or simultaneously with the MA in Education.)

The MAE in Middle Grades Education may be planned to include a certification endorsement for literacy, gifted education, English as a second language, or Instructional Computer Technology. The MAE in Middle Grades Education requires 30 hours.

Professional Education Components-18 hours
Professional Development Component-3 hours
+EDU 501 Seminar: Designing Professional Development Plan (1hour)
++EDU 596 Portfolio Development \& Professional Education Growth Plan (2 hours)
${ }^{+}$Students should enroll in EDU 501 within the first 7 hours of course work.
${ }^{++}$Students should enroll in EDU 596 after completing at least 24 hours of course work.
Educational Psychology Component-3 hours
PSY 510 Advanced Educational Psychology
PSY 511 Psychology of Learning
PSY 519 Psychological Perspectives on Classroom Behavior

Strategies Component-3 hours
EDU 544 Classroom Teaching Strategies
ENVE 575 Introduction to Environmental Education
LTCY 524 Teaching Reading Skills in the Content Areas
GTE 537 Curriculum, Strategies, \& Materials for Gifted Students
LTCY 444G Reading in the Secondary Grades
Curriculum Component-3 hours
SEC 580 The Curriculum
MGE 571 Middle School Curriculum
Restricted Elective -3 hours
If an Exceptional Education course is not documented on the candidate's undergraduate or graduate transcript, the student must enroll in EXED 516. If an EXED course is documented on the candidate's transcript, another course may be selected from SEC 580, EDU 544, GTE 537, PSY 519, LME 547, or any other graduate level professional education course with advisor approval.
Research/Assessment Component-3 hours
EDFN 500 Research Methods or Content Specific Research Course
Specialization/Content Component-12 hours
Advisor-approved
Non-Degree Planned Fifth-Year/Rank II Middle Grades Education, Ref. \# 154
This program requires 32 hours.

## Professional Education Components (18 hours)

Professional Development Component-3 hours
${ }^{\dagger}$ EDU 501 Seminar: Designing Professional Development Plan (1hour)
${ }^{++}$EDU 596 Portfolio Development \& Professional Education Growth Plan (2 hours)
${ }^{+}$Students should enroll in EDU 501 within the first 7 hours of course work.
${ }^{++}$Students should enroll in EDU 596 after completing 24 hours of course work.
Educational Psychology Component-3 hours
PSY 510 Advanced Educational Psychology
PSY 511 Psychology of Learning
PSY 519 Psychological Perspectives on Classroom Behavior
Strategies Component-3 hours
EDU 522 Foundations of Differentiated Instruction
EDU 524 Educational Assessment
EDU 544 Classroom Teaching Strategies
ENVE 575 Introduction to Environmental Education
LTCY 524 Content Area Literacy
GTE 537 Curriculum, Strategies, \& Materials for Gifted Students
LTCY 444G Reading in the Secondary Grades
Curriculum Component-3 hours
SEC 580 The Curriculum
MGE 571 Middle School Curriculum
Restricted Elective -3 hours
If an Exceptional Education course is not documented on the candidate's undergraduate or graduate transcript, the student must enroll in EXED 516. If an EXED course is documented on the candidate's transcript, another course may be
selected from SEC 580, EDU 544, EDU 522, EDU 524, GTE 537, PSY 519, LME 547, or any other graduate level professional education course with advisor approval.
Research/Assessment Component-3 hours
EDFN 500 Research Methods or Content Specific Research Course
Specialization/Content Component-12 hours
Advisor must approve courses.

## Non- Degree Planned Sixth-Year/Rank I Middle Grades Education, Ref. \# 158

This program requires 30 semester hours in addition to the requirements for a Planned Fifth-Year program, or 60 semester hours including a master's degree.

Required Professional Education Component-9-12 hours
^EDU 601, ELED 603, EDU 604, *EXED 516, ^EDU 698
Related Professional Courses -6-9 hours Advisor must approve courses.
Related Specialization Courses-12 hours Advisor must approve courses.
${ }^{\wedge}$ Students should enroll in EDU 601 within the first 7 hours of course work in the Non-Degree Planned Rank I or Specialist Degree.
${ }^{\wedge}$ Students should enroll in EDU 698 after completing at least 24 hours of course work in the Non-Degree Planned Rank I or Specialist Degree.
*An approved elective may be substituted if an introductory Exceptional Education course is on the student's transcript.

## Graduate Courses in Middle Grade Education

All courses worth 3 credits unless otherwise noted.

MGE 530 Seminar in English Education
MGE 534 Seminar in Mathematics Education
MGE 537 Seminar in Science Education
MGE 538 Seminar in Social Studies Education

MGE 545 Investigations in Classroom Teaching
(1 to 3 hours)
MGE 570 Workshop in Middle School Education
(1 to 3 hours)
MGE 571 Middle School Curriculum

## Master of Arts in Education Secondary Education, Major or Minor, Ref. \#103

Because this program leads to a professional teaching certificate, applicants must

1. Hold or be eligible to hold a teaching certificate at the secondary level, or
2. Have a valid secondary education conversion program on file with the Office of Teacher Services.
(Note: Conversion program must be completed prior to or simultaneously with the MA in Education.)
Candidates must declare both a major and a minor (one must be in Secondary Education). The following majors are permitted: art, biology, chemistry, history, music, and secondary education.
This program permits minors in the following areas: agriculture, art, biology, business and marketing education, chemistry, earth and space science, English, family and consumer science, French, German, health, history, technology education, mathematics, physical education, physics, secondary education, and Spanish. The program may also be planned to include a certification endorsement for gifted education, English as a second language, literacy, or Instructional Computer Technology. This program requires 30 hours.
```
Professional Education Components-12-18 hours
    Professional Development Component-3 hours
        +EDU 501 Seminar: Designing Professional Development Plan (1 hour)
        ++EDU 596 Portfolio Development & Professional Education Growth Plan (2 hours)
        *}\mathrm{ +Students should enroll in EDU 501 within the first }7\mathrm{ hours of course work.
        *+}\mathrm{ Students should enroll in EDU 596 after completing 24 hours of course work.
    Educational Psychology Component-3 hours
        PSY 510 Advanced Educational Psychology
        PSY }511\mathrm{ Psychology of Learning
        PSY 519 Psychological Perspectives on Classroom Behavior
    Strategies Component-3 hours
        EDU 544 Classroom Teaching Strategies
        ENVE }575\mathrm{ Introduction to Environmental Education
        LTCY 524 Content Areas Literacy
        GTE 537 Curriculum, Strategies, & Materials for Gifted Students
        LTCY 444G Reading in the Secondary Grades
    Curriculum Component-3 hours
        SEC }580\mathrm{ The Curriculum
        MGE 571 Middle School Curriculum
    *Restricted Elective-3 hours
        If an Exceptional Education course is not documented on the candidate's undergraduate or
        graduate transcript, the student must enroll in EXED 516. If an EXED course is documented
        on the candidate's transcript, another course may be selected from SEC 580, EDU 544, GTE
        537, PSY 519, LME 547, or any other graduate level professional education course with
        advisor approval.
    Research/Assessment Component-3 hours
        EDFN 500 Research Methods or Content Specific Research Course
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Specialization/Content Component-12-18 hours
(Content Advisor Approved)
Secondary education majors-12 hours
Secondary education minors-18 hours
*Secondary education minors may be required to enroll in an additional 3 hours of professional education to achieve the restricted elective component. If an Exceptional Education course is not documented on the candidate's undergraduate or graduate transcript, students are required to enroll in EXED 516. These 3 hours will be in addition to the 30 hours required for the program

## Requirements for other endorsement areas may be obtained from the appropriate academic department:

Teaching English as a Second Language (TESL) - Department of English
Literacy- Department of Special Instructional programs
Gifted and Talented Education -Department of Curriculum and Instruction
Instructional Computer Technology - Department of Special Instructional Programs

## Education Specialist in Education Secondary Education, Ref. \# 119

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 salary requirements under Kentucky's minimum foundation program of education. The following emphases or
specializations are available to the secondary education major: literacy, general curriculum and instruction, and gifted education. The EdS in Secondary Education requires 30 hours beyond a master's degree.

In addition to meeting the admission requirements of Graduate Studies, applicants must meet the following departmental requirements:

- Three years of teaching experience at the appropriate level. Up to two years of experience may be waived in favor of equivalent experience; and
- Four letters of recommendation: two from graduate faculty members and two from professional associates in administrative and/or supervisory roles.
This program requires 30 hours beyond a master's degree.
Professional Education Component*-5 hours
EDU 501, EDU 604, EDU 596
*If EDU 501 and EDU 598/596 appear on the transcript, students must enroll in EDU 601 and EDU 698.

Related Professional Education Courses-7-13 hours
Minimum of seven hours of advisor-approved, professional education graduate level courses, including EXED 516**, and SEC 699 (6 hours)
**An approved elective may be substituted if an Exceptional Education course is on the student's transcript.
Related Specialization Courses-12-18 hours
Minimum of 12 hours of advisor-approved, subject-related courses pertinent to the area of specialization.
Note: There is a limit of 6 hours of workshop and independent study credit that can be used on a Specialist program. Only three of those 6 hours can be one credit hour courses. A total of 24 hours of non-professional education courses is required for the MAE and Specialist program combined.

## Non-Degree Planned Fifth-Year/Rank II Secondary Education, Ref. \#125

This program requires 32 hours.

[^5]Curriculum Component-3 hours
SEC 580 The Curriculum
MGE 571 Middle School Curriculum
Restricted Elective Component-5 hours
If an Exceptional Education course is not documented on the candidate's
undergraduate or graduate transcript, the student must enroll in EXED 516. If an EXED course is documented on the candidate's transcript, another course may be selected from SEC 580, EDU 522, EDU 524, EDU 544, GTE 537, PSY 519, LME 547, or any other graduate level professional education course with advisor approval.
Research/Assessment Component (3 hours)
EDFN 500 Research Methods or Content Specific Research Course

Specialization/Content Component-12 hours
Advisor approved

## Non-Degree Planned Sixth-Year/Rank I Secondary Education, Ref. \#124

This program requires 30 semester hours in addition to the requirements for a Planned Fifth-Year program, or 60 semester hours including a master's degree.

Required Professional Courses-5 hours
EDU 604, EDU 501*, EDU 596**
*Students should enroll in this course within the first 7 hours of the program.
**Students should enroll in EDU 698 if EDU 596 appears on the transcript. Students should enroll in this course upon completion of at least 24 hours.
Related Professional Courses-7-13 hours (Chosen with advisor)
Secondary Education Major - 13 hours including EXED 516***
Secondary Education Minor - 7 hours including EXED 516***
***An approved elective may be substituted if an introductory Exceptional Education course is on the student's transcript
Related Specialization Courses-12-18 hours (Chosen with advisor)
Secondary Education Major- 12 hours
Secondary Education Minor - 18 hours

## Alternate Route to Teacher Certification-Master of Arts in Education Middle Grades/Secondary Education, Ref. \# 103

A recommendation for certification will be contingent upon successful completion of the Kentucky Teacher Internship Program (KTIP) and submission of qualifying scores on the Principles of Learning and Teaching. All requirements for certification must be completed within three years of the time of employment by a school district.

## Admission Requirements:

1. Completion of content course work in the following: single subject for Middle Grades Education mathematics and sciences or two of the following mathematics, science, language arts, or social studies. Completion of content course work for secondary certification: art, biology, chemistry, history, music, English, French, German, Spanish, or physics.
2. Completion of a baccalaureate degree with an overall undergraduate GPA of 2.5 or higher;
3. Passing score on PRAXIS II exams on file before starting program;
4. Acceptable GAP score and GRE writing score on file in Graduate Studies before starting program;
5. Commitment of employment from a Kentucky school district before beginning program;
6. Meet the admission requirements identified by the respective content area; and
7. Favorable recommendation based on interview by screening committee, which will include a faculty member from the identified content area.

This program requires 30 hours.
Required Professional Education Course Components -21 hours
Professional Development Component-6 hours
EDU 501 Seminar: Designing Professional Development Plan (1 hour)
EDU 596 Portfolio Development and Professional Education Growth Plan
(2 hours)
EDU 590 Advanced Internship (3 hours)
Educational Psychology Component-3 hours
PSY 511 Psychology of Learning
PSY 510 Advanced Educational Psychology
Curriculum Component-3 hours
EDU 520 Planning for Instruction
Strategies Component-3 hours
EDU 521 Implementing an Instructional Plan
Exceptional Component-3 hours
EXED 516 Exceptional Child: Perspectives and Issues
Research/Assessment Component-3 hours
EDFN 500 Research Methods
Content Related Component -9 hours
Courses will be selected from the teaching discipline. The specific selection of courses will be based upon candidate pre-assessment. The course selections must be approved by the candidate's program advisory committee, which will include a representative from the candidate's teaching discipline.

Graduate Courses in Secondary Education
All courses worth 3 credit unless otherwise noted.

SEC 445G Introduction to Educational Technology
SEC 470G Teaching Vocational Agriculture
SEC 484G Methods \& Materials Teaching English as a Second Language
SEC 528 Seminar in the Teaching of Secretarial Subjects
SEC 529 Seminar in the Teaching of Bookkeeping \& Basic Business
SEC 530 Seminar in English Education
SEC 531 Seminar in Art Education
SEC 532 Seminar in Foreign Language Education
SEC 533 Seminar in Industrial Arts Education
SEC 534 Seminar in Mathematics Education
SEC 535 Seminar in Music Education

## Graduate Courses in Gifted \& Talented Education

 All courses worth 3 credits unless otherwise noted.GTE 536 Nature and Needs of Gifted, Creative and Talented Students

SEC 536 Seminar in the Teaching of Physical Edu
SEC 537 Seminar in Science Education
SEC 538 Seminar in Social Studies Education
SEC 539 Seminar in Agriculture Education
SEC 540 Seminar in Home Economics Education
SEC 542 Seminar in Speech Education
SEC 545 Investigations in Classroom Teaching (1 to 3 hours)
SEC 570 Workshop - Secondary Education
SEC 580 The Curriculum
SEC 599 Thesis Research and Writing (6 hours)
SEC 600 Maintaining Matriculation (1 to 6 hours)
SEC 699 Specialist Project (6 hours)
SEC 700 Maintaining Matriculation (1 to 6 hours)

GTE 537 Curriculum, Strategies, and Materials for
Gifted Students
GTE 538 Practicum for Teachers of Gifted Students

## Department of Educational Administration, Leadership \& Research

Jeanne Fiene, Head
ed.administration@wku.edu
http://edtech.wku.edu/\~edleader/schmenu.htm

## Graduate Faculty

Professor: R. Keaster, C. Wagner
Associate Professors: V. Basham, G. Ecton, J. Fiene, W. Kelley, W. Schlinker, S. Spall, J. Wang

Optional Retiree: J. Stone

## Degrees Offered

Master of Arts in Education: Instructional Leader - School Principal, All grades
Specialist in Education School Administration
Planned Sixth-Year/Rank I and/or Certifications Offered
Instructional Leader - School Principal, All Grades
Director of Special Education
Supervisor of Instruction
Director of Pupil Personnel Services
School Superintendent

## Master of Arts in Education: Instructional Leader- School Principal, All Grades, Ref \# 151

Students admitted to this program pursue one of two concentrations: Education Administration (EAEA) or School Leader (EASL). A minimum of 36 semester hours is required in the program to complete Level 1 Certification. For the EAEA nine (9) hours of professional education are required and 27 hours of Educational Administration courses are required. For the EASL concentration six (6) hours of professional education and thirty hours of Education administration hours are required. Field experiences are required in most courses. A portfolio and a comprehensive exam are exit requirements. Initial certification is contingent upon successful completion of mandated state tests. Continuing certification is contingent upon additional Level II courses completed and/or the completion of Kentucky Department of Education approved professional development.

Educational Administration Concentration, (EAEA)
Admission requires:

1. Application to Graduate Studies and Research (Form A), including copy of current and valid teaching certificate;
2. A bachelor's degree from an accredited institution;
3. A qualifying GAP of 2200 (undergraduate GPA times GRE) and 3.5 or higher on the Analytic Writing test college requirement;
4. Recommendation for admission by the Educational Administration, Leadership, \& Research Admission Committee.

In addition applicants must submit the following departmental admission materials:

1. Departmental application
2. Written personal statement
3. Three professional recommendations
4. Verification of employment and experience by district office
5. Recent snapshot after admittance (optional)

Note: Forward all department application materials at one time and in one envelope.

School Instruction Leader Concentration (EASL)
Admission requires:

1. Application to Graduate Studies and Research (Form A) along with a current and valid teaching certificate;
2. A bachelor's degree from an accredited institution;
3. A qualifying GAP of 2200 (undergraduate GPA times GRE) and 3.5 or higher on the Analytical Writing test college requirement; and
4. Recommendation for admission by the Educational Administration, Leadership, \& Research faculty.

In addition applicants must submit the following departmental admission materials:

1. Departmental application
2. Four Letters of reference:
a. Immediate Supervisor
b. College Instructor
c. Professional Colleague
d. One of applicant's choosing
3. Current resume that includes all work experience, professional activities, and professional goals
4. Documentation of three years teaching experience and evidence of positive impact on student learning
5. Evidence of leadership experience (including school, district, state, national or in a community based agency)
6. A professional portfolio in accordance with guidelines in application packet
7. Complete an on-demand problem solving exercise
8. Evidence of essential technology competency such as word processing, Power Point, use of Internet, and spread sheet application
9. Demonstration of oral communication will be assessed in a separate exercise. Written communication will be assessed as part of the problem-solving exercise
Note: Forward all department application materials at one time and in one envelope.

## Level I Instruction Leader- School Principal, All Grades

Core Courses: Required for both concentrations (EAEA and EASL)
EDFN 500 Research Methods (3 hours)
PSY 510 Advanced Educational Psychology or PSY 511 Psychology of Learning (3 hours)
EDAD 597 Problems in Administration \& Supervision (3 hours)
EDAD 588 School Business Management (3 hours)
EDAD 677 School Law (3 hours)
EDAD 683 Seminar in Curriculum Development (3 hours)
EDAD 684 Instructional Leadership (3 hours)
Total Core Courses: 21 credit hours

## Educational Administration Concentration (EAEA):

EDFN 576 Issues and Trends in Education (3 hours)
EDAD 585 Fundamentals of School Administration (3 hours)
EDAD 594 Seminar in Leadership: Auxiliary Programs in Education (3 hours)
EDAD 682 School Community Relations (3 hours)
EDAD 690 The Principalship (3 hours)
Total for Educational Administration Concentration: 15 credit hours
School Instructional Leader Concentration (EASL):
EDAD 586 Creating a High Performance Culture (3 hours)
EDAD 611 Leading Change (3 hours)
EDAD 680 Removing Barriers to Learning (3 hours)
EDAD 688 Planning for School Improvement (6 hours)
Total for School Instructional Leader Concentration: 15 credit hours
Exit Requirements for both concentrations (EAEA and ESAL):

1. Successful completion of comprehensive examination.
2. Presentation of well organized and high quality portfolio representative of the student's programmatic accomplishments, including performance assessments that demonstrate proficiency on each program standard.

NOTE: Completion of either concentration makes candidate eligible for Level I Instructional Leader-School Principal-All Grades certification upon passing the two required examinations.

## Level II Instructional Leadership-School Principal

Required for both concentrations within the first five years of the administrative certification.

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Required Courses:
    Educational Administration Concentration (EAEA):
    EDAD 590 Administration of School Personnel (3 hours)
    EDAD }694\mathrm{ Seminar in Educational Administration (3 hours)
    EDAD 696 Advanced Organizational Theory (3 hours)
    School Instructional Leader Concentration (EASL):
    EDED }694\mathrm{ Seminar in Educational Administration - to be taken during year of
        initial employment
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## Specialist in Education School Administration, Ref. \# 098

The Education Specialist Degree in School Administration is an advanced professional degree involving a minimum of 36 semester hours of study beyond the master's degree. The degree is designed primarily for those planning to enter the school principalship or other administrative/supervisory positions.

Admission requires:

1. A master's degree from an accredited college or university with a minimum GPA of 3.5 from graduate work at the master's degree level;
2. A minimum score of 850 on the GRE, score in the $50^{\text {th }}$ percentile or higher on the MAT, or score a 646 Communication and 643 General Knowledge for the NTE;
3. A Graduate Studies and Research Application for Admission (Form A), along with a copy of current and valid teaching certificate;
4. Three recommendation letters from graduate faculty and/or professional associates; Educational Administration, Leadership, \& Research application forms for programmatic admission; and
5. A departmental review.

Requirements:
The requirements for the Education Specialist degree in School Administration include the following:

1. A minimum of thirty-six (36) semester hours of graduate credit in a planned program beyond the master's degree,
2. A minimum of twelve (12) semester hours must be full-time residence credit,
3. A minimum of nine (9) semester hours of residence credit must be completed before admission to candidacy and a minimum of fifteen (15) semester hours of credit after admission to candidacy,
Candidates may transfer a maximum of six (6) semester hours, approved by the student's advisory committee, from an institution with an accredited advanced graduate program in educational administration. At least twenty-one (21) semester hours must be in courses numbered 500 or above. Minimum full-time residence requirements may be met through two semesters, or a semester and a summer, or two summers.

## Specialist Project:

The specialist project is considered to be an integral part of the specialist program.

1. The project shall six (6) hours of credit.
2. The project shall be planned with reference to the student's field of specialization and professional goals.
3. The project may take the form of a field project, a creative study, or a more formal research study. Regardless of the form of the project, the study shall culminate in a written scholarly project.
4. This project must be approved by the student's graduate committee and by Graduate Studies and Research.
5. Copies of the written project will be bound and retained by the University Library.
6. Candidates must follow the guidelines of the Educational Administration, Leadership and Research Department.
7. The project must conform to APA Style and university guidelines.
8. The time limit for the completion of all requirements for the specialist degree is six years from the date of first registration in the Education Specialist Degree Program.
9. A student cannot be formally admitted to the Education Specialist Degree program until all admission requirements are met.

## Alternate Route to Principal Certification

Kentucky Senate Bill \#77 made it possible for higher education institutions with approved school administration certification programs to provide alternate route to certification programs upon application and approval by the Education Professional Standards Board (EPSB). Western Kentucky University (WKU) has an EPSB approved Alternate Route to Principal Certification program.

Under the provisions of Senate Bill \#77 and state regulations, Western Kentucky University established procedures for the alternate route program as follows:

1. A local district superintendent must nominate a candidate for the Alternate Route to Principal Certification program at WKU. The letter of nomination must specifically state that the superintendent is recommending the candidate to the school council and will be employed for the coming academic year if selected by the school council.
2. Once the letter of nomination and a letter of application from the candidate are received, WKU will admit the candidate to the Alternate Route to Principal Certification program providing the candidate is accepted by Graduate Studies and Research.
3. WKU will provide the candidate with a letter stating that the candidate has been admitted to the Alternate Route to Principal Certification program, thus, under the provision of Senate Bill \#77 and state regulations, making the candidate eligible to interview and accept a principal position. It should be noted that these candidates have the same eligibility status as any other candidate who has completed a regular certification program and already has the certification endorsement.
4. WKU will also notify the Office of Teacher Certification/Services that the candidate has been admitted to the Alternate Route to Principal Certification program.
5. If the candidate is offered the position, the superintendent must provide verification of employment to WKU and the candidate. WKU will assign the candidate an advisor, who will prepare the student's program. The candidate will submit the verification of employment and a TC-1 to the Office of Teacher Certification/Services. That office will sign and verify the enrollment of the candidate in the Alternate Route to Principal Certification program and return the TC- 1 to the candidate. The candidate will then forward the TC- 1 with the verification of employment as a principal (or assistant principal) and the appropriate fee payment.
6. EPSB will issue the candidate a two-year, Temporary Provisional Certificate for All Grades Principal. The candidate will have two-years to complete all requirements for the principal certification, after which the candidate receives a regular Provisional Certification.

## Non-degree Certification Programs

- Principalship—All grades
- Supervisor of Instruction
- Director of Special Education
- Director of Pupil Personnel
- School Superintendent

The Department of Educational Administration, Leadership, and Research offers programs designed to prepare school personnel for effective leadership in P-12 schools. The curricula meet professional certification standards in school administration. The department also provides educational foundations courses that give graduate students a greater understanding of their roles and the function of educational institutions in society.

Course work associated with degree programs at Western Kentucky University may be used to meet certification requirements established by the Commonwealth of Kentucky; however, the Commonwealth may institute changes in certification requirements at any time. When the Commonwealth initiates such changes, students seeking certification may be required to modify their courses/experiences to meet the new certification requirements.

Students wishing to pursue one of the non-degree programs must make application to Graduate Studies and Research. Upon completion of the program, individuals must contact the Office of Teacher Certification/Services in the College of Education and Behavioral Sciences. That official then certifies to the Kentucky Education Professional Standards Board that rank requirements have been met.

## Planned Sixth-Year/Rank I Instructional Leader, School Principal, All Grades, Ref. \#121

Students admitted to this program pursue one of two concentrations: Education Administration (EAEA) and School Leader (EASL). A minimum of 30 semester hours for EAEA and a minimum of 33 hours for EASL concentration are required in the non-degree certification program; at least 15 hours must be WKU credit. Students must have previously completed a master's degree program, which would qualify for Rank II salary classification. Therefore, the student will complete all 27 hours in Educational

Administration course work. The total graduate hours must equal at least 60 hours to be recommended for Rank I. Field experiences are required in most courses. A portfolio is an exit requirement. Continuing certification is contingent upon additional Level II courses completed and/or the completion of Kentucky Department of Education approved professional development.

## Educational Administration Concentration (EAEA)

Admission requirements:

1. Application to Graduate Studies and Research (Form A), including a copy of current and valid teaching certificate;
2. A master's degree from an accredited institution;
3. A qualifying GAP of 2200 (undergraduate GPA times GRE) and 3.5 or higher on the Analytical Writing test college requirement; and
4. Recommendation for admission by the Educational Administration, Leadership, \& Research Admissions Committee.
In addition applicants must submit the following departmental admission materials:
5. Departmental application
6. Written personal statement
7. Three professional recommendations
8. Verification of employment and experience by district office
9. Recent snapshot after acceptance into the program (optional)

Note: Forward all department application materials at one time and in one envelope.

## School Instruction Leader Concentration (EASL)

Admission requirements:

1. Application to Graduate Studies and Research (Form A), including a copy of current and valid Teaching Certificate;
2. A master's degree from an accredited institution;
3. A GPA of 3.0 or higher on all completed graduate coursework;
4. An acceptable GRE (1250) on the old GRE, a GAP score of at least 2200 based on the new GRE, or MAT ( $50^{\text {th }}$ percentile), or NTE score of 646 on the Communication Skills and 643 on the General Knowledge Battery;
5. Three (3) years of successful teaching experience; and
6. Recommendation for admission by the Educational Administration, Leadership, \& Research Department, following a structured interview with department faculty.

Department admission materials:

1. Departmental application
2. Four letters of reference:
a. Immediate supervisor
b. College instructor
c. Professional colleague
d. One of applicant's choosing
3. Current resume that includes all work experience, professional activities, and professional goals
4. Documentation of three years teaching experience and evidence of positive impact on student learning
5. Evidence of leadership experiences (including school, district, state, national, or community)
6. Professional portfolio in accordance with guidelines in application packet
7. An on-demand problem solving exercise
8. Evidence of essential technology competency such as word processing, Power Point, use of Internet, and spreadsheet applications
9. Demonstration of oral communication skills, which will be assessed in a separate exercise. Written communication will be assessed as part of the problem-solving exercise
Note: Forward all department application materials at one time and in one envelope.
Core Courses for both concentrations (EAEA and EASL)
EDFN 500 Research Methods (3 hours)
EDAD 597 Problems in Administration \& Supervision (3 hours)
EDAD 588 School Business Management (3 hours)
EDAD 677 School Law (3 hours)
EDAD 683 Seminar in Curriculum Development (3 hours)
EDAD 684 Instructional Leadership (3 hours)
Total Core Courses: 18 credit hours

## Educational Administration Concentration (EAEA)

EDAD 585 Fundamentals of School Administration (3 hours)
EDAD 594 Seminar on Leadership: Auxiliary Programs in Education (3 hours)
EDAD 682 School Community Relations (3 hours)
EDAD 690 The Principalship (3 hours)
Total for Educational Administration Concentration: 12 credit hours
Total for EAEA concentration - Instructional Leader, School Principal - 30 credit hours

## School Instructional Leader Concentration (EASL)

EDAD 586 Creating a High Performance Culture (3 hours)
EDAD 611 Leading Change (3 hours)
EDAD 680 Removing Barriers to Learning (3 hours)
EDAD 688 Planning for School Improvement (6 hours)
Total for School Instructional Leader Concentration: 15 credit hours
Total for EASL concentration - Instructional Leader, School Principal - 33 credit hours
Exit Requirements for both concentrations:
Presentation of a well-organized and high quality portfolio representative of the student's programmatic accomplishments, including performance assessments that demonstrate proficiency on each program standard.

Note: Completion of this program makes candidate eligible for Level I Instructional Leader - School Principal, All Grades certification upon passing the two required state examinations. For continuing certification, Level II requirements must be met in accordance with state guidelines.

## Level I - Certification program course work - 9 hours - (EAEA)

EDAD 590 Administration of School Personnel
EDAD 694 Seminar in Educational Administration
EDAD 696 Advanced Organizational Theory

## Level II - Certification program course work - 6 hours - (EASL)

EDAD 694 Seminar in Education Administration - to be taken during year of initial employment

## Exit Requirements for both Level I and Level II:

Presentation of a well-organized and high quality portfolio representative of the student's programmatic accomplishments, including performance assessments that demonstrate proficiency on each program standard.

## Planned Sixth-Year/Rank I Supervisor of Instruction - 33 hours - Ref. \#121; or

Supervisor of Instruction Endorsement - 15-18 hours - Ref. \# 131
Applicants seeking certification for Supervisor of Instruction should be aware that reciprocity may not be offered by all states.

The endorsement for Supervisor of Instruction may be recommended when the student has met the following conditions:

1. Has completed three years full-time appropriate teaching experience;
2. Has master's degree from an accredited institution;
3. Has a 3.2 GPA or above on all graduate work and an acceptable score on either the GRE, MAT, or NTE; and
4. Has completed appropriate prerequisite courses.

## Prerequisite Courses:

EDFN 500 Research Methods
PSY 510/511 Advanced Educational Psychology/Psychology of Learning
EDFN 576 Issues and Trends in Education

Six hours from the following:
SEC 580 The Curriculum
MGE 571 The Middle School Curriculum
EDAD 683 Seminar in Curriculum Development
ELED 503 Organization of the Elementary School Curriculum

## Level I - Supervisor of Instruction - 18 hours, Concentration Code ILV1

Required Courses:
EDAD 585 Fundamentals of School Administration
EDAD 684 Instructional Leadership
EDAD 686 Principles of Supervision
LTCY 519 Foundations of Reading
EXED 516 The Exceptional Child: Perspectives \& Issues
Three hours from the following:
CNS 551 Classroom Guidance
CNS 565 Elementary Guidance Services (or equivalent)
CNS 566 Secondary Guidance Services (or equivalent)
Note: Filing a TC-1 requesting Rank I requires completion of a minimum of 60 semester hours of graduate credit including the master's degree. Within these total hours the student must complete the required professional courses as outlined in a planned program designed to provide the student with appropriate administrative competencies and courses required for certification.

Level II - Certification program course work - 12 hours, Concentration Code ILV2<br>EDAD 677 School Law<br>EDAD 682 School-Community Relations<br>EDAD 594 Seminar on Leadership: Auxiliary Programs in Education<br>EDAD 694 Seminar in Educational Administration

## Planned Sixth-Year/Rank I Director of Special Education - 30 hours, Ref. \# 121, Concentration Code PDS

The endorsement for Director of Special Education may be recommended when the student has met the following conditions:

1. Has a valid certificate as a teacher of exceptional children or school psychologist in one of the recognized categories of exceptionality;
2. Has three (3) years of full-time teaching as a teacher of special education or school psychologist;
3. Has a master's degree from an accredited institution;
4. Has a 3.0 GPA or above on all graduate work;
5. Has an acceptable score on the GRE, MAT, or NTE;
6. Submits recommendations;
7. Has gained acceptance to Graduate Studies and Research and the Department of Educational Administration, Leadership, and Research; and
8. Has completed a minimum of 15 graduate hours in the approved program of study with at least nine hours taken at WKU.

## Level I - Director of Special Education - 30 hours

## Prerequisite Courses:

EDFN 500 Research Methods
Three hours from the following:
EXED 330 Introduction to Exceptional Education: Development in Learning
EXED 516 The Exceptional Child: Perspectives and Issues
Three hours from the following:
EXED 518 Seminar: Contemporary Challenges in Special Education
EXED 510 Seminar: Speech Pathology
CNS 663 Counseling the Exceptional Child and Parent
Three hours from the following:
ELED 503 Organization of the Elementary School Curriculum
SEC 580 The Curriculum
MGE 571 Middle School Curriculum
EDAD 683 Seminar in Curriculum Development
Three hours from the following:
EXED 533 Seminar: Curriculum for Learning and Behavior Disorders
EXED 535 Seminar: Curriculum for the Moderately \& Severely Disabled
Or an advisor selected substitute

## Required courses

EDAD 585 Fundamentals of School Administration
EDAD 677 School Law

EDAD/EXED 620 Seminar in the Administration of Special Education
EDAD/EXED 625 Practicum in the Administration of Special Education
EDAD/EXED 630 Special Education Law and Finance
Note: Filing a TC-1 requesting Rank I requires completion of a minimum of 60 semester hours of graduate credit including the master's degree. Within these total hours the student must complete the required professional courses as outlined in a planned program designed to provide the student with appropriate administrative competencies and courses required for certification.

## Level II - Certification program course work - 6 hours

EDAD 598 Field-based Experience in Educational Administration \& Supervision Special Education
EDAD 686 Principles of Supervision

## Director of Special Education Endorsement - 15 hours, Ref. \#131, Concentration Code PDS

The endorsement for Director of Special Education may be recommended when the student has met the following conditions:

1. Has a valid certificate as a school psychologist or as a teacher of exceptional children in one of the recognized categories of exceptionality;
2. Has completed three (3) years of full-time teaching as a teacher of special education or school psychologist;
3. Has an appropriate master's degree from an accredited institution;
4. Has a 3.0 GPA or above on all graduate work;
5. Has an acceptable score on the GRE, MAT, or NTE;
6. Submits recommendations;
7. Has gained acceptance to Graduate Studies and Research and the Educational Administration, Leadership, \& Research department; and
8. Has completed a minimum of 15 graduate hours in the approved program of study with at least nine hours taken at WKU.

## Level I Director of Special Education - 27 hours

## Prerequisite Courses:

EDFN 500 Research Methods
EDAD 677 School Law
EDAD 585 Fundamentals of School Administration
Three hours from the following:
EXED 330 Introduction to Exceptional Education: Development in Learning
EXED 516 The Exceptional Child: Perspectives and Issues
Three hours from the following:
EXED 518 Seminar: Contemporary Issues
EXED 510 Seminar: Speech Pathology
Three hours from the following:
SEC 580 The Curriculum
ELED 503 Organization of the Elementary School Curriculum
MGE 571 The Middle School Curriculum
EDAD 683 Seminar in Curriculum Development

## Required Courses:

EDAD/EXED 620 Seminar in the Administration of Special Education

EDAD/EXED 625 Practicum in the Administration of Special Education EDAD/EXED 630 Special Education Law and Finance

## Level II Director of Special Education - 6 hours Required Courses:

EDAD 598 Field-based Experience in Educational Administration \& Supervision EDAD 686 Principles of Supervision

## Planned Sixth-Year/Rank I Director of Pupil Personnel Services - 30 hours, Ref. \# 121, Concentration Code PAPP

The Director of Pupil Personnel (DPP) is one of the two legally mandated positions for a school district. The DPP usually deals with such issues as student attendance, student conduct codes, school calendars, and student services.

The endorsement for Director of Pupil Personnel may be recommended when the student has met the following conditions:

1. Has completed three (3) years full-time appropriate teaching experience or employment in a school setting;
2. Has a master's degree from an accredited institution;
3. Has a 3.2 GPA or above on all graduate work and an acceptable score on the GRE, MAT, or NTE; and
4. Has completed the appropriate prerequisite courses.

## Level I Director of Pupil Personnel Services - 36 hours

## Prerequisite Courses:

EDFN 500 Research Methods
PSY 510/511 Advanced Educational Psychology/Psychology of Learning
EDFN 576 Issues \& Trends in Education
Three hours from the following courses:
SEC 580 The Curriculum
ELED 503 Organization of the Elementary School Curriculum
MGE 571 The Middle School Curriculum
EDAD 683 Seminar in Curriculum Development
Three hours from the following:
CNS 551 Classroom Guidance
CNS 565 Elementary Guidance Services (or equivalent)
CNS 566 Secondary Guidance Services (or equivalent)

## Required Courses:

EDAD 585 Fundamentals of School Administration
EDAD 588 School Business Management
EDAD 649 School System Administration
EDAD 684 Instructional Leadership
EXED 516 The Exceptional Child: Perspectives \& Issues
EDAD 583 Accounting for Pupil Personnel
EDAD 677 School Law

Level II Director of Pupil Personnel Services - 6 hours
EDAD 594 Seminar in Leadership: Auxiliary Programs in Education
EDAD 682 School-Community Relations

Completion of a planned Fifth/Sixth-Year program may not be counted by states other than Kentucky in determining pay status. The Director of Pupil Personnel Services position is unique to Kentucky, and Kentucky’s manifestation is not found in other places. Other states seek a counseling or social work type background for student services, not a Director of Pupil Personnel Services with attendance duties as in Kentucky.

Note: Filing a TC-1 requesting Rank I requires completion of a minimum of 60 semester hours of graduate credit including the master's degree. Within these total hours the student must complete the required professional courses as outlined in a planned program designed to provide the student with appropriate administrative competencies and courses required for certification.

## Director of Pupil Personnel Services Endorsement - 15 hours, Ref. \#131, Concentration Code PAPP

The Director of Pupil Personnel (DPP) is one of the two legally mandated positions for a school district. The DPP usually deals with such issues as student attendance, student conduct codes, school calendars, and student services.

The endorsement for Director of Pupil Personnel may be recommended when the student has met the following conditions:

1. Has completed three (3) years full-time appropriate teaching experience or employment in a school setting;
2. Has a master's degree from an accredited institution;
3. Has a 3.2 GPA or above on all graduate work and an acceptable score on the GRE, MAT, or NTE;
4. Has completed the appropriate prerequisite courses; and
5. Has completed a minimum of 60 semester hours of graduate credit including the master's degree. Within these total hours the student must complete the required professional courses as outlined in a planned program designed to provide the student with appropriate administrative competencies and courses required for certification.

Level I Director of Pupil Personnel Services - 27 hours Prerequisite Courses<br>EDFN 500 Research Methods<br>PSY 510/511 Advanced Educational Psychology/Psychology of Learning<br>EXED 516 The Exceptional Child: Perspectives \& Issues<br>EDFN 576 Issues \& Trends in Education<br>Three hours from the following:<br>SEC 580 The Curriculum<br>ELED 503 Organization of the Elementary School Curriculum<br>MGE 571 The Middle School Curriculum<br>EDAD 683 Seminar in Curriculum Development<br>Three hours from the following:<br>CNS 551 Classroom Guidance<br>CNS 565 Elementary Guidance Services (or equivalent)<br>CNS 566 Secondary Guidance Services (or equivalent)

## Required Courses:

EDAD 585 Fundamentals of School Administration
EDAD 583 Accounting for Pupil Personnel
EDAD 677 School Law

## Level II Director of Pupil Personnel Services - 6 hours

EDAD 594 Seminar in Leadership: Auxiliary Programs in Education
EDAD 682 School-Community Relations
Completion of a planned Fifth/Sixth-Year program may not be counted by states other than Kentucky in determining pay status. The Director of Pupil Personnel Services position is unique to Kentucky, and Kentucky's manifestation is not found in other places. Other states seek a counseling or social work type background for student services, not a Director of Pupil Personnel Services with attendance duties as in Kentucky.

## Superintendent Endorsement, Ref. \#131, 12 hours - Code KST

An applicant desiring to pursue this program must first meet the admission requirements of Graduate Studies and Research to be admitted to the department.

Department admission prerequisites:

1. Has completed Level I and II preparation requirements for administrative endorsement as principal or supervisor;
2. Has a 3.2 GPA or above on all graduate work;
3. Has an acceptable score on the GRE, MAT, or NTE; and
4. Submits recommendations.

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

1. Completed two years full-time experience in a school administrative position, and
2. Completed a minimum of sixty (60) semester hours graduate credit above the bachelor's
degree in an approved certification program(s), including the following required courses:
EDAD 639 The Superintendency
EDAD 649 School System Administration
EDAD 659 Strategic Planning in Education

* EDAD 598 Field Based Experience in Educational Administration-Superintendency *EDAD 598 - Candidates should enroll concurrently with the first required course taken and will continue working concurrently with all three required courses. Students only register once for EDAD 598. Students will receive an "IP" grade for EDAD 598 until all requirements are met and the other three required courses are completed. All work should normally be completed within one year but must be completed within a maximum of two years.


## Alternate Route to Superintendent Certification Program

The alternate route program enables the district to consider the best candidates for positions of superintendent or assistant superintendent, including candidates who have not previously completed requirements for the superintendent's certification endorsement or are otherwise not eligible for certification under traditional program guidelines.

## Admission requires:

1. A letter from the employing district signed by the superintendent and/or board chairman must be sent to WKU indicating the desire to employ the named candidate as an assistant superintendent or superintendent and requesting the named candidate to be admitted to the Alternative Route to Superintendent Certification program.
2. The candidate must submit an application for admission that includes all requested information pertaining to education and experience.
3. The department admissions committee will review the request and application and determine if the candidate is eligible for admission, and what, if any, additional requirements must be met.
4. If admitted, the candidate is eligible to be interviewed for a position as superintendent or assistant superintendent.
5. If employed, the candidate is eligible for a two-year, Temporary Provisional Certificate endorsement for Superintendent. The candidate must submit a TC-1 to get endorsement.
6. The candidate has two years to complete all remaining program requirements. Upon completion, the candidate is eligible for a standard certificate endorsement.

## Alternative Admission

Applicants seeking admission to any degree program, other than the Ed. D., without the qualifying GAP score may apply under one of the following alternatives:

## Alternative 1:

1. Submit a professional portfolio,
2. Submit professional letters of recommendation,
3. Successfully complete three years of classroom teaching,
4. Submit to an interview, and
5. Meet all other university, college, and department requirements.

## Alternative 2:

1. Possess a master's degree from an accredited institution,
2. Have a GPA of 3.2 or higher on all graduate work,
3. Have NTE scores (Communication Skills 646 and General Knowledge 643) or 50th percentile or higher on the MAT,
4. Have three years of successful teaching experience,
5. Submit directly to the department the following:
a. Department application
b. Written personal statement
c. Three professional recommendations, and
6. Meet all other university, college, and department requirements.

## Alternative 3:

1. Possess a master's degree from an accredited institution,
2. Have a GPA of 3.4 on all master's degree course work
3. Have acceptable GRE scores,
4. Have three years of successful teaching experience, and
5. Participate in an interview by the Educational Administration, Leadership, \& Research Admission Committee. Interviews may be held prior to each regular enrollment period and will focus on determining the candidate's written and oral communication skills as well as potential for success as an educational leader. Questions related to the interview should be directed to the Educational Administration, Leadership, and Research office (270-745-4890), and
6. Meet all other university, college, and department requirements.

## Cooperative Doctorate in Education, Ref. \#142

Recognized by the Council on Postsecondary Education, this doctoral program is a collaborative effort between the Department of Educational Administration, Leadership, and Research at WKU and the Department of Education Leadership, Foundations, and Human Resources Education at the University of Louisville. Students interested in the Ph.D. program may obtain preliminary information about the program in Room 403 - Tate Page Hall or visit the program's Web site at http://edtech.wku.edu/programs/cdp/index.htm. This Web site includes all the information needed to obtain an overview of the program and learn about what is involved in the application process. Available also on the web site is a copy of the Doctoral Program Handbook which spells out a number of issues involved in obtaining admission to the doctoral program and completing the degree. The program has three professional specialty tracks: P-12 Administrative Leadership; Higher Education Leadership; and Organizational Leadership. Once students review this preliminary information, they are encouraged to contact the director of the program to talk about a) their interest in the program, b) their academic and professional goals, and c) how they intend to use this degree to achieve these goals. Completed application materials are reviewed by a WKU Admissions Committee and students who qualify as acceptable candidates are advised to the second stage in the admission process. This stage involves a formal presentation on some aspect of research in education or leadership and an interview involving representatives from both universities.

Upon admission to the doctoral program, each student is assigned a program advisor to guide the process of developing an appropriate academic program that also involves feedback and the approval of two other committee members. In order to finish the program, student must complete a total of 90 hours of course ork above the bachelor's degree; this includes work from the student's initial master's degree and up to nine additional hours of graduate work deemed to be recent enough for currency and relevant to the program's content. Remaining new graduate hours involve a blend of content courses (e.g., education, administration, leadership, business, communication, etc.), research courses, internships, and dissertation hours (independent study). The student must take at least 18 hours from each institution; this includes 6 hours of dissertation. Some $U$ of $L$ courses are taught by $U$ of $L$ professors at WKU. Students must also complete a residency requirement of 18 hours of credit within a period of 12 consecutive months.

## Graduate Courses in Educational Administration

All courses worth 3 credits unless otherwise noted.
EDAD 581 Organization and Administration of Occupational Education
EDAD 583 Accounting for Pupil Personnel
EDAD 585 Fundamentals of School Administration
EDAD 586 Creating a High Performance Culture
EDAD 588 School Business Management
EDAD 590 Administration of School Personnel
EDAD 594 Seminar in Leadership: Auxiliary Programs in Education
EDAD 596 Readings in Education
EDAD 597 Problems in Educational Administration
EDAD 598 Field-Based Experience in Educational Administration
EDAD 611 Leading Change
EDAD 620 Seminar in the Administration of Special Education
EDAD 625 Practicum in the Administration of Special Education
EDAD 630 Special Education Law and Finance
EDAD 639 The Superintendency

EDAD 649 School System Administration
EDAD 659 Strategic Planning in Education
EDAD 677 School Law
EDAD 680 Removing Barriers to Learning
EDAD 682 School-Community Relations
EDAD 683 Seminar in Curriculum Development
EDAD 684 Instructional Leadership
EDAD 686 Principles of Supervision
EDAD 688 Planning for School Improvement
EDAD 690 The Principalship
EDAD 694 Seminar in Educational Administration 3-6 hours for a Maximum of 6 hours)
EDAD 696 Advanced Organizational Theory
EDAD 697 Research in Administration and Supervision
EDAD 699 Specialist Project (6 hours)
EDAD 700 Maintaining Matriculation (1 to 6 hours)
EDAD 798 Internship in Administration and Supervision
EDAD 799 Dissertation Research (1 to 12 hours)

Graduate Courses in Educational Foundations All courses worth 3 credits unless otherwise noted. EDFN 500 Research Methods
EDFN 501 Educational Statistics
EDFN 548 Research in Curriculum and Instruction
EDFN 570W Workshops in Education
EDFN 576 Issues and Trends in Education

EDFN 601 Applied Statistical Techniques and Research Designs in Education
EDFN 612 Seminar in Community College Teaching EDFN 675 Higher Education in America
EDFN 685 Academic Problems in Higher Education EDFN 720 Foundations of Rural Educational Policy

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## Department of Psychology

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## Graduate Faculty

Professors: S. Haggbloom, S. Kuhlenschmidt, E. Lemerise, S. Mutter, A. Norman, F. Norman, W. Pfohl, R. Poe, D. Roenker, E. Shoenfelt

Associate Professors: R. Brown, P. Derryberry, R. Grieve, L. Hahn, E. Jones, K. Madole, C. Myers, K. Phelps, J. Pope-Tarrence, S. Wininger

Assistant Professors: M. Hakman, L. Meyer, K. Minor-Rubino, T. Paquin, P. Pegg, C. Pritchard

Optional Retirees: R. Greer, S. McFarland, R. Miller

## Master of Arts in Psychology, Ref. \# 092

This general program provides preparation for students who wish to pursue careers in clinical, business, or government settings, and/or enter a doctoral program. The department offers four concentrations within the program: clinical, experimental, industrial/organizational, and general. Within each concentration, the student is expected to become competent in theory, research, and application of psychology as related to the chosen area of concentration.

Applicants should have a statistics and experimental methodology course; background in general psychology; a minimum score of 850 on the Graduate Record Examination (GRE) General Test (verbal and quantitative combined); a minimum GPA of 2.75 with 3.0 in psychology courses. Applicants should submit three letters of recommendation, transcripts, a psychology department application form, a 500 -word personal statement describing professional interests and career goals, and the Graduate Studies application form. An interview may be required.
Applicants to the clinical psychology concentration should also submit an affidavit affirming that they have never been convicted or charged with a felony crime. Applications should be received by March 1 for priority consideration. Beyond the stated minimum requirements, selection is competitive.

The program comprises 12 hours of core courses, 9 hours of restricted electives, 12-15 hours of specialized courses in a concentration, 6-9 hours of practicum and/or internship, and 6 hours of thesis or electives ( 48 credit hours total). A comprehensive examination is required at the time of thesis defense or upon completion of course work. The research tool is required in all concentrations. No concentration may have more than 9 hours of 400G-level courses.

## Core Courses - 12 hours

PSY 512 Experimental Design
PSY 541 Professional Issues and Ethics in Psychology
PSY 563 Statistics and Psychometric Theory
PSY 552 Advanced Social Psychology

Restricted Electives-9 hours
Learned or Cognitive Basis of Behavior-3 hours
PSY 511 Psychology of Learning
PSY 523 Advanced Topics in Cognition
PSY 673 Advanced Training in Business and Industry

# Individual or Unique Basis of Behavior-3 hours <br> PSY 520 Individual Differences and Human Diversity <br> PSY 521 Advanced Child Developmental Psychology <br> PSY 550 Personality Theory <br> Biological/Quantitative Analysis of Behavior-3 hours <br> PSY 580 Advanced Physiological Psychology <br> PSY 513 Advanced Statistical Analysis 

## Clinical Psychology, Concentration Code MACL

This concentration follows the scientist-practitioner model of training. It prepares students to be successful performing both research and therapy. The program is practice-oriented, and offers a broad foundation for the professional who will render a wide variety of psychological services at the MA level. The program also prepares students to pursue further education at the doctoral level. The program prepares students for the national ASPPB licensure examination required to practice psychology in many states. Practicum and internship (9 hours) required. Thesis, or 2 course electives, ( 6 hours) required. A criminal background check will be required of successful applicants during the first semester of graduate study at the applicant's expense.
Specific course requirements-12 hours
PSY 560 Assessment of Cognitive and Intellectual Functioning
PSY 640 Psychopathology
PSY 641 Theories of Psychotherapy
PSY 660 Assessment of Personality and Socio-Emotional Functioning

## Industrial-Organizational Psychology, Concentration Code MAIN

This concentration focuses on behavior in business, industry, consulting, and government organizations. Students are expected to become proficient in the construction and validation of personnel selection systems. Job analysis, test validation, criterion development, equal employment opportunity law, and training in business and industry are emphasized in the program. A four-to-six months internship in personnel psychology is encouraged (6 hours); 6 advisor-approved graduate credit hours may be substituted for the internship if no internship placement can be obtained. A thesis is required.
Specific course requirements-15 hours
PSY 505 Statistical Software for Behavioral Scientists
PSY 570 Job Analysis and Compensation
PSY 571 Personnel Psychology
PSY 572 Organizational Psychology
PSY 670 Equal Employment Opportunity, the Law, and Ethical Considerations

## Experimental Psychology, Concentration Code MAAE

This concentration is research-oriented and designed to prepare individuals for continuation in a Ph.D. program and/or positions in industry, government, or education where strong research and methodological skills are needed. Some freedom within the curriculum permits students to design a program that best fits their interests. The program provides a number of research areas including cognition, perception, neuroscience, child development, aging, social psychology, sport psychology, and educational psychology. A thesis is required, in addition to a research practicum (6 hours) involving two semesters of participation in a research project prior to the thesis.

[^7]> Electives (Chosen with faculty advisor)—9 hours

## General Psychology, Concentration Code MAGE

This concentration is designed for students who desire a terminal master's degree in general psychology. Course requirements in addition to the core courses and restricted electives-are individually determined in consultation with the faculty advisor. Practicum (6 hours) is required. A thesis is not allowed.

## Specialist in Education School Psychology, Ref. \# 147

This program emphasizes training as an innovative problem solver. The student is trained to function as an integral part of the total program of pupil services. Each individual receives onsite experience in public schools, school-related practicum assignments in the department's psychological clinic, and experience as a member of an interdisciplinary team. Upon completion of the required course work, the student must complete a full year minimum 1200-hour internship within an educational setting. Practicum, research tool and a specialist project (thesis) are also required.

Applicants should have course work in statistics and experimental methodology, general psychology, and abnormal or personality psychology; a minimum score of 850 on the Graduate Record Examination General Test (Verbal + Quantitative); and a minimum undergraduate GPA of 3.0. Exceptions to the minimum criteria may be made for students with exceptional backgrounds or experiences. Applicants should send three letters of recommendation, a psychology department application form and the graduate studies application form to the Office of Graduate Studies. Beyond these stated minimum requirements, selection is competitive. A criminal background check will be required of successful applicants during the first semester of graduate study at the applicant's expense. This program requires 71 hours.

Specialist Requirements are as follows: (All 3 hours, unless otherwise designated)
LTCY 520 Clinical Diagnosis of Reading Abilities
PSY 514 Program Evaluation
PSY 540 Behavior Problems of Children and Adolescence
PSY 541 Professional Issues and Ethics in Psychology
PSY 545 Clinical Child Psychology: Theory and Practice
PSY 552 Advanced Social Psychology
PSY 580 Advanced Physiological Psychology
PSY 641 Theories of Psychotherapy
PSY 519 Psychological Perspectives on Classroom Behavior
PSY 560 Assessment of Cognitive and Intellectual Functioning
PSY 561 Advanced Assessment in Educational Settings
PSY 562 Practicum in Psychological Assessment (6 hours)
PSY 643 Psychoeducational Assessment
PSY 645 Consultation in Educational and Mental Health Settings
PSY 512 Seminar in Experimental Design
PSY 511 Psychology of Learning
PSY 521 Advanced Child Psychology
PSY 563 Statistics and Psychometric Theory
PSY 662 Practicum in Psychology (2 hours)
PSY 699 Specialist Project (6 hours)
PSY 592 Internship (6 hours)

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Graduate Courses in Psychology
All courses worth 3 credits unless otherwise noted.
PSY 405G Cognitive Psychology
PSY 410G Psychology of Learning
PSY 411G Psychology of Sensation and Perception
PSY 412G Psychology of Motivation and Emotion
PSY 421G Psychology of Early Adolescence
PSY 422G Adolescent Psychology
PSY 423G Psychology of Adult Life and Aging
PSY 424G Topics in Developmental Psychology
PSY 430G Psychology of Women
PSY 432G Psychology of the Gifted and Creative
PSY 435G Moral Development in Education
PSY 440G Abnormal Psychology
PSY 441G Psychological Aspects of Alcoholism
PSY 442G Beginning Skills in Psychological Interviewing
PSY 443G Behavior Modification
PSY 450G Psychology of Personality
PSY 455G Introduction to the Clinical Practice
    of Psychology
PSY 473G Training in Business and Industry
PSY 475G Grant Writing
PSY 480G Physiological Psychology
PSY 483G Evolutionary Psychology
PSY 485G Psychology of Religion
PSY 490G Research, Readings, or Special Projects in
    Psychology
PSY 495G History and Systems of Psychology
PSY 499G Senior Seminar in Psychology
PSY 500 Trends and Scientific Approaches in Psychological
    Thinking (1 to 3 hours)
PSY 501 Issues in College Instruction Using the Internet
(2 hours)
PSY 505 Statistical Software for Behavioral Scientists
PSY 510 Advanced Educational Psychology
PSY 511 Psychology of Learning
PSY 512 Seminar in Experimental Design
PSY 513 Advanced Statistical Analysis
PSY 514 Program Evaluation
PSY 519 Psychological Perspectives on Classroom Behavior
PSY 520 Individual Differences and Human Diversity
PSY 521 Advanced Child Psychology
PSY 523 Advanced Topics in Cognition
PSY 540 Behavior Problems of Childhood and Adolescence
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PSY 541 Professional Issues and Ethics in Psychology
PSY 545 Clinical Child Psychology: Theory and Practice
PSY 551 Social Psychology of Organizations
PSY 552 Advanced Social Psychology
PSY 560 Assessment of Cognitive and Intellectual Functioning
PSY 561 Advanced Assessment in Educational Settings
PSY 562 Practicum in Psychological Assessment
(1 to 3 hours, may be repeated)
PSY 563 Statistics and Psychometric Theory
PSY 570 Job Analysis and Compensation
PSY 571 Personnel Psychology
PSY 572 Organizational Psychology
PSY 580 Advanced Physiological Psychology
PSY 590 Readings of Research in Psychology
(1 to 3 hours, may be repeated)
PSY 591 Internship in College Teaching (1 to 2 hours)
PSY 592 Psychology Internship
PSY 599 Thesis Research and Writing (6 hours)
PSY 600 Maintaining Matriculation (1 to 6 hours)
PSY 637 Theories in Addiction
PSY 647 Addictions: Assessment, Diagnosis and Treatment Planning
PSY 641 Theories of Psychotherapy
PSY 642 Clinical Interviewing and Psychotherapy
PSY 643 Psychoeducational Assessment
PSY 645 Consultation in Educational and Mental Health Settings: Theory and Practice
PSY 660 Assessment of Personality and SocioEmotional Functioning
PSY 662 Practicum in Psychology
PSY 667 Drug Abuse Counseling
PSY 670 Equal Employment Opportunity, the Law, and Ethical Considerations
PSY 673 Advanced Training in Business and Industry
PSY 699 Specialist Project (6 hours)
PSY 700 Maintaining Matriculation (1 to 6 hours)
PSY 770 Legal Issues for Organizational Leaders
PSY 771 Human Resources Management for Organizational Leaders
PSY 773 Employee Training and Developmental Issues for Organizational Leaders

## Department of Special Instructional Programs

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## Graduate Faculty

Professors: J. Ferguson, R. Smith, V. Stayton
Associate Professors: N. Atwell, J. Berger, S. Powers, P. Petty
Assistant Professors: J. Applin, M. Boman, S. Dietrich, C. Houston, L. Maples, M. Maxwell, T. Suzuki, L. Teuton

## Master of Arts in Education: Literacy Education, Ref. \# 044

(Elementary, Middle, or Secondary Reading \& Writing Endorsement)
Total Hours: 36 hours
The Master of Arts in Education - Literacy Education is tailored to upgrade literacy instruction at all grade levels and is open to teachers in regular classrooms, special education classrooms, special reading classes, basic adult education classes, and community college reading instructors.

Admission to the Master of Arts in Education-Literacy program requires a GAP score (undergraduate GPA x GRE score) of 2300 and a minimum GRE analytical writing score of 3.5. Applicants with a GAP score between 2200 and 2299 and at least a 3.5 Analytical Writing score may contact a member of the literacy faculty for information on documentation required under the alternate admissions policy of the program area. Applicants must have and submit a current teaching certificate when applying to the MAE: Literacy Education program. Thesis and nonthesis options are available to students.

## Professional Education Component (21 hours)

Required (21 hours)
LTCY 518 Literacy Education and Technology (3 hours)
LTCY 519 Foundations of Reading Instruction (3 hours)
LTCY 520 Clinical Diagnosis of Reading Ability (3 hours)
LTCY 521 Reading Intervention (3 hours)
LTCY 524 Content Area Literacy (3 hours)
LTCY 527 Literacy Learning \& Cultural Differences (3 hours)
LTCY 528 Literacy Research Methods \& Evaluation (3 hours)

## Specialization Component (6 hours)

Choose one of the following (3 hours total)
LTCY 523 Diagnostic Reading Procedures for Classroom Teachers (3 hours)
LTCY 624 Seminar in Literacy Issues (3 hours)
LTCY 695 Internship in Literacy Supervision (3 hours)
Restricted Electives (3 hours) - choose one:
PSY 510 Advanced Educational Psychology (3 hours)
PSY 511 Psychology of Learning (3 hours)
PSY 519 Psychological Perspectives on Classroom Behavior (3 hours)
PSY 540 Behavior Problems of Childhood and Adolescence (3 hours)
ELED 503 Organization of Elementary School Curriculum (3 hours)
MGE 571 Middle School Curriculum (3 hours)
EXED 516 Exceptional Child: Perspectives \& Issues (3 hours)

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SEC 580 Curriculum (3 hours)
ENG 596 Writing Project (3 hours)
LME 518 Advanced Children's Literature (3 hours)
LME 527 Literature for Young Adults (3 hours)
EXED 523 Curriculum/Methods in Early Childhood Special Education
IECE 591 Seminar in Interdisciplinary Early Childhood Education
Research Foundations (3 hours):
EDFN 500 Research Methods (3 hours)
Research (6 hours)
LTCY }599\mathrm{ Thesis
or
Non-Thesis Option (6 hours)
LTCY 522 Investigations in Reading
LTCY }624\mathrm{ Seminar in Literacy Issues
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NOTE: Hours above 30 may count toward Rank 1

## Master of Arts in Education: Elementary Education-Literacy, Ref. \# 093; Middle Grades Education-Literacy, Ref. \# 094; Secondary Education-Literacy, Ref. \# 155

Literacy is currently an area of endorsement as part of the Master of Arts in Education (Elementary, Middle Grades, and Secondary majors). Refer to program web page for current program options and requirements at http://edtech.tph.wku.edu/~sip/literacy.htm

## Master of Arts in Education: Exceptional Education-Learning and Behavior Disorders (LBD), Ref. \# 107

The MAE in LBD is a web-based program available through both Western Kentucky University (WKU) and the Kentucky Virtual University (KYVU). The program is for individuals with an undergraduate major and certification in learning and behavior disorders.

A GAP score of 2200 or higher (undergraduate GPA of $2.5 \times$ GRE composite score) and a 3.5 on Analytical Writing are required. Applicant is responsible for maintaining contact with the graduate college (270-745-2446) to ensure application is complete and has been forwarded to the EXED admissions committee. Completed paperwork is due by April 1 for summer semester admission or by July 20 for fall semester admission.

Submit a portfolio by either April 1 or July 20 containing the following documents to the EXED program admission committee, Tate Page Hall, 364, WKU, Bowling Green, KY 42101. The portfolio should include three letters of recommendation, a professional development plan (including strengths in exceptional education and areas of growth in exceptional education), and a personal philosophy of education (including students with exceptionalities and commitment to the profession). The EXED admission committee may request an interview.

Program requirements- 30 hours
EXED 517 Transition Services and Programs for Individuals with Disabilities
EXED 530 Advanced Assessment Techniques
EXED 531 Advanced Prescriptive Teaching
EXED 532 Families, Professionals and Exceptionalities
EXED 533 Seminar: Curriculum for Learning and Behavior Disorders
EXED 534 Seminar: Research in Exceptional Child Education
EXED 590 Advanced Internship in Exceptional Education
EDFN 500 Research Methods

EXED 518 Seminar: Problems in Special Education
PSY 540 Behavior Problems of Childhood and Adolescence
All courses in the program carry critical performance indicators (CPIs). A course's critical performance must be completed before the final course grade will be recorded. Each course's CPI becomes a part of the portfolio that is reviewed at the end of each semester for progress through the program.

Successful completion of a comprehensive examination is required. A GPA of 3.0 or higher in all graduate course work is required, with no grade lower than a C. A written comprehensive examination is required at the conclusion of course work.

The MAE in Learning and Behavior Disorders requires the development of an ongoing portfolio, built upon the application portfolio that reflects the candidate's progress toward attainment of the experienced teacher standards. The portfolio, which contains the critical performance indicator exemplars from each course, is reviewed at the end of each semester. Students must take the required PRAXIS II specialty examinations for LBD certification. The portfolio, all courses, and the written comprehensive examination must be successfully completed before the degree is awarded.

## Alternate Route to Certification for Master of Arts in Education-Learning Behavior Disorders, Ref. \# 107

An alternative route to certification program is a graduate degree program for individuals with baccalaureate degrees, who are interested in working in schools with learning and behavior disordered children. This 30-hour graduate program consists of course work in the diagnosis and assessment of learning disabilities, prescriptive teaching, transition services programs, and research in exceptional education.

The alternative route to certification program is designed for students who do not already hold certification in exceptional education. Because students come from a variety of educational backgrounds, program advisors review each application carefully, taking into consideration comparable course work a student may have already taken as well as appropriate life experiences. Students may also indicate plans for proposed future professional development in the form of workshops, in-service training, or conferences to be used in place of background coursework for the program.

To ensure that all significant information is available for each applicant, a portfolio review process is used. As students complete course work in the program, items will be added to the portfolio as evidence of progress. During the program, any deficiencies identified in the initial portfolio review process may be addressed through planned and approved involvement in professional development activities. Documentation of such involvement will be added to the portfolio. Actual portfolio examples are available from the Exceptional Education office. Call (270) 745-4607 or visit the Exceptional Education website for more information.

Students must apply for admission to graduate studies and the Exceptional Education program. Students may begin applying to both at the same time, but must be admitted to graduate studies before the Exceptional Education faculty will formally consider the application.

Admission to the program requires a GAP score of 2200 or higher (GAP=GRE composite score X undergraduate GPA) and an Analytical Writing score of 3.5 or higher. Completed applications including graduate school applications and the Exceptional Education program applications must be received by the Exceptional Education program by the following dates: April 1 for admission to the summer cohort or July 20 for the fall cohort.

To apply for admission to the Exceptional Education program, submit a portfolio containing three letters of recommendation from professional references; a professional development plan describing previous course work, life experiences, and planned professional development activities in the area of learning and behavior disorders; and a personal philosophy of educating
students with exceptionalities, with an emphasis on commitment to the profession. The EXED admission committee may request an interview.

All courses in the program carry critical performance indicators (CPIs). A course's critical performance must be completed before the final course grade will be recorded. Each course's CPI becomes a part of the portfolio that is reviewed at the end of each semester for progress through the program.

Successful completion of a comprehensive examination is required. A GPA of 3.0 or higher in all graduate course work is required, with no grade lower than a C. Note: To obtain teacher certification, a passing score on the PRAXIS II is required for all candidates.

Program requirements- 30 hours
EXED 517 Transition Services and Programs for Individuals with Disabilities
EXED 530 Advanced Assessment Techniques
EXED 531 Advanced Prescriptive Teaching
EXED 532 Families, Professionals and Exceptionalities
EXED 533 Seminar: Curriculum for Learning and Behavior Disorders
EXED 630 Special Education Law and Finance
EXED 590 Advanced Internship in Exceptional Education
EDFN 500 Research Methods
EXED 516 Exceptional Child: Perspectives and Issues
or EXED 518 Seminar: Problems in Special Education
PSY 519 Psychological Perspectives on Classroom Behavior

## Master of Arts in Education: Exceptional Education-Moderate \& Severe Disabilities (MSD), Ref. \#107

The MAE in MSD is a web-based program available through both Western Kentucky University (WKU) and the Kentucky Virtual University (KYVU).

To be eligible for admission to the MAE in Moderate and Severe Disabilities, a candidate must:

1. Hold a BA/BS from an accredited college or university and certification in at least one of the following areas: exceptional education, moderate and severe disabilities; elementary education (P-5); interdisciplinary early childhood education; communication disorders (P-12); or exceptional education, learning and behavior disorders;
2. Meet the requirements for acceptance into graduate studies as stated in the Western Kentucky University Graduate Catalog; and
3. Present an application portfolio to the exceptional education admissions committee. The application portfolio consists of the following documents: three letters of recommendation, personal philosophy of teaching students with moderate to severe disabilities, current vitae, and letter of intent/commitment to teaching students with moderate and severe disabilities.

The MAE in Moderate and Severe Disabilities requires the development of an ongoing portfolio, built upon the application portfolio that reflects the candidate's progress toward attainment of the experienced teacher standards. The portfolio, which contains the critical performance indicator exemplars from each course, is reviewed at the end of each semester. A written comprehensive examination is required at the conclusion of course work. Students must take the required PRAXIS II specialty examination. The portfolio, all courses, and the written comprehensive examination must be successfully completed before the degree is awarded.

Program requirements-30 hours<br>EXED 516 Exceptional Child: Perspectives and Issues<br>EXED 517 Transition Services and Programs for Individuals with Disabilities<br>EXED 419G Assistive Technology<br>PSY 519 Psychological Perspectives on Classroom Behavior<br>EXED 535 Seminar: Curricular Options for Individuals with Moderate and<br>Severe Disabilities<br>EXED 532 Families, Professionals, and Exceptionalities<br>EXED 630 Special Education Law and Finance<br>EXED 530 Advanced Assessment Techniques<br>EXED 590 Advanced Internship in Exceptional Education<br>EDFN 500 Research Methods

## Director of Special Education Rank I-30 hours, Ref. \# 131, Concentration Code PDS

This program is housed in the Department of EALR. See that section for admission criteria and program requirements.

Master of Arts in Education: Interdisciplinary Early Childhood Education, Ref. \# 144
The program is designed to prepare early childhood educators to work with children, both with and without special needs, ages birth through kindergarten and their families. Program graduates are eligible to apply for certification in interdisciplinary early childhood education (IECE), birth to primary (B-P). This certification qualifies individuals to work with children from birth to entry into the primary program. This includes teaching children in kindergarten or other programs for five-year-olds if those programs are operated separately from the primary program. Graduates are prepared for positions in public schools, First Steps, Head Start programs, child care centers, and other public and private agencies serving young children and families.

In addition to meeting the graduate studies admission requirements, applicants must complete the IECE application process through the Department of Special Instructional Programs. This application process includes documentation of early childhood related professional experiences and training, a written professional goals statement, and three letters of reference. Applicants must be officially admitted to the IECE program before beginning the program sequence. Students must also have had EXED 330 or EXED 516 or equivalent prior to entering the master's program or complete one of them as a program deficiency.

The performance-based program of study requires 36 semester hours of course work and 240 clock hours of field experiences. Approximately one-half of the field experience hours are completed as part of ongoing course work. The culminating experience of the program is a summer internship. During the final semester of course work, the candidate must also pass an oral comprehensive exam.

Program requirements:

## Professional education-9 hours

IECE 523 Planning Curriculum and Instruction in Interdisciplinary Early Childhood Education
EXED 523 Curriculum/Methods in Early Childhood Special
Education
CD 486G Language Disorders

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Specialization courses-12 hours
    CD 481G Speech \& Language Development
    IECE 521 Assessment in IECE
    IECE 522 Family-Centered Services
    IECE 524 Internship in IECE
Content area courses-12 hours
    CFS 577 Seminar in Child Development Research
    IECE 520 Organizing Programs for IECE
    SWK 436G Services to Children
    PSY 645 Consultation in Educational \& Mental Health Settings:
        Theory \& Practice
Research foundation -3 hours
    EDFN 500 Research Methods
Prerequisites: EXED 330 or EXED 516
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Planned Sixth-Year/Rank I in Interdisciplinary Early Childhood Education, Ref. \# 156
This program is designed to prepare educators to work with children both with and without special needs, ages birth through kindergarten and their families. Program graduates are eligible to apply for certification in interdisciplinary early childhood education (IECE), birth to primary (B to P). This certification qualifies individuals to work with children from birth to entry into the primary program. This includes teaching children in kindergarten or other programs for five-yearolds if those programs are operated separately from the primary program. Graduates are prepared for positions in public schools, First Steps, Head Start programs, child care centers, and other public and private agencies serving young children and families.

In addition to meeting the graduate studies admissions requirements, applicants must complete the IECE application process through the Department of Special Instructional Programs. This application process includes documentation of early childhood related professional experiences and training, a professional written goals statement, and three letters of reference. Applicants must be officially admitted to the IECE program before beginning the program sequence. Students must also have had EXED 330 or EXED 516 or equivalent prior to entering the Rank I program or complete one of them as a program deficiency.

The performance-based program of study requires 33 hours of course work and 240 clock hours of field experiences. Approximately one-half of the field experience hours are completed as a part of ongoing course work. The culminating experience of the program is a summer internship.

Program requirements are as follows:
Professional education-21 hours
CD 481G Speech \& Language Development
CD 486G Language Disorders
IECE 521 Assessment in IECE
IECE 522 Family-Centered Services
IECE 524 Internship in IECE
IECE 523 Planning Curriculum and Instruction in Interdisciplinary Early Childhood Education
EXED 523 Curriculum/Methods in Early Childhood Special Education
Content area courses-12 hours
IECE 520 Organizing Programs for IECE
CFS 577 Seminar in Child Development Research

SWK 436G Services to Children
PSY 645 Consultation in Educational \& Mental Health Settings: Theory \& Practice
Prerequisite: EXED 330 or EXED 516

## Master of Science in Library Media Education, Ref. \# 083

The Master of Science degree in Library Media Education is a dual track program in information service and educational technology. The degree prepares persons for service as library media specialists, training development specialists, educational technology specialists, and information service specialists in schools, colleges, public libraries, and private organizations.

The Master of Science degree in Library Media Education is open to people who do not hold or seek a teacher certification as well as to certified teachers who seek additional certifications and changes in teaching rank.

The MS in LME degree offers two certification options for Kentucky teachers: the School Media Librarian P-12 Certificate and the Instructional Computer Technology Endorsement P-12. Both provide an extension of basic teacher certification in Kentucky.

## Admission Requirements

- A minimum GAP score (GRE-V plus GRE-Q, multiplied by undergraduate GPA) of 2500 and GRE Analytical Writing score of 3.5.
- Exception: The GAP and GRE requirement may be waived for any applicant who has earned a previous master's degree or higher from an accredited institution.


## General Requirements

The Master of Science in Library Media Education requires a minimum of 30 semester hours plus a research tool.

Core requirements-15 hours
LME 501 Program Organization and Administration
LME 512 Issues in Library Media Education
LME 535 Survey of Educational Technology Practices
Or LME 545 Educational Technology Production
(Students are advised to take the lower level course first and should contact an advisor for more information about registering for the technology courses.)

LME 537 Principles of Educational Technology Applications
Or LME 547 Integration of Educational Technology
(Students are advised to take the lower level course first and should contact an advisor for more information about registering for the technology courses.)

LME 590 Practicum
Approved electives-15 hours
The remaining courses are selected based on an applicant's prior experience, previous academic work, and career goals with the approval of the graduate advisor.

Research Tool-3 hours
The research tool requirement shall be met by successful completion (grade A or B) of EDFN 500 Research Methods or its equivalent within the first 12 semester hours of the graduate program.

Comprehensive Examination-
A written comprehensive examination is required for the MS in Library Media Education.

## School Media Librarian P-12 Certification Focus (5 $\mathbf{5}^{\text {th }} \mathbf{6}^{\text {th }}$ Year)

The School Media Librarian P-12 Certification Focus of the MS in LME fulfills the requirements for Kentucky state certification as a School Media Librarian P-12 with an extension of basic teaching certification at the 5th Year or 6th Year and a change in teaching rank.

Required Core (or equivalents)-15 hours
LME 501 Program Organization and Administration
LME 512 Issues in Library Media Education
LME 535 Survey of Educational Technology Practices
Or LME 545 Educational Technology Production
(Students are advised to take the lower level course first and should contact an advisor for more information about registering for the technology courses.)
LME 509 Investigations in Educational Technology
LME 537 Principles of Educational Technology Applications
Or LME 547 Integration of Educational Technology
(Students are advised to take the lower level course first and should contact an advisor for more information about registering for the technology courses.)

## LME 590 Practicum

Professional Specialization-9 hours
LME 502 Collection Management
LME 506 Classification and Cataloging
LME 508 Information Sources and Services
Elective courses-Minimum of 6 hours
Other appropriate LME courses or courses outside of LME may be selected with the approval of the graduate advisor. These include LME 545 Educational Technology Production and LME 547 Integration of Educational Technology for the both the Educational Technology Certificate and the Instructional Computer Technology Endorsement, P-12. Students seeking certification as a library media specialist should consider LME 527 Thematic Approach to Young Adult Literature and LME 518 Advanced Children's Literature in preparation for appropriate certification exams required by state agencies.

## Required State Professional Examinations

A passing score on the PRAXIS II Subject Assessment for Library Media Specialist test (0310) is required by Kentucky for the School Media Librarian P-12 Certificate. This examination or another one may be required for library media specialist certification in other states. Students outside of Kentucky are responsible for determining what the requirements are for certification in their states.

## Requirements for MS Degree with Prior Certification as School Media Librarian

A person who already holds initial certification as a school media librarian at the undergraduate or graduate level (but not the MS in LME from WKU) must complete 6 semester hours of LME courses and at least 24 hours of other appropriate courses for the MS degree and change in Kentucky teaching rank. These courses may include other fields based on prior experience, previous academic work, and career goals and must be approved by the graduate advisor.

## Initial Certification as School Media Librarian at the Graduate Level

A person who does not hold a teaching certificate may obtain initial certification at the master's level as a School Media Librarian P-12 in Kentucky. The initial certification requires admission to Professional Education, completion of the MS in the School Media Librarian P-12 Certification Focus, and passing scores on required professional examinations (PRAXIS II Principles of Learning and Teaching test and the PRAXIS II Subject Assessment-Library Media Specialist test).

## Educational Technology Focus

The Educational Technology Focus of the Master of Science in Library Media Education emphasizes preparation as a professional educational technology specialist in public and private organizations.

The Educational Technology Focus of the MS in Library Media Education for teachers also fulfills the requirements for the Instructional Computer Technology Endorsement P-12 and a change in teaching rank for 5th Year or 6th Year certification.

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Required Core (or equivalents)-15 hours
LME }501\mathrm{ Program Organization and Administration
LME }512\mathrm{ Issues in Library Media Education
LME 535 Survey of Educational Technology Practices
LME }537\mathrm{ Principles of Educational Technology Applications
LME 590 Practicum
Specialization-15 hours
LME 545 Educational Technology Production
LME 547 Integration of Educational Technology
LME 509 Investigations in Educational Technology
LME }519\mathrm{ Special Topics in Educational Technology
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Other courses with the approval of the academic advisor may be selected from the fields of communication, information technology, management information systems, computer science, etc.

## Educational Technology Certificate, Ref.\# 167

The graduate Educational Technology Certificate is not a teaching endorsement and does not require teacher certification for admission. The Educational Technology Certificate is acknowledged on the student's graduate transcript.

Students may pursue the certificate program only or concurrently as part of a master's degree program. Teachers may also obtain the Educational Technology Certificate with the Instructional Computer Technology Endorsement P-12.

Required courses - 12 semester hours<br>LME 535 Survey of Educational Technology Practices<br>LME 537 Principles of Educational Technology Applications<br>LME 545 Educational Technology Production<br>LME 547 Integration of Educational Technology

Instructional Computer Technology Endorsement P-12, Concentration KCT, Ref.\# 0412 The Instructional Computer Technology Endorsement P-12 for teachers may be pursued as
part of the Educational Technology Focus in the Master of Science in LME program; as part of the Master of Science in LME, School Media Librarian P-12 Certification Focus; as an emphasis within another master's degree program in elementary, middle, or secondary education; as an emphasis in a planned RII or planned RI program; or as a certification only program. It may also be obtained concurrently with the graduate Educational Technology Certificate.

Required courses - 12 semester hours<br>LME 535 Survey of Educational Technology Practices<br>LME 537 Principles of Educational Technology Applications<br>LME 545 Educational Technology Production<br>LME 547 Integration of Educational Technology

## Autism Spectrum Disorders Certificate, Ref.\# 0441

This 15 -hour program prepares students to provide academic, social, behavioral, communication, sensory and community services and information to individuals diagnosed with ASD and their families. Individuals who complete the program will be knowledgeable about the various disorders included in the spectrum of autism, characteristics, educational strategies, collaboration efforts, communication, and technology skills to be implemented with individuals with ASD.

Enrollment in this program is restricted to post-master's students who have completed a degree in any of the following graduate programs: Education, Literacy, School Psychology, Communication Disorders, Social Work, Marriage and Family Therapy, Mental Health Counseling, Nursing, Public Health. It may also be appropriate for other post-master's individuals seeking to learn more about individuals who have been diagnosed with ASD.

The program consists of 15 hours of required courses: EXED 610 (prerequisite for all other courses), 612, 615, 618, and 619. EXED 612 requires completion of a 3 -hour practicum (comprising at least 120 hours) at an approved site in the field of autism. To enroll in the practicum the student must have completed EXED 610, and the internship site and supervisor must be approved by the program coordinator.

## Required courses-15 hours

EXED 610 Characteristics of Autism Spectrum Disorders and Pervasive Developmental Delays
EXED 612 Collaboration with Schools and Agencies for Students with Autism Spectrum Disorders
EXED 615 Instructional Strategies and Design for Students with Autism Spectrum Disorders
EXED 618 Social Skills Instruction and Behavioral Programming for Students with Autism Spectrum Disorders
EXED 619 Assistive Technological and Communication Interventions for Students with Autism Spectrum Disorders

The graduate Autism Spectrum Disorders certificate provides essential information regarding individuals diagnosed with ASD. Students will examine research-based practices that have been identified for individuals with ASD as well as learn how to implement these strategies in the classroom and community. Practicum hours will be required.

## Master of Arts in Education: Adult Education, Ref. \# 047

The Master of Arts in Education in Adult Education prepares students for professional adult education practice at the graduate level to teach adults in a variety of settings. These settings include community education, adult basic education, adult literacy, corporate training, human resources and organizational development, workplace training, patient education, technical and community colleges, and other adult learning centers.

## Admissions Requirements

Admission to the Master of Arts in Education in Adult Education program requires a GAP score (undergraduate GPA X GRE score (V + Q)) of 2500 and a minimum GRE analytical writing score of 3.5.

## General Requirements

The 30-hour Master of Arts in Education in Adult Education will consist of a required core of 15 semester hours in Adult Education, a research foundations course, and two 3-hour electives. The student and his or her advisor will choose electives relevant to the student's area of interest. The remaining six hours will be attained through completion of a thesis or two additional courses. Students completing the additional non-thesis courses will be required to make a presentation of their findings of their applied research project. All students taking the non-thesis option will be required to take a comprehensive exam. All students are encouraged to take EDFN 500 Research Methods with the first twelve hours of their program.

Core Courses (15 hours)
ADED 510 Introduction to Adult Education (3 hours)
ADED 520 Methods for Teaching Adults (3 hours)
ADED 530 Program Planning for Adults (3 hours)
ADED 540 History and Philosophy of Adult Education (3 hours)
ADED 611 Adult Learning and Development (3 hours)
Electives (6 hours) Courses may be selected from the following or from other courses with prior approval of advisor.
ADED 598 Adult Education Seminar (3 hours)
CNS 555 Social and Cultural Diversity in Counseling (3 hours)
CNS 556 Developmental Career Counseling (3 hours)
CNS 557 Human and Family Development in Counseling (3 hours)
CNS 572 American College Student (3 hours)
CNS 574 Student Development in Higher Education (3 hours)
CNS 577 Counseling Concepts and Applications for Student Affairs Professionals (3 hours)
CNS 580 Family Life Studies (3 hours)
CNS 586 Parenting Issues (3 hours)
CNS 667 Drug Abuse Counseling (3 hours)
CNS 670 Parameters of Law in Student Affairs and Higher Education (3 hours)
EXED 516 Exceptional Child: Perspectives and Issues (3 hours)
EXED 518 Seminar: Contemporary Challenges in Spec. Ed. (3 hours)
EXED 534 Seminar: Research in Exceptional Child Education (3 hours)
LTCY 519 Foundations of Reading Instruction (3 hours)
LTCY 523 Diagnostic Reading Procedures for Classroom Teachers (3 hours)
LME 535 Survey of Educational Technology Practices (3 hours)
LME 537 Principles of Educational Technology Practices
PSY 510 Advanced Education Psychology (3 hours)
PSY 511 Psychology of Learning (3 hours)

Research Foundations (3 hours)
EDFN 500 Research Methods (3 hours) or equivalent as approved by advisor
Students may take one of the following two options:
Thesis Option (6 hours)
ADED 599 Thesis (6 hours)
OR
Non-Thesis Option (6 hours)
EDU 590 Adult Education Practicum (3 hours)
ADED 597 Directed Study in Adult Education (3 hours)
Students completing the additional non-thesis courses will be required to make a presentation of their findings of their applied research project.

## Graduate Courses in Adult Education

All courses worth 3 credits unless otherwise noted.
ADED 510 Introduction to Adult Education
ADED 520 Methods for Teaching Adults
ADED 530 Program Development for Adults
ADED 540 Philosophy and History of Adult Education

ADED 597 Directed Study in Adult Education
ADED 598 Adult Education Seminar
ADED 611 Adult Development and Learning

EXED 535 Seminar: Curricular Options for Individuals with Moderate and Severe Disabilities
EXED 590 Advanced Internship in Exceptional Education
EXED 599 Thesis Research and Writing (6 hours)
EXED 600 Maintaining Matriculation (1 to 6 hours)
EXED 610 Characteristics of Autism Spectrum Disorders and Pervasive Developmental Delays
EXED 612 Collaboration with Schools and Agencies for Students with Autism Spectrum Disorders
EXED 615 Instructional Strategies and Design for Students with Autism Spectrum Disorders
EXED 618 Social Skills Instruction and Behavioral Programming for Students with Autism Spectrum Disorders
EXED 619 Assistive Technological and Communication Interventions for Students with Autism Spectrum Disorders
EXED 620 Seminar in the Administration of Special Education
EXED 625 Practicum in the Administration of Special Education
EXED 630 Special Education Law and Finance

Graduate Courses in Interdisciplinary Early Childhood Education
All courses worth 3 credits unless otherwise noted.
IECE 520 Organizing Programs for Interdisciplinary Early Childhood Education
IECE 521 Assessment in Interdisciplinary Early Childhood Education
IECE 522 Family-Centered Services
IECE 524 Internship in Interdisciplinary Early Childhood Education

## Graduate Courses in Library Media Education

All courses worth 3 credits unless otherwise noted.
LME 501 Program Organization and Administration
LME 502 Collection Management
LME 506 Classification and Cataloging
LME 508 Information Sources and Services
LME 509 Investigations in Educational Technology (1 to 3 hours)
LME 512 Issues in Library Media Education
LME 518 Advanced Children's Literature
LME 519 Special Topics in Educational Technology
(Up to 6 Hours)
LME 527 Thematic Approach to Young Adult Literature

LME 535 Survey of Educational Technology Practices
LME 537 Principles of Educational Technology Application
LME 545 Educational Technology Production
LME 547 Integration of Educational Technology
LME 590 Practicum (1 to 3 hours)
LME 409G Selected Topics (1 to 3 hours)
LME 410G Storytelling
LME 411G Creative Media Experiences for Children
LME 475G Workshop (1 to 3 hours)

## Graduate Courses in Literacy

All courses worth 3 credits unless otherwise noted.
LTCY 518 Literacy Learning and Technology
LTCY 519 Foundations of Reading Instruction
LTCY 520 Clinical Diagnosis of Reading Variability
LTCY 521 Reading Intervention Practicum
LTCY 522 Investigations in Reading
(1 to 3 Hours)
LTCY 523 Diagnostic Reading Procedures for Classroom Teachers
LTCY 524 Content Area Literacy

LTCY 527 Literacy Learning and Cultural Differences
LTCY 528 Literacy Research Methods \& Evaluations
LTCY 599 Thesis Research and Writing (6 hours)
LTCY 624 Seminar in Reading Problems
LTCY 421G Reading in the Middle School
LTCY 444G Reading in the Secondary Grades

## College of Health and Human Services

Dr. John A. Bonaguro, Dean<br>Dr. Sylvia Gaiko, Associate Dean

## Departments

Communication Disorders
Consumer and Family Sciences *
Physical Education and Recreation
Public Health
Social Work

## Schools

School of Nursing

## Degrees Offered

## Master of Science

Communication Disorders
Physical Education
Exercise Science
Teacher Certification
Recreation and Sport Administration

## Master of Health Administration

## Master of Public Health

Health Education Concentration
Environmental Health Concentration

Master of Science Nursing
Primary Care Practitioner
Nurse Educator
Nurse Administrator

## Master of Social Work

## Certificates Offered

## Post-MSN Options

Nursing Education
Primary Care Nurse Practitioner
Complementary Health Care
*The Department of Consumer \& Family Sciences does not offer a degree program; however, it does offer course work for content area in other programs.

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## Vision

To be recognized nationally as a college that offers exemplary programs in Health and Human Services.

## Mission

The College provides diverse educational opportunities leading to excellence in Health and Human Services for a global community.

The College of Health and Human Services is the newest college at Western Kentucky University, established by our Board of Regents in August 2002 to bring together all health and human services programs under one administration unit. One of our strengths is the breath and depth of the diverse disciplines within the College. The College consists of seven departments that represent an array of disciplines, and offers degrees at the associate, baccalaureate and masters degree levels. The College also offers a collaborative doctorate in Rehabilitation Sciences with the University of Kentucky. Departments include Allied Health, Communication Disorders, Consumer and Family Sciences, School of Nursing, Physical Education and Recreation, Public Health, and Social Work. The College also oversees the Academic Center for Excellence, the Center for Gerontology, Clinical Education Complex, the Institute for Rural Health Development and Research, the Kentucky Emergency Medical Services Academic, and the South-Central Kentucky Area Health Education Center.

Our focus is to provide the highest possible quality of education to prepare our students to become leaders in careers related to health and human services. The faculty are highly qualified in their respective disciplines and utilize innovative teaching strategies along with state of the art instructional technology, including ITV, web enhanced and web based instruction.

The disciplines in the college have their roots in outreach to the community. Dental hygiene, communication disorders, consumer and family science, nursing, physical education, public health, recreation and social work prepares students for their profession by engaging them in activities within the community that applies the theories and concepts discussions in the classroom for a more comprehensive understanding of the issues, while providing a valuable service to the communities in which we reside. Students are required to complete clinical experiences, field work, or internships through one of the many affiliation agreements at a myriad of health and humans services facilities, agencies and organizations. A nationally recognized mobile health and wellness unit provides opportunities for students to apply skills learned in the classroom in the provision of prevention services to residences in our region.

Due to the nature of these experiences students are required to meet various departmental academic requirements and federal and/or state mandates. Departments may require the successful completion of specific courses or maintain a certain GPA in order to be placed in clinical or internship experiences. Some students may be required to undergo criminal background checks and drug testing and to provide proof of health insurance, liability insurance, and/or immunization records prior to participating in any required experiences at selected off-campus facilities/agencies. Additionally, there may be certifications, training seminars, or other requirements specified by the facility/agency that a student must meet in order to be eligible for field or practical experiences at the facility. It is the responsibility of the student to ensure that all institutional and/or facility requirements are met as a condition of participating in the on or off-campus experiences; students may be responsible in part or in full for any costs incurred to meet such requirements. Students are also responsible for transportation to and from off-campus experiences.

CHHS is dedicated to improve the quality of life in the community through education, service, collaboration, leadership, and scholarship. This is accomplished in the various centers and programs in the college that provide for a vibrant and relevant university experience. Below is a brief description of these organizational units:

## Academic Center for Excellence (ACE)

The Academic Center for Excellence (ACE) is the student success center for the College of Health and Human Service. ACE provides a comprehensive array of programs and services to support academic success among the CHHS students. The Center provides academic advising, tutoring for CHHS courses, assistance with degree program completion and career exploration/planning. It also houses a computer lab with software programs available specifically for our majors. For more information see website: http://www.wku.edu/chhs/ace

## Center for Gerontology

The Center for Gerontology is guided by the belief that healthy aging is attainable on both the individual and community level and requires implementing holistic strategies. Keys to successful healthy aging are increasing physical activity, improving eating habits, preventing disease, injury and disability, maximizing financial and physical independence and maintaining active participation with the community. Located within a historically rural environment, the Center recognizes the value of interdisciplinary and intergenerational collaboration in developing approaches that respect the needs of older adults and the rural communities that support them. Committed to balancing gerontoloical theory with practice, the Center nurtures dynamic partnerships between agencies working on aging issues, Western Kentucky University and the international community.

The Center oversees mini-grants that promote gerontology by engaging students and faculty in aging research. The Center houses the international journal, Journal of Aging, Humanities \& the Arts, an official publication of the Gerontological Society of America (http://www.tandf.co.uk/journals/titles/19325614.asp)

The Center focuses on three strategic areas:

- Prepare new generations of aging advocates to work with older adults, their families and their communities.
- Contribute to new knowledge on aging populations, cohorts and communities through the conduct of applied aging research.
- Enhance local capacity for older adults and the communities in which they live through the dissemination of community based research, best practices and sponsorship of programmatic activities.

For more information see website: http://www.wku/edu/chhs/gerontology

## Clinical Education Complex (CEC)

The Clinical Education Complex (CEC) is a collaboration project between the College of Health and Human Services and the College of Education and Behavioral Sciences. The CEC houses the Acquired Brain Injury Resource Program, the Communication Disorders Clinic, the Early Childhood Center, the Family Counseling Clinic, and the Kelly Autism Program. It provides applied research opportunities for both graduate and undergraduate students and valuable services to the community at large. For more information see website: www.wkucec.com

## Institute for Rural Health Development and Research (IRHDR)

....Building Bridges for a Healthier Community
The purpose of Western Kentucky University’s Institute for Rural Health Development and Research is to identify rural health and human service needs and facilitate collaborative arrangements engaging WKU students and faculty and community agencies in addressing these needs. Programs that support graduate education and field experiences are the WKU Mobile Health and Wellness Unit, Hazard Emergency and Awareness Unit (HEAT), Wellworks, Hispanic Initiative, Health Enhancement of Rural (HERE) and a school based dental sealant program. For more information see website: http://www.wku/edu/chhs/irhdr

## South-Central Kentucky Area Health Education Center (AHEC)

...Promoting the Common Health Throughout the Commonwealth
The mission of the Kentucky AHEC is to promote healthy communities through innovative partnerships. The South Central AHEC is affiliated with the University of Louisville School of Medicine in cooperation with WKU's College of Health and Human Services. For more information see website: http://www.wku.edu/scahec/

## Department of Communication Disorders

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http://www.wku.edu/onlineprograms/communicationDisorders.htm

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## Graduate Faculty

Professors: F. Kersting
Associate Professors: J. Etienne, L. Bland
Assistant Professors: B. Brindle, R. Dressler
Instructors: M. Moore, V. Hill
Optional Retiree: S. Cooke

## Master of Science in Communication Disorders, Ref. \# 114

This program is designed to prepare professional speech pathologists to meet the needs of the communicatively handicapped in hospitals, clinics, nursing facilities, and schools. It is also designed to meet the academic and clinical requirements of the American Speech Language and Hearing Association, leading to national certification and state licensure.

In addition to Graduate Studies admission requirements, the program requires an undergraduate grade point average of 3.2. The applicant's GAP (GRE x GPA) must be a minimum of 2800. Any academic deficiencies required to meet certification requirements of the American Speech-Language-Hearing Association must be completed before the student attains 21 credits. A strong academic background in psychology and/or gerontology is desirable.

Forty-two academic semester hours and seven clinical hours are required with an additional six hours added to the thesis option. The student must complete a minimum of 400 clock hours of clinical experience by graduation.

By the final semester of course work, the candidates must pass the PRAXIS exam in speech-language pathology. Candidates who do not successfully pass the PRAXIS exam must successfully complete a written exam administered by the program area faculty.

In order to protect client populations, students will be required to undergo criminal background checks and provide proof of a recent physical examination, professional liability insurance, and negative TB test prior to beginning any clinical experiences, and these must be updated annually. Some clinical externship placements may require students to undergo drug testing and submit proof of health insurance, CPR training, and other immunizations prior to beginning off campus experiences. Additionally, there may be certifications, training seminars, or other requirements specified by an institution that a student must meet in order to be eligible for training at an educational or health care institution. It is the responsibility of the student to ensure that all University and/or institutional requirements are met as a condition of participating in clinical experiences. It is the responsibility of the student to ensure that all institutional and/or facility requirements are met as a condition of participating in the on and off-campus experiences; students may be responsible in part or in full for any costs incurred to meet such requirements. Students are also responsible for transportation to and from off-campus experiences.

The master's level professional preparation in Communication Disorders is a 49-credit hour preparation program, combining didactic course work and diverse clinical experiences. In addition to maintaining program standards necessary for continued accreditation by ASHA’s Council on Academic Accreditation, the graduate program includes curricular and assessment activities addressing the Kentucky Teacher Standards.

## Planned Sixth-Year/Rank I in Communication Disorders, Ref. \# 164

The state requirement for Rank I salary classification is 60 graduate hours beyond the undergraduate degree. The following courses and their distribution meet requirements for the Rank I certification:

1. Master's Degree- 49 credit hours
2. Planned Sixth-Year-12 hours (this total may vary for students transferring graduate work from another institution.
3. Please consult with a Rank 1 advisor before beginning course work.

## Required Courses:

CD 503 Advanced Diagnostics
CD 589 Seminar in Communication Disorders
Choose one of the following options:
Option 1-6 hours
CD 512 Phonology or
CD 513 Neurogenics
Approved elective (3 hours)
Option 2-6 hours
EXED 599 Thesis \& Research Writing
Approved Elective-3 hours
*Any course not taken under Option 1 may also be taken as an elective.
*Electives must have prior approval of advisor.
Graduate Courses in Communication Disorders
All courses worth 3 credits unless otherwise noted.
CD 481G Speech and Language Development CD 506 Dysfluency
CD 482G Audiology
CD 483G Articulation Disorders
CD 484G Speech Anatomy and Physiology
CD 485G Diagnostic Procedures for Communication Disorders
CD 486G Language Disorders
CD 487G Aural Rehabilitation
CD 488G Augmentative Communication Systems
CD 489G Geriatric Communication Disorders
CD 500 Research Methods in Communication Disorders
CD 502 Motor Speech Disorders
CD 503 Advanced Diagnostic Procedures in Speech Pathology
CD 504 Seminar in Language Disorders
CD 505 Orofacial Anomalies

CD 507 Dysphasia
CD 508 Voice Disorders
CD 509 Speech Science
CD 510 Seminar in Speech Pathology
CD 511 Neurology of Speech and Language
CD 512 Seminar in Phonology
CD 513 Advanced Neurogenics
CD 514 Dysphagia
CD 515 Pediatric Audiology
CD 580 Diagnostic Procedures in Speech Disorders (2 hours)
CD 589 Special topics in Communication Disorders
CD 590 Clinical Internship in Speech Pathology (1 hour)
CD 591 Clinical Externship (6 hours)

# Department of Consumer and Family Sciences 

Doris Sikora, Interim Head
http://www.wku.edu/Dept/Academic/chhs/cfs CFS@wku.edu

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## Graduate Faculty

Professor: S. Gaiko
Associate Professor: D. Sikora
Assistant Professor: C. Smith

## Master of Arts in Education Secondary Education, Family \& Consumer Sciences minor, Ref. \# 018

Courses in Consumer and Family Sciences (formerly home economics) may constitute a minor in the Master of Arts in Education (Secondary) or an area of emphasis in the Master of Arts in Education (Education and Behavioral Science Studies).

Graduate Courses in Consumer \& Family Sciences All courses worth 3 credits unless otherwise noted.

CFS 520 Seminar in Consumer \& Family Sciences
CFS 521 Interior Ergonomics I
CFS 522 Interior Ergonomics II
CFS 531 Cultural Patterns of Dress
CFS 533 Developing Fashion Merchandising Programs
CFS 535 Textile Analysis \& Interpretation
CFS 536 Seminar in Institutional \& Home Environment
CFS 537 Critique \& Design of Investigations in CFS
CFS 571 Seminar in Family and Consumer Sciences Education
CFS 572 Curriculum Development in Family and Consumer Sciences Education
CFS 573 Evaluation in Family and Consumer Sciences Education

CFS 574 Supervision of Family and Consumer Sciences Education
CFS 575 Individual Study in Consumer and Family Sciences
CFS 577 Seminar in Child Development Research CFS 580 Internship
CFS 582 Sensory Evaluations \& Qualities of Foods
CFS 583 Human Resources in Food Systems
CFS 584 Community Nutrition
CFS 585 Nutrition for the Elderly
CFS 598 Special Topics in CFS (1 to 6 hours)
CFS 599 Thesis Research \& Writing (6 hours)
CFS 600 Maintaining Matriculation (1 to 6 hours)

# School of Nursing 

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http://www.wku.edu/Dept/Academic/chhs/nursing

## Graduate Faculty

Professors: D. Blackburn, S. Jones, B. Siegrist, D. Williams
Associate Professor: P. Bailey
Assistant Professors: L. Lindsey, E. Main

## Master of Science in Nursing (MSN), Ref. \# 149

The MSN builds on the first professional degree, the baccalaureate of science in nursing. The purpose of the program is to develop expertise in advanced nursing practice that demands increased accountability, proficiency, and leadership. Applicants for the MSN program must meet the following requirements:

1. Be a graduate of a CCNE or NLN accredited BSN program
a. Graduates of non-accredited programs are considered on an individual basis,
b. Provide evidence of prior education in health assessment, and nursing research;
2. Provide official transcripts of all higher education course work;
3. Obtain a minimal GAP score of 2200 and 3.5 on the GRE written analytical component.
4. Hold RN licensure or have applied for RN licensure in Kentucky;
5. Successful completion of a 3 credit hour graduate statistics course, and;
6. Send to the School of Nursing by April 15: application, fee, and three letters of recommendation, including one from current supervisor. Obtain forms from School of Nursing. Also provide a statement of personal goals (1-2 pages) including expectations of the program and outcomes for practice 5 years after graduation. The Graduate Faculty will schedule a personal interview after all required forms have been received.

The MSN program includes four concentrations: Primary Care Nurse Practitioner, Nurse Educator, Nurse Administrator, and Occupational Health Nurse. The following series of core courses are required in all four options: NURS 501, 504, 506, 508, 510, 512 and a graduate statistics course.

## Primary Care Nurse Practitioner Concentration

This concentration prepares the graduate to sit for certification as an Advanced Registered Nurse Practitioner, more specifically, primary care or family nurse practitioner.

Specialty requirements:
NURS 500 Advanced Concepts
NURS 502 Advanced Health Assessment
NURS 509 Practice Management for Nurse Practitioners
NURS 515 Advanced Pharmacology
NURS 550 Primary Care: Children \& Adolescents
NURS 552 Primary Care: Adults
NURS 554 Primary Care Internship

## Nurse Educator Concentration

This option prepares the registered nurse for the roles of nursing faculty in university or community college settings.

Specialty requirements:<br>NURS 500 Advanced Concepts<br>NURS 502 Advanced Health Assessment<br>NURS 515 Advanced Pharmacology<br>NURS 518 Clinical Teaching in Nursing<br>NURS 520 Teaching in Schools of Nursing<br>NURS 522 Teaching in Schools of Nursing Internship<br>CNS 552 Testing \& Assessment in Counseling<br>PSY 511 Psychology of Learning

## Nurse Administrator Concentration

This concentration prepares graduates for advanced practice as a nurse administrator or nurse manager in various health care settings.

Specialty requirements:<br>BA 500 Management Dynamics<br>BA 501 Survey of Economic Theory<br>BA 505 Survey of Accounting Principles<br>NURS 528 Leadership \& Management in Nursing Administration<br>NURS 530 Nursing Administration Internship<br>Electives-9 hours:<br>BA 503 Information Systems \& Decision Science<br>BA 507 Marketing Management<br>BA 509 Managerial Finance<br>HCA 551 Health Care Jurisprudence<br>HCA 571 Managed Care<br>HCA 542 Health Care Human Resources Administration<br>HCA 544 Health Care Systems Design \& Behavior<br>HCA 586 Health Care Economics

## Occupational Health Nurse Concentration

This concentration prepares the graduate for advanced practice in work place settings and to sit for certification as an Occupational Health Nurse and/or Community Health Clinical Nurse Specialist. This option requires completion of three specialty courses (completed online) through the University of Cincinnati.

Specialty Requirements (WKU):
NURS 540 Occupational Health Nurse Practicum I
NURS 541 Occupational Health Nurse Practicum II
NURS 542 Occupational Health Nurse Practicum III
EHS 577 Environmental Toxicology
PH 575 Health Education \& Promotion Program Planning
Or PH 402G Worksite Health Promotion
PH 582 Epidemiology
PH 584 Principles of Environmental Health
HCA 544 Healthcare Systems Design \& Behavior

HCA 545 Financial Management of Healthcare Organizations
Or BA 509 Managerial Finance
Specialty Requirements (University of Cincinnati):
Note: Each of the courses below is 3-quarter hours.
ANCH 810 Introduction to Occupational Health Nursing
ANCH 811 Managing Occupational \& Environmental Diseases \& Injuries
ANCH 813 Managing Health and Safety Programs in the Workplace
All students are required to select either Plan A (thesis) or Plan B (non-thesis) option (3-6 credit hours).

## Post-MSN Certificate in Nursing, Nursing Education, Ref. \# 172

This certificate is for students who have completed a masters degree in nursing and desire to pursue non-degree educational preparation to teach in schools of nursing in university and community college settings. The required courses focus on theories and strategies that guide instructional process, teaching and evaluation strategies and faculty role development. Students may transfer up to 6 credit hours of the requirements listed below.

| Course requirements- 16 hours |  |
| :--- | :--- |
| NURS 518 Clinical Teaching in Nursing | 3 hours |
| NURS 520 Teaching in Schools of Nursing | 3 hours |
| NURS 522 Teaching in Schools of Nursing Internship | 4 hours |
| CNS 552 Testing \& Assessment in Counseling | 3 hours |
| PSY 511 Psychology of Learning | 3 hours |

## Post-MSN Certificate in Nursing, Primary Care Nurse Practitioner, Ref. \# 176

This certificate is for students who have completed a masters degree in nursing and desire to pursue a non-degree course of study that leads to eligibility to take a national Family Nurse Practitioner certification examination. Students may transfer up to 12 hours of the courses listed below.

Core requirements-28 hours
NURS 500 Advanced Physiological and Pathophysiological Concepts 4 hours
NURS 502 Advanced Health Assessment 3 hours
NURS 508 Advanced Issues in Professional Nursing 1 hour
NURS 509 Practice Management for Nurse Practitioners 1 hour
NURS 515 Advanced Pharmacology 4 hours
NURS 550 Primary Care: Children and Adolescents 5 hours
NURS 552 Primary Care: Adults 5 hours
NURS 554 Primary Care Internship 5 hours

## Post-MSN Certificate in Nursing, Complementary Health Care, Ref. \# 206

Provides theory and nursing skills related to the five domains of complementary therapies recognized by the National Center for Complementary and Alternative Medicine (NCCAM) at the National Institutes of Health (NIH) including manipulative methods, alternative medical systems, mind/body interventions, biologically based treatments, and energy therapies. Regional and cultural influences related to the use of folk medicine are explored and opportunities are provided to interact with complementary healthcare practitioners.

## Core requirement:

NURS 415G Complementary Health Care

Elective Courses - student will select two - 3 credit hour courses from the following courses, or other related courses, as approved by advisor:

FLK 462 G Folklore and Medicine COMM 463G Intercultural Communication<br>NURS 490G Parish Nursing (new, approval in process)<br>NURS 450 G Rural Health \& Safety

Total Hours: 9 credit hours

## Graduate Courses in Nursing

NURS 415G Complementary Healthcare (3 hours)
NURS 490G Parish Nursing (3 hours)
NURS 500 Advanced Physiological and Pathophysiological Concepts (4 hours)
NURS 501 Nursing, Politics and Health Policy (2 hours)
NURS 502 Advanced Health Assessment (3 hours; includes 60 clinical hours)
NURS 504 Theoretical Foundations of Professional Nursing (3 hours)
NURS 506 Transition to Advanced Nursing Practice (1 hour)
NURS 508 Advanced Issues in Professional Nursing (1 hour)
NURS 509 Practice Management for Advanced Practice Nurses (1 hour)
NURS 510 Graduate Nursing Research (3 hours)
NURS 512 Research Application (2 hours)
NURS 515 Advanced Pharmacology (4 hours)
NURS 518 Clinical Teaching in Nursing (3 hour)
NURS 520 Teaching in Schools of Nursing (3 hours)

NURS 522 Teaching in Schools of Nursing Internship (4 hours; includes 240 clock hours)
NURS 528 Leadership and Management in Nursing Administration (3 hours)
NURS 530 Nursing Administration Internship (3 hours, includes 120 clock hours)
NURS 540 Occupational Health Nursing Practicum I (1 hour; includes 1050 clinical hours)
NURS 541 Occupational Health Nursing Practicum II (1 hour; includes 105 clinical hours)
NURS 542 Occupational Health Nursing Practicum III (3 hours; includes 315 clinical hours)
NURS 550 Primary Care: Children and Adolescents (5 hours; includes 120 clinical hours)
NURS 552 Primary Care: Adults (5 hours; includes 120 clinical hours)
NURS 554 Primary Care Internship (5 hours; includes 300 clinical hours)
NURS 590 Special Topics in Nursing (1 to 6 hours)
NURS 599 Thesis Research and Writing (6 hours)
NURS 600 Maintaining Matriculation (1 to 6 hours)

# Department of Physical Education \& Recreation Administration 

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Assistant Professors: S. Arnett, F. Gibson, B. Larson, S. Lyons, J. Navatta, R. Ramsing,
T. Stenger-Ramsey

Optional Retiree: T. Crews

## Master of Science in Physical Education, Ref. \# 090

A student can be admitted to the physical education program if he/she has an undergraduate physical education major or the equivalent of an undergraduate minor in physical education. Students should contact the department head for specific prerequisite courses. The program has two concentrations: Physical Education Teacher Education, which focuses on teaching Physical Education, and Exercise Science, which focuses on the scientific bases of exercise and human performance. Both of these concentrations will meet the Kentucky Teacher Requirements for Advanced Teaching Standards.

## Exercise Science, Concentration Code PEXS

The Exercise Science Concentration is designed to prepare students for various careers within this dynamic field. Also, the Exercise Science Concentration is designed to meet the requirements for Kentucky P-12 Physical Education Certification. This area of study also provides excellent preparation for students wishing to continue their education in a related doctoral program. All candidates are required to take PE 501, 503, 504, 515. Six hours of restricted electives consisting of PE 505 or 521, and PE 520 or 522 are selected in consultation with the graduate advisor. Nine hours of electives are selected in consultation with the graduate advisor. This rigorous course work, permitting in-depth study of various topics, is coupled with research and practicum opportunities that enhance learning by allowing students to acquire hands-on experiences in numerous areas of Exercise Science.

## Teacher Education, Concentration Code TCHR

The Teacher Education Concentration is designed to meet the requirements for Kentucky P-12 Physical Education Certification. The student pursuing this concentration must take PE 501, 503, 504, 515, PSY 510 or 511, EDU 501 and 596. Six hours of restricted electives consisting of PE 505 or 521, and PE 520 or 522 are selected in consultation with the graduate advisor. Nine hours of electives are selected in consultation with the graduate advisor. Students who have taken an adaptive physical education course in their undergraduate program may substitute an elective course for PE 508.
** The Teacher Education Concentration is offered on-site through evening classes and also through the Division of Extended Learning and Outreach as an On-line Option (Distance Learning).

## Master of Arts in Education Physical Education minor, Ref. \# 023

The area of interest for the minor in physical education is Teacher Education. The student minoring in physical education must take PE 504, 505, 508, and 520. Students who have taken an adaptive physical education course in their undergraduate program may substitute an elective course for PE 508.

## Master of Science in Recreation and Sport Administration, Ref. \#095

This program is designed to prepare professional Recreation and Sport Administration practitioners for a wide range of 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. Program includes thesis and non-thesis options. Candidates are encouraged to write a thesis.

A 24-hour major in recreation is required with a twelve-hour cognate field to be selected in consultation with the student's advisor. A research course is required. The required courses are: REC 501, $513,515,517,519,521,523$, and 590 . The total number of graduate hours for this degree is 36 .

## Graduate Courses in Physical Education

All courses worth 3 credits hours unless otherwise noted.
PE 501 Research Methods in Physical Education
PE 503 Motor Learning
PE 504 Advanced Exercise Physiology
PE 505 Foundations of Curriculum Construction
PE 508 Adapted Physical Education
PE 515 Assessment in Physical Education and Recreation
PE 520 Teaching Strategies in Physical Education
PE 521 Critical Analysis of Professional Literature in Physical Education

## Graduate Courses in Recreation

All courses worth 3 credit hours unless otherwise noted.
REC 404G Recreation Facility Management
REC 420G Commercial Recreation Tourism
REC 423G Camp and Conference Center Administration
REC 424G Camp and Conference Center Administration
REC 426G Facility Planning and Design
REC 428G Community Centers \& Playgrounds
REC 430G Recreation Resource Management
REC 434G Development of Nature Oriented Areas and Facilities
REC 435G Outdoor Expedition Planning
REC 437G Outdoor Leadership Expedition
REC 482G Recreation Workshop

PE 522 Advanced Exercise Prescription
PE 523 Seminar in Exercise Science
PE 524 Applied Biomechanics
PE 530 Independent Investigations in Physical Education
PE 570 Workshop in Physical Education
PE 596 Practicum in Exercise Science
PE 599 Thesis Research and Writing (6 hours)
PE 600 Maintaining Matriculation (1 to 6 hours)

REC 501 Analysis of Research in Recreation
REC 513 Recreation and Sport Administration
REC 515 Recreation Sport Facility Development
REC 517 Legal Issues in Recreation and Sport
REC 519 Fiscal Practices in Recreation Sport
REC 521 Public Relations in Recreation and Sport
REC 523 Theory of Recreation and Sport
REC 530 Advanced Studies in Recreation
REC 532 Environmental Education Resources
REC 590 Practicum in Recreation and Sport
REC 598 Master's Project in Recreation and Sport
REC 599 Thesis Research and Writing (6 hours)
REC 600 Maintaining Matriculation (1 to 6 hours)

## Department of Public Health

Gary English, Head
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http://www.wku.edu/Dept/Academic/CHHS/PublicHealth/

Science \& Technology Hall 412
(270) 745-4797 Office
(270) 745-4437 Fax

## Graduate Faculty

Professors: J. Bonaguro, D. George, T. Nicholson
Associate Professors: M. Gardner, S. Nagy, C. Wainright, J. White
Assistant Professors: E. Iyiegbuniwe, G. Lartey, W, Mcanta, C. Nagy, R. Taylor, C. Watkins, D. Wyant

Optional Retirees: D. Dunn, W. Higgins

## Master of Public Health, Ref. \# 152

Contact: J. David Dunn, MPH Interim Program Director
The Master of Public Health (MPH) is a professional degree program designed to meet the needs of a wide range of health professionals (e.g., public health educators, nurses, environmentalists, public health administrators, industrial health personnel, nutritionists, dental hygienists, physicians, and other professionals) who desire graduate education in public health. The MPH degree program is accredited by the Council on Education for Public Health. Two concentrations are offered: environmental health and public health education. To pursue the MPH degree, the applicant must have completed a baccalaureate degree in health sciences, or have adequate academic preparation in the disciplines basic to public health.

In addition to the admission requirements required by the University applicants to the MPH must submit a statement of purpose, addressing the following points:

1. Explain how your academic and personal background experiences have prepared you for graduate study in public health, and in particular, public heath education or environmental health;
2. Explain or describe your interest in public health and your reasons for seeking education in this field;
3. Describe the type of position you expect to fill in the field of public health upon completion of the MPH; and
4. State your long-term career plans and explain how you expect the MPH degree to help you achieve your goals.
The statement addressing the above items should be in essay form, typed or written legibly, and no longer than two pages.

Candidates for the MPH degree must complete a minimum of 46 hours of course work.
Core Courses- 28 hours
PH 520 Vital \& Medical Statistics 3 hours
PH 580 History and Philosophy of Public Health 3 hours
PH 582 Epidemiology 3 hours
PH 583 Public Health Administration 3 hours
PH 584 Principles of Environmental Health 3 hours
PH 587 Health Behavior 3 hours
PH 546 Graduate Internship 6 hours
PH 591 Health Program Evaluation 3 hours
HCA 520 Statistical Applications in Health 1 hour

## Environmental Health, Concentration Code PHEH

The goal of the environmental health option of the MPH program is to prepare graduates who can function as a professional environmental health specialist in a variety of public and private settings. Students completing the environmental health option in the MPH program will be able to

- Understand basic concepts of ecology and understand human’s role in altering the ecosystem
- Assess a community to determine the presence of adverse environmental conditions and their potential impact on human health
- Monitor the community's environment to assure that the environmental quality is conducive to good health
- Develop and implement strategies to remediate unhealthy environmental conditions
- Understand the role of and work with the public and private sectors in controlling adverse environmental conditions
- Manage resources and personnel to effectively carry out an environmental health program
- Identify, interpret, and implement environmental health laws, regulations, and policies
- Function effectively as a member of the public health team

Concentration Course work- 12 hours
PH 510 Watershed Management and Science
PH 577Environmental Toxicology
PH 580 Solid and Hazardous Wastes
PH 571 Air Quality Management
Electives- 6 hours
BIOL 472G Applied and Environmental Microbiology
PH 530 Independent Investigations in Public Health
PH 585 International Health
PH 560 Environmental Management and Risk Assessment
PH 595 Public Health Management of Disasters
ENV 495G Environmental Measurement
PH 599 Thesis Research
PH 501 Research Methods

## Public Health Education, Concentration Code PHED

The public health education specialization prepares public health education professionals to effectively plan, implement, and evaluate health education and promotion programs, and carry out the related professional functions. Graduates will be able to:

- Assess individual and community needs for health education
- Plan effective health education programs
- Implement health education programs
- Evaluate the effectiveness of health education programs
- Coordinate provisions of health education programs
- Act as a resource person in health education
- Communicate health and health education needs, concerns, and resources
- Solve problems in ways sensitive to cultural differences

[^8]
## Electives- 6 hours

PH 501 Research Methods<br>PH 530 Independent Investigations in Public Health<br>PH 568 STD/HIV Prevention: A Public Health Approach<br>PH 585 International Health<br>PH 586 Violence Prevention<br>PH 595 Public Health Management of Natural \& Technological Disasters<br>HCA 540 Health Care Organization \& Management<br>HCA 541 Strategic Management \& Marketing of Health Services<br>HCA 542 Health Care Human Resource Management<br>HCA 546 Health Systems Informatics<br>HCA 586 Health Economics Policy<br>PH 599 Thesis Research<br>PH 572 Drug Abuse Prevention

## Master of Arts in Education Health minor, Ref. \# 014

Contact: Dr. Grace Lartey
The program leading to the Master of Arts in Education with a minor in health is designed to prepare graduates for positions as (1) health educators in junior and senior high schools, (2) coordinators of school health programs, (3) administrators and supervisors of school health programs, and (4) family resource and youth service center directors. The applicant must hold a valid teaching certificate and have the minimum of an undergraduate minor in health. Applicants who hold a valid teaching certificate but have not completed a recognized minor in health may be conditionally admitted if they have completed a minimum of 12 semester hours of undergraduate course work in health and/or related courses.

Students pursuing a minor in health must complete 12 to 15 hours in health, including Public Health 567 and 587. Six to nine additional hours of health must be chosen with approval of the student's graduate minor advisor.

## Master of Health Administration, Ref. \# 153

Contact: Charles F. Wainright, Program Director
The Master of Health Administration (MHA) degree program prepares graduates for administrative positions in various types of health care facilities and agencies including: acute care, long-term care, group medical practices, managed care organizations, public health agencies, clinics, and health related organizations such as pharmaceutical firms, medical equipment firms, and consulting firms. Students from various undergraduate backgrounds, who meet the university graduate admissions requirements, may be admitted to the program. The minimum specific requirements are a GAP score (GRE scores on verbal +quantitative + analytic sections x GPA) equal to or above 4000 or a GAP score (GRE scores for verbal + quantitative sections x GPA) equal to 2500 on the new GAP rating. Applicants must score at least 450 on each of the two sections (verbal + quantitative) in order to be considered for admission unless conditional admission is given, and must score a 3.5 or better on the Analytical Writing section. Additional undergraduate and graduate courses may be required depending upon the applicant's educational background. International students must also submit a letter of intent regarding the MHA Program degree and successfully pass the TOEFL exam (e.g., 550 on the paper-based, 213 on the computer based and 79 on the iBT TOEFL).

Candidates for the MHA degree must complete 56 credit hours consisting of BA 501, BA 505, PH 520, PH 582, HCA 520, HCA 540, HCA 541, HCA 542, HCA 543, HCA 544, HCA 545, HCA 551, HCA 564, HCA 565, HCA 571, HCA 574, HCA 586, one approved three hour elective, and either HCA 546 (6-hr internship), or PH 599 (6 hrs - thesis). Additionally, health care executives
may elect to take an Executive option of two additional 3-hour courses in a concentration area instead of the internship or thesis options.

Graduate Courses in Health Care Administration<br>All courses worth 3 credit hours unless otherwise noted.<br>HCA 520 Graduate Statistics Laboratory<br>HCA 530 Independent Investigations in Health Care Administration<br>HCA 540 Health Care Organization and Management<br>HCA 541 Strategic Management and Marketing of Health Services<br>HCA 542 Health Care Human Resources Administration<br>HCA 543 Health Care Quality and Accountability<br>HCA 544 Health Care Systems Design and Behavior<br>HCA 545 Managerial Finances for Health Services

HCA 546 Graduate Internship
HCA 551 Health Care Jurisprudence
HCA 555 Health Care Preparedness and Leadership
HCA 556 Ambulatory Care/Rural Health
HCA 564 Health Systems Informatics
HCA 565 Health System Laboratory
HCA 571 Managed Care
HCA 572 Special Topics in Health Services
HCA 574 Decision Making in Health Services
HCA 586 Health Economics and Policy

## Graduate Courses in Public Health

All courses worth 3 credits unless otherwise noted.
PH 443G Health Problems of the Aged
PH 444G Death Education
PH 447G Human Values and the Health Sciences
PH 460G School and Community Health Workshop
PH 461G Comprehensive School Health Program
PH 462G Folklore and Medicine
PH 463G Consumer Health
PH 464G Women's Health
PH 465G Health and Safety in the Elementary
School
PH 466G Clinical Health Education
PH 467G Drug Abuse Education
PH 468G Sexuality Education
PH 469G Critical Issues in Health and Safety
PH 501 Research Methods
PH 520 Vital and Medical Statistics
PH 530 Independent Investigations in Public Health (1 to 6 hours)
PH 532 Independent Investigations in School Health
(1 to 6 hours)
PH 545 The Health Education Curriculum
PH 546 Graduate Internship (1 to 6 hours)
PH 548 Community Health Organization
PH 560 Environmental Management \& Risk
Assessment

## Graduate Courses in Safety

All courses worth 3 credits unless otherwise noted.
SFTY 470G Driver Education and Traffic Education SFTY 471G Advanced Studies in Driver Education

PH 567 Administration of the Comprehensive School Health Program
PH 568 STD/HIV Prevention: A Public Health Approach
PH 571 Air Quality Management
PH 575 Health Education \& Promotion Program Planning
PH 576 Education \& Communication Techniques in Public Health Education
PH 580 History and Philosophy of Public Health
PH 581 Methods in Public Health Education
PH 582 Epidemiology
PH 583 Public Health Administration
PH 584 Principles of Environmental Health
PH 585 International Health
PH 586 Violence Prevention: A Public Health Approach
PH 587 Health Behavior
PH 588 Seminar in Public Health
PH 589 Internship in Community College Training
PH 590 Public Health Law
PH 591 Health Program Evaluation
PH 595 Public Health Management of Disasters
PH 599 Thesis Research and Writing (6 hours)
PH 600 Maintaining Matriculation (1 to 6 hours)

SFTY 531 Independent Investigations in Safety (1 to 6 hours)
SFTY 570 School and Community Safety Programs

## Department of Social Work

J. Dean May, Head<br>http://www.wku.edu/chhs/socialwork/

Academic Complex 211
(270) 745-5312 Office
(270) 745-6841 Fax

## Graduate Faculty

Associate Professors: S. Cashwell, M. Lin, J. May, R. Smith, S. Stark, G. Villereal, S. Wesley
Assistant Professors: E. Arnold, A. Cappiccie, J. Chadha, J. Gabbard, V. Hurt, M. Randolph, C. Robey, C. Snyder

## Master of Social Work, Ref. \# 157

Janice Chadha, Program Director
janice.chadha @wku.edu
The Master of Social Work (MSW) program at Western Kentucky University (WKU) prepares students for professional social work practice at the graduate level to meet the needs of increasingly diverse rural populations. It is particularly dedicated to addressing the work-force needs of agencies that serve families and communities. Moreover, the MSW curriculum emphasizes social work practice at the advanced level in rural communities.

There are three program options for students meeting the admission requirements outlined below. The Traditional Option requires two years ( 4 semesters) for students with a baccalaureate degree in any field. The Advanced-Standing Option requires one year (3 semesters) for students who have earned a bachelor of social work (BSW) degree from an accredited social work program and who have fulfilled the additional admission requirements outlined below. The Part-Time, Traditional Option requires 4 years (12 semesters) for students who have a baccalaureate degree in any field. All program options require students to complete SWRK 661 as a capstone course prior to graduation. This course integrates the entire curriculum in a comprehensive practice experience. Students are required to pass a Practice Readiness Exam prior to graduation.

Specific program admission requirements:

- A GAP score of at least 2200 .
- An overall GPA of at least 2.75 for all hours earned past the first 60 semester or 90quarter hours of the baccalaureate degree (regardless of GAP score), or a minimum score of 800 on the combined verbal and quantitative portion of the Graduate Record Examination (regardless of GAP scores).
- A Western Kentucky University Master of Social Work program application and personal statement.
- Three completed WKU Master of Social Work program reference forms.
- Demonstrated competence in the use of basic statistical methods through completion, with a minimum grade of " C ", of an undergraduate or graduate course covering the portion of the research process involving the quantitative manipulation and analysis of data. This course should cover descriptive and inferential statistics. The student must submit documentation that this prerequisite has been met prior to program admission. Any course presented to fulfill the statistical competence requirement must have been completed within seven years of entrance into the MSW program.
- Completed at least one course from each of the following areas: economics, American government, psychology, sociology, and human biology. These courses must have been completed with a minimum grade of C. Applicants may be enrolled in liberal arts prerequisite courses while their MSW applications are being evaluated, but all of these
courses must have been successfully completed before admission to the program. Offers of admission will be contingent upon the successful completion of all required courses.


## Advanced Standing Option Requirements:

- Completion of a bachelor of social work (BSW) degree at a Council on Social Work Education (CSWE) accredited institution within the previous seven years with a grade point average of 3.0 or higher in social work courses.
- Satisfactory completion of a minimum of 400 hours of educationally based field instruction in direct practice with individuals, families, groups, and communities under appropriate social work supervision. A copy of the student's final field evaluation must be submitted.
- Completion of courses from the following subject areas within an accredited social work program at the upper-division (junior and senior) level with a grade of "C" or better in each course: Human Behavior and the Social Environment - one course; Social Welfare Policy and Services - one course; Social Work Practice - two courses to include study of intervention methods with individuals, families, small groups and communities; Social Work Research - one course in research methodology.
- Interview may be required.


## Provisional Admissions for the Traditional Program

An applicant who believes that her/his individual circumstances warrant consideration for a waiver of the minimum admissions requirement of an undergraduate GPA of 2.75 and 800 on the GRE must petition the MSW Program Director. The request should be attached to this application in the form of a statement entitled "Petition for Exceptional Consideration." The petition should include a statement indicating how failing to meet the minimum admission requirement of a 2.75 GPA and 800 GRE score does not adequately represent the applicant's capabilities. The applicant should briefly discuss her/his demonstrated capacity for successful achievement of an arduous MSW program. For example, an applicant might provide evidence of:

1. Superior grades during the final semester(s) of work prior to graduation indicating a trend toward improved performance;
2. Competence through achievement in another graduate program; and
3. Outstanding work experience in human services (volunteer or paid).

The applicant should also discuss how she/he plans to address potential obstacles to successful completion of the program. Finally, the applicant should attest to the accuracy of all information provided in the petition, date and sign the document. The petition must be submitted with the application.

## Graduate Courses in Social Work

All courses worth 3 credit hours unless otherwise noted.
SWRK 433G Ethical Issues \& Dilemmas in Social Work
SWRK 436G Services to Children
SWRK 501 Cultural Competency in Social Work Practice (2 hours)
SWRK 510 Human Behavior in Social Environment
SWRK 511 Understanding the Rural Community (2 hours)
SWRK 520 Generalist Social Work Practice
SWRK 521 Social Work Clinical Assessment and Intervention
SWRK 530 Foundations of Social Welfare Policy
SWRK 540 Foundations of Social Work Research Methods
SWRK 560 Foundation Field Practicum I (4 hours)
SWRK 561 Foundation Field Practicum II (4 hours)
SWRK 571 Introduction to KY Child Welfare Practice
SWRK 572 Family Violence: Social Work Practice
SWRK 573 Assessment \& Case Management of Child Sex Abuse

SWRK 574 Enhancing Safety \& Permanency for Children
SWRK 610 Social Work Administration and Supervision (2 hours)
SWRK 620 Advanced Psycho-Social Approaches for Rural Practice
SWRK 621 Rural Community Organization and Development
SWRK 630 Rural Social Welfare Policy
SWRK 637 Theories in Addiction
SWRK 647 Addictions: Assessment, Diagnosis and Treatment Planning
SWRK 660 Advanced Field Practicum I (4 hours)
SWRK 661 Advanced Field Practicum II (4 hours)
SWRK 667 Drug Abuse Counseling
SWRK 671 Social Work and the Law
SWRK 672 Child Sexual Abuse
SWRK 673 Grief and Loss: Issues and Interventions
SWRK 695 Special Topics in Social Work
SWRK 698 Selected Readings in Social Work
SWRK 699 Selected Research in Social Work

# Gordon Ford College of Business 

William Tallon, Dean<br>Departments<br>Accounting<br>Computer Information Systems<br>Economics<br>Finance<br>Management<br>Marketing<br>\section*{Degrees Offered}<br>\section*{Master of Arts}<br>Applied Economics<br>\section*{Master of Business Administration}<br>Accounting Concentration<br>Economics Concentration<br>Finance Concentration<br>General Concentration

## Master of Business Administration, Ref. \# 057

Paula Newby, MBA Director of Admissions
Grise Hall 434A
mba@wku.edu
(270) 745-5458 Office
(270) 745-3893 Fax

The MBA is an interdisciplinary program that provides professional education for successful careers in management. The program emphasizes accounting, computer information systems, economics, finance, management and marketing as the major focus. Students take a core area of courses and then choose electives that best suit their individual career needs.

The program is offered using two distinct methods of delivery. Students must elect their preferred method of delivery in their graduate application form.

The traditional program is best suited for the student whose schedule can accommodate regularly scheduled evening and weekend class sessions and desire face-to-face interaction.

The eMBA, or electronic MBA, offers all course work in an online, on-demand format. This delivery method is best suited for students who are already actively engaged in their profession and require the flexibility of work anywhere, anytime.

The admission process for the MBA program at Western Kentucky University involves the following steps and requirements*:
A. Completion of graduate application form, a current resume and a minimum of one professional reference (who can attest to the applicant's potential to successfully complete graduate work), submission of an official undergraduate degree transcript from each university attended and an official copy of a GMAT score taken within the last five years.
B. Applicants seeking admission must meet the following criteria: Minimum undergraduate overall grade point average of 2.5 on a 4.0 scale, a minimum overall GMAT score of 500 , a written GMAT score 3.5 and a minimum GAP score of 1050 based upon the GMAT score plus the overall undergraduate GPA multiplied by 200.
C. Applicants who have limited prior academic background in basic business are required to demonstrate proficiency in six major areas by:
i. Successfully completing one or more preparatory courses as specified by the MBA Director, OR
ii. Successfully completing one or more core area proficiency exams (fees required).
*These minimum requirements establish eligibility for admission, but do not guarantee acceptance.
Applicant materials are reviewed during the normal admission cycles. Students accepted into the MBA program will receive written notification and additional orientation materials. Students not admitted will be notified in writing and may be encouraged to reapply during the next regular admissions cycle.

| Tier 1 Foundation Courses | Undergraduate Equivalent |
| :--- | :--- |
| BA 500 Management Dynamics | MGT 310 Organizational Management |
| BA 501 Survey of Economic Theory | ECON 202 Microeconomics |
|  | ECON 203 Macroeconomics |
| BA 503 Information Systems \& Decision Science | CIS 343 Principles of MIS |
|  | MGT 313 Quantitative Methods OR |
|  | MGT 314 Production |
| BA 505 Survey of Accounting Principles | ACCT 200 Finance Accounting <br> ACCT 201 Managerial Accounting |
| BA 507 Marketing Management | MKT 320 Principles of Marketing |
| BA 509 Managerial Finance | FIN 330 Fundamentals of Finance |
| ECON 206 Statistics | ECON 206 Statistics |

## MBA - General

Students who pursue the MBA are expected to complete 24 hours of core (Tier II) courses including:

BA 510 Organizational Theory
BA 511 Applied Microeconomic Theory
BA 512 Problem Solving, Data Modeling, and Managerial Decisions
BA 513 Information Technology and Strategy
BA 515 Managerial Accounting
BA 517 Advanced Marketing
BA 519 Advanced Managerial Finance
BA 580 Contemporary Issues in Business
BA 590 Strategic Business Concepts \& Applications

## Electives-6 hours

Students may choose 6 semester hours of electives from the various functional areas of business. Electives may also be taken outside the Gordon Ford College of Business with approval of the MBA Director.

Note: No more than 6 semester hours of transfer work may be applied toward this program.

## MBA - Economics Concentration (Conc. \# BECO)

BA 510 Organizational Theory
BA 511 Applied Microeconomic Theory
BA 512 Problem Solving, Data Modeling, and Managerial Decisions
BA 513 Information Technology and Strategy
BA 517 Advanced Marketing
BA 519 Advanced Managerial Finance
BA 590 Strategic Business Concepts \& Applications
ECON 594 Forecasting
Economics electives

Note: Economics electives will replace the 6 hours of electives required in the general MBA.

MBA - Accounting Concentration (Conc. \# BACC)
Acceptance into the Accounting Concentration is based upon evaluation of the individual student's qualifications

BA 510 Organizational Theory
BA 511 Applied Microeconomic Theory
BA 512 Problem Solving, Data Modeling, and Managerial Decisions
BA 513 Information Technology and Strategy
BA 517 Advanced Marketing
BA 519 Advanced Managerial Finance
BA 590 Strategic Business Concepts \& Applications
ACCT 500 Advanced Financial Accounting Theory \& Practice
ACCT 520 Seminar in Advanced Managerial Accounting
ACCT 530 Seminar I in Tax Research \& Planning
ACCT 540 Advanced Auditing Standards \& Applications
Note: ACCT 530 and 540 will replace the 6 hours of electives required in the general MBA.

## MBA - Finance Concentration (Conc. \# BFIN)

Acceptance into the Finance Concentration is based upon evaluation of the individual student's qualifications.

BA 510 Organizational Theory
BA 511 Applied Microeconomic Theory
BA 512 Problem Solving, Data Modeling, and Managerial Decisions
BA 513 Information Technology and Strategy
BA 515 Managerial Accounting
BA 517 Advanced Marketing
BA 519 Advanced Managerial Finance
BA 590 Strategic Business Concepts \& Applications
BA 592/FIN 449G Practicum in Portfolio Management

## Finance electives

Note: Finance electives will replace the 6 hours of electives required in the general MBA.

## Graduate Courses in Business Administration

All courses worth 3 credit hours unless otherwise noted.
BA 500 Management Dynamics
BA 501 Survey of Economic Theory
BA 503 Information Systems and Decision Science
BA 505 Survey of Accounting Principles
BA 507 Marketing Management
BA 509 Managerial Finance
BA 510 Organizational Theory
BA 511 Applied Microeconomic Theory
BA 512 Problem Solving, Data Modeling, and Managerial Decisions
BA 513 Information Technology and Strategy

BA 515 Managerial Accounting Concepts \& Applications
BA 517 Advanced Marketing
BA 519 Advanced Managerial Finance
BA 533 Managing Database Applications
BA 534 Electronic Commerce
BA 540 Applied Statistical Methods
BA 541 Survey of Public Finance
BA 542 International Economics
BA 543 Forecasting
BA 544 Labor and Human Resource Economics
BA 550 Bank Management

BA 551 Investments and Portfolio Management
BA 552 International Finance
BA 560 Contemporary Human Resource Management
BA 571 Services Marketing
BA 572 Consumer Behavior

BA 573 International Business
BA 579 Supply Chain Management
BA 580 Contemporary Issues in Business
BA 590 Strategic Business Concepts \& Applications
BA 592 Special Topics in Business

## Department of Accounting

R. Aldridge, Chair

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http://www.wku.edu/Dept/Academic/gfcb/accounting/

## Graduate Faculty

Professors: R. Aldridge, J. Hall, N. Magner

Associate Professors: M. Lee, H. Little

## Graduate Courses in Accounting

All courses worth 3 credit hours unless otherwise noted
ACCT 500 Advanced Financial Accounting Theory and Practice
ACCT 540 Advanced Auditing Standards and Applications
ACCT 598 Independent Study in Accounting

## Department of Computer Information Systems

J. Butterfield, Chair

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http://cis.wku.edu/

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(270) 745-5953 Fax

## Graduate Faculty

Associate Professors: R. Blankenship, J. Butterfield
No courses available from this department.

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(270) 745-6376 Fax

## Department of Economics

W. Davis, Chair<br>ECON@wku.edu<br>http://www.wku.edu/Economics/econdept.htm

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(270) 745-3190 Fax

## Graduate Faculty

Professors: M. Borland, B. Goff, R. Howsen, Y. Kim, S. Lile, R. Pulsinelli
Associate Professors: C. Carey, W. Davis, D. Myers, T. Noser, B. Strow, M. Trawick
Assistant Professors: A. Lebedinsky, C. Strow, D. Wilson, D. Zimmer

## Master of Arts Applied Economics, Ref. \# 0410

The Master of Arts in Applied Economics emphasizes the training of students with backgrounds in economics and other arts and sciences for careers that require strong analytical skills, technical tools, and communication abilities that can be applied to a broad range of subjects. Toward this end, students may also enroll in courses from related master programs including the Master in Business Administration, the Master in Public Administration, and the Master in Health Administration to enhance their range of knowledge and experience. In addition to course work, the program utilizes practicum, an end-of-program applied project, and non-credit workshops to build specific technical skills and to enhance employability of graduates.

Program admission requirements:

- Completion of graduate application form, a list of three references, submission of official copy of undergraduate degree transcript, and an official copy of a GRE score taken within the last five years. Applications are considered for fall admission only.
- Minimum undergraduate overall grade point average of 2.75 (4.0 scale) and a minimum GRE score of 900 . Alternate graduate admission test scores such as the GMAT or LSAT will be considered on a case by case basis as a substitute for the GRE.
- All applicants from non-English speaking countries are required to take the Test of English as a Foreign Language (TOEFL). A minimum score of 79 on the iBT TOEFL is required for admission.
- All applicants must have completed an introductory microeconomics (Economics 202 or equivalent) course, an introductory macroeconomics (Economics 203 or equivalent) course, and an introductory statistics (Economics 206 or equivalent) course. Students who have not completed an intermediate level course (300 level or higher) course in microeconomics, macroeconomics, or statistics will be required to complete a preparatory workshop in the area of deficiency prior to the fall semester. Economics 501 may be substituted for the microeconomics and macroeconomics preparatory workshops.

Curriculum Requirements: 30 Hour Minimum

## 9 Hour Core:

ECON 502, 503, and 506 (502 and 506 must be taken in initial fall semester)

Options I \& II Require:
2 Skill-building, Non-Credit Workshops (Minimum)
Maximum of 6 Hours of 400G Credit

## Course (Credit Hours)

ECON 502 (3) Applied Microeconomic Theory
ECON 503 (3) Applied Macroeconomic Theory
ECON 506 (3) Applied Statistical Methods
ECON 571 (3) Public Sector Economics
ECON 581 (3) Survey of Public Finance (directed study only)
ECON 582 (3) Seminar in Economic History (directed study only)
ECON 583 (3) Advanced Microeconomic Theory (directed study only)
ECON 585 (3) Topics in Macroeconomics (directed study only)
ECON 591 (3) International Economics
ECON 594 (3) Forecasting
ECON 595 (3) Labor and Human Resource Economics
ECON 596 (3-6) Applied Economics Project
ECON 597 (3) Practicum in Economics
ECON 598 (3) Directed Studies
ECON 599 (6) Thesis and Research Writing
ECON 600 Maintaining Matriculation
ECON 400G-Issues in Capital Market Economics
ECON 410G-Seminar in Economics
ECON 430G-Environmental and Resource Economics
ECON 434G—The Economics of Poverty and Discrimination
ECON 440G-American Industry
ECON 464G-Introduction to Mathematical Economics
ECON 465G-Regression and Econometric Analysis
ECON 475G-Urban and Regional Economics
ECON 496G—International Monetary Economics
Option I: Applied Analyst Option (30 hours)
This option emphasizes building in-depth analytical, quantitative, and communication
skills.
Core Courses (9 hours) plus Forecasting (594), Applied Economics Project (596), at least (9) hours from: Urban \& Regional Economics (475G), Public Sector Economics (511), Labor and Human Resource Economics (595), (3-6) hours of electives including up to (6) hours of approved graduate level electives outside economics, and at least (2) Skill-building Workshops.

Option II: Social and Policy Issues Option (30 hours)
This option emphasizes analytical and communication skills but includes a wider variety of subject matter as well as more elective choices.
Core courses ( 9 hours), at least 12 hours from the following courses: Up to (6) hours from the 400G courses, Public Sector Economics (571), International Economics (591), Labor and Human Resource Economics (595), Applied Economics Project (596), (6-9) hours of electives including up to (6) hours of approved graduate level electives outside of economics, and at least (2) Skill- building Workshops.

Option III: Advanced Academic Option
This option prepares students to pursue a Ph.D. by providing opportunity for more advanced theoretical course work and statistical tools.

Core courses (9 hours), Regression \& Econometrics (465G), Introduction to Mathematical Economics (434G) or Directed Studies in Mathematical Economics, Advanced Microeconomic Theory (583), Topics in Macroeconomics (585), (3-6) hours of electives including up to (6) hours of approved graduate level electives outside of economics, and ECON 596 or 599 (3-6 hour Project or Thesis)

## Graduate Courses in Economics

All courses worth 3 credit hours unless otherwise noted.

ECON 400G Issues in Capital Market Economics
ECON 410G Seminar in Economics
ECON 420G Public Finance
ECON 430G Environmental and Resource Economics
ECON 434G The Economics of Poverty and Discrimination
ECON 440G American Industry: Structure, Performance, and Policy
ECON 464G Introduction to Mathematical Economics
ECON 465G Regression and Econometric Analysis
ECON 475G Urban and Regional Economics
ECON 491G History of Economic Thought
ECON 496G International Monetary Economics
ECON 501 Survey of Economic Theory
ECON 502 Applied Microeconomic Theory
ECON 503 Applied Macroeconomic Theory

ECON 505W Economics for Teachers
ECON 506 Applied Statistical Methods
ECON 571 Public Policy Economics
ECON 581 Survey of Public Finance
ECON 582 Seminar in Economic History
ECON 583 Advanced Microeconomic Theory
ECON 585 Topics in Macroeconomics
ECON 591 International Economics
ECON 594 Forecasting
ECON 595 Labor and Human Resource Economics
ECON 596 Applied Economics Project
ECON 597 Practicum in Economics
ECON 598 Directed Studies
ECON 599 Thesis and Research Writing (6 hours)
ECON 600 Maintaining Matriculation (1 to 6 hours)

# Department of Finance 

| C. Brown, Interim Chair | Grise Hall 334 |
| :--- | :--- |
| FINANCE@wku.edu | (270) $745-2018$ Office |
| http://finance.wku.edu | (270) $745-5284$ Fax |

http://finance.wku.edu

## Graduate Faculty

Associate Professors: I. Chhachhi, C. Brown

Graduate Courses in Finance
All courses worth 3 credit hours unless otherwise noted.
FIN 438G Corporate Funds Management
FIN 439G Security Analysis/Portfolio Management
FIN 449G Practicum in Portfolio Management

## Department of Management

Z. Mohamed, Chair<br>Grise Hall Room 200<br>MGT@wku.edu<br>http://www.wku.edu/management/welcome.htm<br>(270) 745-5408 Office<br>(270) 745-6376 Fax

## Graduate Faculty

Professors: Z. Mohamed, A. Rahim, R. Reber, L. Simpson
Associate Professors: R. Hatfield, P. Potter
Assistant Professors: S. Spiller

No courses available from this department.

## Department of Marketing

R. Shannon, Chair http://www.wku.edu/gfcb/marketing

Grise Hall Room 431
(270) 745-2249 Office
(270) 745-3190 Fax

## Graduate Faculty

Associate Professors: R. Shannon
Assistant Professors: C. Martin, P. Todd

Graduate Courses in Marketing
All courses worth 3 credit hours unless otherwise noted.
MKT 529 Directed Study in Marketing

## Ogden College of Science and Engineering

Blaine Ferrell, Dean

## Departments

Agriculture
Architectural \& Manufacturing Sciences
Biology
Chemistry
Computer Science
Geography \& Geology
Mathematics
Physics \& Astronomy

## Degrees Offered

## Master of Science

Agriculture
Biology
Chemistry (Coal Chemistry, Biochemistry, and Teacher Options)
Computer Science
Geoscience
Homeland Security ${ }^{5}$
Mathematics
Technology Management
Master of Arts
Mathematics

## Certificate Program

Certificate in Geographic Information Science

[^9]
## Department of Agriculture

Jack Rudolph, Head
www.wku.edu/agriculture
Environmental Science \& Technology 269
agriculture@wku.edu

## Graduate Faculty

Professors: L. Brown, D. Coffey, G. Jones, J. Rudolph, N. Speer
Associate Professors: C. Anderson, J. Britt, R. Gilfillen, D. Stiles, T. Willian
Assistant Professors: J. Kessell, M. Stone, P. Woosley
Optional Retirees: A. Bedel, E. Gray

## Masters of Science in Agriculture, Ref. \# 052

In addition to Graduate Studies admissions requirements, applicants should have an undergraduate major or area of concentration in agriculture or a related science. Non-agriculture undergraduate degree holders may be required to complete pertinent undergraduate courses in agriculture, as prescribed by the departmental graduate committee.

## Master of Arts in Education Agriculture, major Ref. \# 053 or minor Ref. \# 001

This program provides graduate course work in agriculture and meets Kentucky certification requirements. The student majoring in agriculture shall take a minimum of 18 hours in the major area; the student with a minor 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. For additional information regarding the education aspects of this degree, consult the Master of Arts in Education-Secondary Education section.

## Graduate Courses in Agriculture

## All courses worth 3 credits unless otherwise noted.

AGEC 460G Agricultural Policy
AGEC 461G Advanced Farm Management
AGEC 463G Agricultural Finance
AGEC 468G World Food Development

AGEC 482G Development of Agricultural
Resources for Rural Recreation
AGEC 561 Agricultural Production Economics

AGED 470G Methods in Teaching Agricultural Education
AGED 471G Organization and Planning in Agricultural Education
AGED 583 Curriculum Development and Determining Content in Agricultural Education

AGRI 473G Interactions in the Cave and Karst Environment
AGRI 475G Selected Topics in Agriculture (1 to 3 hours)
AGRI 491G Data Analysis and Interpretation
AGRI 493G Sustainable Agriculture
AGRI 528 Agricultural Genetics
AGRI 590 Experimental Design and Data Analysis

AGED 584 Program Development in Agricultural Education
AGED 589 Special Problems in Agricultural Education (1 to 3 hours, up to 6 hours)

AGRI 597 Special Problems in Agriculture (1 to 3 hours, up to 9 hours)
AGRI 598 Seminar (1 hour, up to 3 hours)
AGRI 599 Thesis Research and Writing (6 hours)
AGRI 600 Maintaining Matriculation (1 to 6 hours)
AGRI 675 Advanced Topics in Agriculture
(1 to 3 hours, up to 10 hours)
AGRO 409G Weed Science (2 hours)
AGRO 410G Weed Science Laboratory (1 hour)
AGRO 414G Crop Improvement
AGRO 420G Forage Crops ( 2 hours)
AGRO 421G Forage Crops Laboratory (1 hour)
AGRO 422G Field Crops
AGRO 451G Soil Management
AGRO 452G Soil Microbiology
AGRO 454G Soil Management and Conservation
AGRO 455G Soil Chemistry (2 hours)

ANSC 437G Physiology of Reproduction in Domestic Animals (2 hours)
ANSC 438G Physiology of Reproduction in Domestic Animals Laboratory (1 hour)
ANSC 446G Animal Breeding (2 hours)
ANSC 447G Animal Breeding Laboratory (1 hour)

HORT 401G Landscape Plants II (2 hours)
HORT 402G Landscape Plants II Laboratory
(1 hour)
HORT 403G Landscape Design and Construction (2 hours)
HORT 404G Landscape Design and Construction Laboratory (1 hour)
HORT 405G Nursery Management (2 hours)

AGRO 456G Soil Chemistry Laboratory (1 hour)
AGRO 457G Soil Formation, Classification, and Mapping (2 hours)
AGRO 458G Soil Formation, Classification, and Mapping (1 hour)
AGRO 475G Selected Topics in Agronomy
(1 to 3 hours)
AGRO 520 Pasture Development and Management
AGRO 533 Physiology of Lactation
AGRO 551 Advanced Soil Fertility

ANSC 448G Animal Feeds and Feeding Practices (4 hours)
ANSC 449G Domestic Animal Nutrition:
Principles and Techniques
ANSC 545 Ruminant Nutrition
ANSC 546 Advanced Animal Breeding
ANSC 547 Advanced Animal Nutrition

HORT 406G Nursery Management Laboratory
(1 hour)
HORT 407G Plant Propagation (2 hours)
HORT 408G Plant Propagation Laboratory (1 hour)
HORT 419G Vegetable Production
HORT 475G Selected Topics in Horticulture
(1 to 3 hours)

## Department of Architectural \& Manufacturing Sciences

Terry Leeper, Head<br>http:// www.wku.edu/Dept/Academic/Ogden/AMS/

Environmental Science Technology 204
(270) 745-3251 Office
(270) 745-5946 Fax

## Graduate Faculty

Professors: B. Askins, T. Leeper
Associate Professors: D. Jackson, K. Khatir
Assistant Professors: G. Arbuckle, B. Reeka, D. Gravitt, M. Doggett, S. Lightner

## Master of Science in Technology Management, Ref. 045

The Master of Science in Technology Management develops leaders to support the needs of the modern world-wide industry. The curriculum enhances both career and personal objectives. Graduates of the program are equipped to manage organization resources, lead technological change, and strategically integrate higher level knowledge within their companies.

The purpose of the Master of Science Technology Management (MSTM) is to develop leaders with skills, knowledge and vision to manage changing business needs for economic and community development that increases international competitiveness.

The program is delivered using a distance education format. All courses can be taken online, promoting time flexibility without the disruption of a professional career. Courses are offered on a biterm basis (every eight weeks) and have no sequenced prerequisites, allowing students to take courses at their convenience without delaying graduation.

Students may complete the program of student in two years by enrolling in one bi-term course every eight weeks and one course during the summer the summer semester. Students may complete the program in one year with additional courses. Each course is delivered via Blackboard or interactive video.

In addition to Graduate Studies admission requirements, the AMS Department requires prospective students to have documented 4,000 hours of industrial experience in their technical field.

## Admission Requirements:

1. Bachelor's degree from an accredited college or university (undergraduates may apply one semester prior to graduation)
2. Submission of official transcripts
3. Meet the admission requirements of the WKU Office of Graduate Studies and Research
4. Completion of the GRE
5. Along with University requirements, the AMS Department requires prospective students to have 4,000 documented hours ( $\sim 2$ years) of industrial experience in their technical field

## Core requirements:

All students must take the following courses: (All courses are 3 credit hours unless otherwise noted)
AMS 510- Emerging Technologies
AMS 520- Resource Management
AMS 525- Industrial Resource Allocation
AMS 530- Automated Date Collection Systems
AMS 535- Workforce Development
AMS 590- Operations Leadership
AMS 630- Legal and Ethical Issues in Technology
AMS 650- Industrial Distribution
AMS 671- Quality Management

Research Tool Course (University Graduate School Requirement)
The research tool must be met by demonstrating either:

1. Reading proficiency in a foreign language appropriate for the major areas, or
2. Competency in an appropriate research technique

Thesis option:
AMS 571- Research Methods in Technology Management (3 hrs)
AMS 599- Thesis (6 hrs)
Non-thesis option:
AMS 690- Graduate Project (6 hrs)
Students will be required to complete an oral defense of their Thesis or Graduate Project and complete a comprehensive written exam of their course work.

Graduate Courses in Architectural \& Manufacturing Sciences<br>All courses worth 3 credit hours unless otherwise noted.<br>AMS 452G Industrial Wood Processing II<br>AMS 465G Industrial Technology for Elementary<br>Teachers<br>AMS 495G Acoustic Guitar Construction (4 hours)<br>AMS 510 Emerging Technologies<br>AMS 520 Resource Management<br>AMS 525 Industrial Resource Allocation<br>AMS 530 Automated Date Collection Systems<br>AMS 532 Industrial Design<br>AMS 535 Workforce Development<br>AMS 542 Industrial Electricity and Electronics<br>AMS 544 Wood Technology<br>AMS 548 Graphic Arts<br>AMS 552 Advanced Machine Shop<br>AMS 560 Metal Technology<br>AMS 568 Ceramics and Plastics<br>AMS 571 Research Methods in Technology Management (3 hrs)<br>AMS 590 Operations Leadership<br>AMS 599 Thesis Research and Writing (6 hours)<br>AMS 600 Maintaining Matriculation<br>(1 to 6 hours)<br>AMS 630 Legal and Ethical Issues in<br>Technology<br>AMS 650 Industrial Distribution<br>AMS 671 Quality Management<br>AMS 690 Graduate Project (6 hrs)

## Department of Biology

Richard Bowker, Head
http://bioweb.wku.edu

Thompson Complex-North Wing 201
(270) 745-3696 Office
(270) 745-6856 Fax

## Graduate Faculty

Professors: R. Bowker, C. Davis, B. Ferrell, D. McElroy, S. Sahi
Associate Professors: L. Alice, K. Crawford, K. Doerner, S. Grubbs, S. Jacobshagen, P. Lienesch, A. Meier, K. Philips, C. Rinehart, M. Stokes

Assistant Professors: H. Johnson, S. Huskey, R. King, J. Marcus, N. Rice, R. Wyatt
Adjunct Faculty: J. Andersland, O. Meier

## Master of Science in Biology, Ref. \# 056

In addition to Graduate Studies requirements, admission requires the equivalent of an undergraduate major in biology including supportive courses in science and mathematics. Exceptions are made for students with undergraduate degrees in other areas; however, additional courses may be required. The program is 30 credit hours plus a research tool.

## Core Requirements:

BIOL 500 in their first year ( 3.0 credits)
BIOL 598 in their final term of coursework ( 2.0 credits)
and
BIOL 599 thesis research (Plan A) (6.0 credits) for thesis students or BIOL 516 (Plan B) (3.0 credits) for non-thesis students.

Students must also take
BIOL 601 (1.0 credit)

Additional Requirements:
Research Tool
3 hours
[An appropriate course approved by the thesis committee and the Graduate School]

## Environmental Science Option (Thesis)

Interdisciplinary Core Requirements 9 hours
[BIOL 587, 543, 506]
Program Requirements 6 hours
[BIOL 500, 598, 601]
Program Electives 9 hours
[Any 9 hours of graduate course-work approved by the thesis committee]
BIOL 599 Thesis Research
6 hours
[An approved thesis project]

Program Total 30 hours
Additional Requirements:
Research Tool
3 hours
[An appropriate course approved by the thesis committee and the Graduate School]

Students must take additional graduate courses on the advice of their graduate committee for a minimum of 30 total hours of course work. Additionally, all students must complete a research tool course as required by the university.

The Plan A degree requires a thesis based upon original research conducted under the direction of a departmental graduate faculty member. A non-thesis degree option (Plan B) may be selected with the advice of the graduate student's committee. The research tool requirement may be satisfied by enrollment in a methodology course in agreement with the student's graduate advisor.

## Master of Arts in Education Biology, major Ref. \# 054 or minor Ref. \# 003

This program is designed for the preparation and strengthening of secondary school science teachers. The major requires a minimum of 18 hours of course work in Biology, and the minor requires a minimum of 12 hours in Biology. In both cases, the remainder of the required 30 hours is taken in professional education.

Students who desire a breadth of course work in the sciences may major in the Science Area 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.

## Graduate Courses in Biology

All courses worth 3 credit hours unless otherwise noted.
*Courses for Biochemistry option
BIOL 400G Plant Physiology
BIOL 402G Evolutionary History of Plants (4 hours)
BIOL 404G Techniques and Theory of Electron Microscopy (4 hours)
BIOL 407G Virology
BIOL 408G Invertebrate Zoology (4 hours)
*BIOL 411G Cell Biology
*BIOL 412G Cell Biology Laboratory (1 hour)
BIOL 415G Ecological Methods
BIOL 430G Evolution: Theory and Process
*BIOL 446G Biochemistry
*BIOL 447G Biochemistry Laboratory (2 hours)
BIOL 450G Recombinant Gene Technology
BIOL 456G Ichthyology (4 hours)
BIOL 459G Mammalogy
BIOL 460G Parasitology (4 hours)
*BIOL 462G Bioinorganic Chemistry
BIOL 464G Endocrinology
BIOL 466G Animal Behavior
*BIOL 467G Biochemistry II
BIOL 470G Pathogenic Microbiology (4 hours)
BIOL 472G Applied and Environmental Microbiology (4 hours)
BIOL 473G Interactions in the Cave and Karst Environment
BIOL 475G Selected Topics in Biology
(1 to 3 hours)
BIOL 483G Multivariate Methods in Biology (4 hours)
BIOL 485G Field Biology
BIOL 486G Senior Environmental Seminar (1 hour)

BIOL 495G Molecular Genetics
BIOL 496G Plant Biotechnology (4 hours)
BIOL 497G Aquatic Field Ecology (4 hours)
BIOL 500 Introduction to Graduate Studies and Research in Biology
BIOL 501 Biological Perspectives ( 3 to 4 hours)
BIOL 503 Contemporary Research in Biology
(1 hour)
BIOL 506 Biology Environmental Seminar
BIOL 515 Advanced Ecology
BIOL 516 Investigations in Biology (1 to 3 hours)
BIOL 522 Systematics \& Evolution (4 hours)
BIOL 524 Evolutionary \& Ecological Genetics
BIOL 526 Physiological Ecology
BIOL 543 Environmental Science Concepts
BIOL 560 Advanced Cell Biology
*BIOL 562 Advanced Biochemistry (4 hours)
BIOL 566 Advanced Molecular Genetics
BIOL 568 Advanced Microbiology (4 hours)
BIOL 569 Professional Work/Career Experience in Biology
BIOL 570 Advanced Immunology
BIOL 573 Environmental Law, Regulations and Policy
BIOL 589 Internship in Biology
BIOL 598 Graduate Seminar (1 hour)
BIOL 599 Thesis Research \& Writing (6 hours)
BIOL 600 Maintaining Matriculation (1 to 6 hours)
BIOL 601 Internship in College Instruction (1 hour)
BIOL 675 Advanced Topics in Biology
(1 to 3 hours)

## Biochemistry

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kevin.williams@wku.edu

## Graduate Faculty

Associate Professors: S. Jacobshagen, C. Rinehart
Assistant Professors: N. Rice, K. Williams
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, as the awarded degree is either a Masters in Biology or Chemistry. Enrollment requires the completion of proper prerequisites in biology and chemistry.

For further information, contact Dr. Williams in the Department of Chemistry or Dr. Jacobshagen in the Department of Biology.

## Department of Chemistry

Cathleen Webb, Head
http://www.wku.edu/Chemistry/index.html

Thompson Complex-Central Wing 444
(270) 745-3457 Office
(270) 745-5361 Fax

## Graduate Faculty

Professors: L. Byrd, E. Conte, D. Dahl, W. Pan, L. Pesterfield
Associate Professors: S. Burris, T. Buthelezi, R. Hoffman, C. Webb
Assistant Professors: H. Palandoken, C. Snyder, K. Williams, T. Zeng, R. Zhang
Optional Retirees: D. Hartman, L. Shank
Emeritus Professor: D. Slocum

## Master of Science in Chemistry, Ref. \# 059

In addition to Graduate Studies admission requirements, candidates for admission to this program must submit evidence of satisfactory completion of undergraduate curricula in chemistry. The Master of Science degree program in Chemistry has been designed around a core curriculum. In addition, a number of elective courses are offered in analytical, inorganic, and physical chemistry and in biochemistry. This program also offers options in Coal Chemistry, Biochemistry, and Teacher education.

## Curriculum Requirements

All candidates are required to complete a minimum of 30 semester hours of graduate work, including 24 semester hours of course work and 6 hours of thesis research. Two hours of graduate seminar (CHEM 598) are required of all MS candidates and are included in the 24 semester hour course work requirements. At least two of the core courses must be at the 500 -level.

Core requirements:
CHEM 435G Analytical Chemistry or CHEM 531 Advanced Analytical Chemistry
CHEM 446G Biochemistry or CHEM 562 Advanced Biochemistry
CHEM 420G Inorganic Chemistry or CHEM 520 Advanced Inorganic Chemistry I

Students who have completed 3 core courses at the 500-level with a B average may elect to take CHEM 516 as part of the 24-hour course work requirement.

In the investigation course (CHEM 580) the student must review the current chemical literature, prepare a written report, and prepare a laboratory research proposal appropriate for an MS degree in chemistry. The student must then present a well-documented plan of laboratory research that could be used to gather the data needed to support hypotheses offered in his/her research proposal. The student must also defend this plan in a formal meeting of his/her MS committee.

CHEM 598 requirements are to be satisfied according to the current departmental policy.
CHEM 599 requirements are to be satisfied by preparing two comprehensive literature reviews on topics chosen by the three (or more) members of the student's graduate committee. Each of these comprehensive literature reviews should be the equivalent of at least the introduction to an MS thesis. At least one of the reviews must be appropriate for publication in a major journal in one of the six areas of chemistry offered by the department. Both reviews must be written in the style and format (ACS Style Guide) required by the department and University graduate study committees.

The six-hour thesis research requirements (CHEM 599) may be replaced by a cooperative research project (CHEM 596) conducted at a cooperating industrial or governmental laboratory.

Elective course work may be selected from among the core courses or other appropriate chemistry courses.

## Coal Chemistry Option

Core requirements plus CHEM 490G and CHEM 591

## Biochemistry Option

Core requirements plus CHEM 446G, CHEM 447G, and CHEM 467G

## Teacher Option

Students must complete at least one course in four of the six areas of chemistry offered by the department and at least two of the four courses must be at the 500 -level. The courses which may be used to satisfy this requirement are
Core requirements as above, CHEM 446G/447G, and CHEM 490G/591
No more than 12 of the required 30 hours of graduate work in chemistry can be at the 400G-level.
Other chemistry courses are as follows:
CHEM 430G Forensic Chemistry
CHEM 467G Biochemistry II
CHEM 450G Physical Chemistry I
CHEM 475G Advanced Topics in Chemistry
CHEM 516 Investigations in Chemistry (maximum of 3 credit hours)
Two additional requirements for the Teacher Option are listed below:

1. Each student must complete at least 7 courses in the above lists.
2. All students must complete 3 hours of CHEM 580 (which counts for the research tool and does not count toward the 30-hour requirement), 2 hours of CHEM 598, and 6 hours of CHEM 599 or 596.

## Master of Arts in Education Chemistry, major Ref. \#061 or minor Ref. \#005

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 18 hours of course work in chemistry. Students must take either CHEM 516 (3 hours) or CHEM 580 (3 hours) as part of the required 18 hours of course work in chemistry. Students who have not previously completed a year of physical chemistry are strongly urged to take CHEM 450G and 452G.

Students desiring a breadth of course work in the sciences may major in the Science Area 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.

## Graduate Courses in Chemistry

All courses worth 3 credit hours unless otherwise noted.
CHEM 412G Introduction to Physical Chemistry (5 hours)
CHEM 420G Inorganic Chemistry
CHEM 425G Polymer Chemistry (4 hours)
CHEM 430G Forensic Chemistry
CHEM 435G Analytical Chemistry (4 hours)
CHEM 440G Introduction to Synthetic Organic
CHEM 441G Advanced Organic Chemistry
CHEM 446G Biochemistry
CHEM 447G Biochemistry Laboratory (2 hours)
CHEM 450G Physical Chemistry I
CHEM 451G Physical Chemistry Laboratory
(2 hours)
CHEM 452G Physical Chemistry II
CHEM 453G Physical Chemistry Laboratory (2 hours)
CHEM 462G Bio-Inorganic Chemistry
CHEM 467G Biochemistry II
CHEM 470G Chemistry for the Middle School
(4 hours)
CHEM 475G Advanced Topics in Chemistry
(1 to 3 hours)
CHEM 476G Advanced Laboratory Investigations in Chemistry (2 hours)
CHEM 490G Materials Chemistry
CHEM 491G Materials Chemistry Laboratory
CHEM 500 Fundamentals of Chemistry
CHEM 506 Environmental Seminar

CHEM 516 Investigations in Chemistry
(1 to 3 hours)
CHEM 520 Advanced Inorganic Chemistry I
CHEM 521 Advanced Inorganic Chemistry II
CHEM 531 Advanced Analytical Chemistry
CHEM 540 Organic Reactions
CHEM 541 Advanced Organic Chemistry II
CHEM 543 Environmental Science Concepts
CHEM 550 Advanced Physical Chemistry I
CHEM 551 Advanced Physical Chemistry II
CHEM 562 Advanced Biochemistry (4 hours)
CHEM 569 Internship in Chemistry I
CHEM 570 Lecture Demonstration Techniques
CHEM 580 Chemical Skills
CHEM 581 Spectroscopy
CHEM 586 Advanced Materials Chemistry
CHEM 587 Environmental Law, Regulations and Policy
CHEM 589 Internship in Chemistry II
CHEM 591 Coal Chemistry Laboratory
CHEM 596 Cooperative Research I (11 hours)
CHEM 597 Cooperative Research II (11 hours)
CHEM 598 Graduate Seminar (1 hour)
CHEM 599 Thesis Research and Writing (6 hours)
CHEM 600 Maintaining Matriculation (1 to 6 hours)
CHEM 799 Doctoral Research in Chemistry
(1 to 6 hours)
CHEM 800 Maintaining Matriculation (1 to 6 hours)

## Department of Computer Science

Art Shindhelm, Interim Head
http://cs.wku.edu

Thompson Complex-Central Wing 137A
(270) 745-4642 Office
(270) 745-6449 Fax

## Graduate Faculty

Professors: R. Crawford, L. Narasimhan, A. Shindhelm, U. Ziegler
Associate Professors: M. Atici, J. Gary, G. Xing
Assistant Professors: A. Emam, Q. Li, M. Mostafa, Z. Xia, H. Wang

## Master of Science in Computer Science, Ref. \# 117

This program is designed to provide post-graduate education for individuals seeking professional careers in computer science. Areas of emphasis are information systems, systems programming, and algorithms.

Admission requirements include a minimum 2.9/4.0 undergraduate grade point average and a minimum GAP score of 2200 . In addition, applicants must have completed approximately two years of undergraduate study in computer science and mathematics, including a year of calculus.
Minimum requirements include knowledge of programming in a high level language including data structures, assembly programming, computer organization, discrete structures, and operating systems.

A minimum of 30 semester hours of course work is required, plus the research tool. Both thesis and non-thesis options are available. The research tool, under both options, may be met by successful completion of CS 476G Research Methods and Projects.

Core requirements:
CS 443G Database Management Systems
CS 445G Operating Systems II
CS 541 Mathematical Foundations of Computer Science
CS 543 Computer Information Systems Design
CS 544 Compiler Theory and Design
CS 549 Analysis of Algorithms
Approved Electives:
Four elective computer science courses (12 hours) must be included. Elective computer science courses are selected with the approval of the graduate advisor. A minimum of six 500-level computer science courses is required. If any of the required courses have been completed for undergraduate credit, approved electives will be substituted.

## Graduate Courses in Computer Science

All courses worth 3 credit hours unless otherwise noted.
CS 405G Numerical Analysis I
CS 406G Numerical Analysis II
CS 442G Data Structures
CS 443G Data Base Management Systems
CS 444G Programming Languages
CS 445G Operating Systems II
CS 446G Interactive Computer Graphics
CS 450G Computer Networks
CS 456G Artificial Intelligence
CS 460G Software Engineering II
CS 475G Selected Topics in Computer Science (1 to 3 hours, up to 6 hours)
CS 476G Research Methods and Projects in Computer Science

> CS 541 Mathematical Foundations of Computer Science
> CS 543 Computer Information Systems Design
> CS 544 Compiler Theory and Design
> CS 545 Advanced Operating Systems Principles
> CS 549 Analysis of Algorithms
> CS 550 Advanced Computer Networks
> CS 567 Micro-computing Operating Systems
> CS 589 Internship in Community College Teaching
> CS 595 Advanced Topics in Computer Science (1 to 3 hours, up to 6 hours)
> CS 599 Thesis Research and Writing (6 hours)
> CS 600 Maintaining Matriculation (1 to 6 hours)

Environmental Science \& Technology 304
(270) 745-4555 Office
(270) 745-6410 Fax

## Graduate Faculty

Professors: S. Foster, C. Groves, D. Keeling, K. Kuehn, M. May, L. Trapasso
Associate Professors: K. Algeo, R. Mahmood, F. Siewers
Assistant Professors: J. All, A. Celestian, G. Goodrich, S. Kenworthy, Y. Li, A. Wulff, J. Yan

Optional Retirees: N. Crawford

## Master of Science in Geoscience, Ref. \# 072

The graduate program in Geoscience provides advanced professional training for careers as hydrologists, environmental resource managers, city and regional planners, engineering geologists, geophysical and geochemical geologists, meteorologists and climatologists, earth science teachers, Geographic Information Systems (GIS) specialists, consultants in business and industry, and professional educators. The program also provides a scientific foundation for graduate students who plan to continue advanced studies leading to the Ph.D.

Both Plan A (Thesis) and Plan B (Project) are available. Required courses for both plans are GEOG 500, 502, 520 ( 12 hours total). Plan A requires a minimum of 30 semester hours of graduate credit, including a thesis (6 hours) based upon original research directed by an advisor. Plan B requires a minimum of 30 semester hours of graduate credit, including a research project of publishable quality directed by an advisor.

With approval of the advisory committee, a student may take a maximum of six hours outside the Department. No more than 9 hours of course work can be taken at the 400G-level under either plan. The research tool, under both plans, must be met by demonstrating either

1. Reading proficiency in a foreign language appropriate for the major areas, or
2. Competency in an appropriate research technique.

An appropriate course approved by the thesis director and the Graduate School may be part of the 30-hour program.

Note: Applicants for the Master of Science in Geoscience must meet the University GAP score requirement for admission.

## Core Curriculum:

## M.S. Geoscience Program (Thesis)

Core Requirements
12 hours
[GEOG 500, 502, 520]
Program Electives
12 hours
[Any 12 hours of graduate course work approved by the thesis director]
Thesis Research
6 hours
[An approved thesis project]
Program Total
30 hours
Additional Requirements:
Research Tool
3 hours
[An appropriate course approved by the thesis director and the Graduate School that may be part of the 30-hour program.]
M.S. Geoscience (Project)

Core Requirements
12 hours
[GEOG 500, 502, 520]
Program Electives
18 hours
[Any 18 hours of graduate course work approved by the thesis director]
Graduate Project 6 hours
[A research paper of publishable quality approved by the program director]
Program Total 36 hours

## Additional Requirements:

Research Tool
3 hours
[An appropriate course approved by the thesis director and the Graduate School that may be part of the 30-hour program.]

Environmental Science Option (Thesis)
Interdisciplinary Core Requirements 9 hours
[GEOG 506, 543, 587]
Program Requirements 8 hours
[GEOG 500, 520]
Program Electives 7 hours
[Any 7 hours of graduate course work approved by the thesis director]
Thesis Research
6 hours
[An approved thesis project]
Program Total
30 hours
Additional Requirements:
Research Tool
3 hours
[An appropriate course approved by the thesis director and the Graduate School that may be part of the 30-hour program.]

## Environmental Science Option (Project)

Interdisciplinary Core Requirements 9 hours
[GEOG 506, 543, 587]
Program Requirements 8 hours
[GEOG 500, 520]
Program Electives
13 hours
[Any 13 hours of graduate course work approved by the thesis director]
Graduate Project
6 hours
[A research paper of publishable quality approved by the program director]
Program Total
36 hours
Additional Requirements:
Research Tool
3 hours
[An appropriate course approved by the thesis director and the Graduate School that may be part of the 30-hour program.]

## Master of Arts in Education Geography, major Ref.\# 133 or minor Ref. \#011

Students in this program must meet all the requirements for high school professional certification. The major requires a minimum of 18 hours (see advisor for course selection) with GEOG 500 required. The minor requires a minimum of 12 hours with GEOG 500 required. The remaining hours (within the required 30) are taken in professional education.

## A detailed listing of all courses, requirements, and program specialties can be found online at: http://www.wku.edu/geoweb/gradcrse/gradprogram.htm

## Certificate in Geographic Information Science, Ref. \#203

Geographic Information Science (GIS) technology is widely used in business, industry, government, and education. This certificate is designed for students in a variety of disciplines that involve spatial analysis, mapping, and interpretation of geospatial data. Students who complete the program will have a solid GIS foundation that spans the collection, management, analysis, interpretation, and display of geospatial data using geographic information systems. Students gain practical experience by completing projects that require the use of sophisticated GIS functions. Finally, they learn how to develop and implement customized GIS applications.

The certificate is offered by the Department of Geography \& Geology. It consists of a series of four graduate courses taken for a total of 12 credit hours. These courses are selected from GEOG 417G, 419G, $515,520,577,590$, or 595.

## Graduate Courses in Geography

All courses worth 3 credits unless otherwise noted.
GEOG 416G Remote Sensing: Principles and Applications
GEOG 417G GIS Analysis and Modeling
GEOG 423G Transportation Planning
GEOG 424G Weather Analysis and Forecasting
GEOG 426G Applied Meteorology/Climatology
GEOG 427G Water Resources
GEOG 428G Applied Groundwater Hydrology
GEOG 430G Cultural Geography
GEOG 431G Dynamic Meteorology
GEOG 434G Historic Preservation Planning: Principles and Practices
GEOG 451G Geography of Kentucky
GEOG 454G Geography of Middle America
GEOG 462G Geography of South America
GEOG 464G Geography of Europe
GEOG 465G Geography of Asia
GEOG 466G Geography of Africa
GEOG 467G Geography of the Middle East
GEOG 473G Interactions in the Cave and Karst Environment
GEOG 474G Environmental Planning
GEOG 479G Industrial and Commercial Geography
GEOG 484G Planning: Theory and Application
GEOG 487G Environmental Law
GEOG 488G Rural Planning
GEOG 500 Geoscience Research and Literacy (4 hours)
GEOG 501 Geoscience and Development
GEOG 502 Geoscience Field Research (4 hours)
GEOG 505 Biogeography
GEOG 506 Geoscience Environmental Seminar
GEOG 507 Geographic Concepts and Skills for Teachers
GEOG 510 Geoscience Research Topics
GEOG 515 Remote Sensing Applications (4 hours)
GEOG 517 Spatial Databases
GEOG 520 Geoscience Data Analysis (4 hours)
GEOG 521 Seminar in Geomorphology
GEOG 522 Seminar in Physical Climatology
GEOG 524 Meteorology for Science Teachers
GEOG 525 Seminar in Political Geography
GEOG 530 Seminar in Cultural Geography (4 hrs)
GEOG 534 Historic Preservation Planning: Application
GEOG 540 Advanced Regional Geography
GEOG 543 Environmental Science Concepts
GEOG 544 Practical Environmental Ethics
GEOG 550 Seminar in Economic Geography
GEOG 555 Global Environmental Change
GEOG 571 Quality of Life: Environmental Problems and Ecological Solutions
GEOG 577 Special Topics in GIS
GEOG 580 Seminar in Urban Geography
GEOG 584 Advanced Planning
GEOG 585 Advanced Studies in Population Geography
GEOG 587 Environmental Law, Regulations and Policy
GEOG 590 Experimental Design
GEOG 595 Geoscience Practicum
GEOG 599 Thesis Writing and Research (6 hours)
GEOG 600 Maintaining Matriculation

## Graduate Courses in Geology

All courses worth 3 credits unless otherwise noted.
*This graduate course is specially designed for teachers of natural and earth science.
GEOL 405G Paleontology
GEOL 470G Tectonics
GEOL 415G Environmental Geology
GEOL 475G Special Topics in Geology
GEOL 420G Geomorphology
GEOL 480G Coal Geology
GEOL 440G Hydrogeology
GEOL 445G Aqueous Geochemistry
GEOL 460G Sedimentation and Stratigraphy
GEOL 485G Geology of Fossil Fuels
GEOL 490G Petroleum Geology
*GEOL 511 The Dynamic Earth

## Department of Mathematics

Peter Hamburger, Head
http://www.wku.edu/Mathematics/

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(270) 745-3699 Fax

## Graduate Faculty

Professors: J. Barksdale, D. Biles, B. Brunson, C. Ernst, P. Hamburger, N. Iraniparast, B. Kessler, D. Neal, B. Richmond, T. Richmond, M. Robinson, J. Spraker, W. Weidemann

Associate Professors: F. Atici, C. Edwards, L. Nguyen
Assistant Professors: D. Benko, M. Dunkum, D. Lanphier, H. Marchionda, D. Wu
The Department of Mathematics offers the M.S. degree and the M.A. degree. Both degrees have the thesis and non-thesis options, and both require 30 hours of graduate-level courses. The M.S. requires traditional courses in analysis, algebra, topology, and applied mathematics, and is recommended for students planning to pursue a Ph.D. degree or technical industrial employment. The M.A. degree is designed for students interested in careers in secondary education and will help students become more knowledgeable about the mathematics they will teach in high school and make connections and extensions of that knowledge to college and higher mathematics.

## Master of Science in Mathematics, Ref. \# 085

Admission requirements for the M.S. in Mathematics include a GAP score of 3000 ((GRE Verbal + GRE Quantitative) x Undergraduate GPA). Also required is successful completion of the following undergraduate courses: (a) a calculus sequence through multivariable calculus; (b) linear algebra; (c) discrete mathematics; (d) an applied mathematics course (e.g., differential equations, probability, calculus-based statistics, numerical analysis); and (e) abstract algebra. A cumulative grade point average of 3.0 (on a 4.0 scale) is required in at least one of the following: (i) all mathematics courses that are applicable to the undergraduate mathematics major or (ii) courses specified in (b) through (e) above. Admission may be granted to a student having at most one deficiency in the undergraduate courses listed above.

The Master of Science in Mathematics requires a minimum of 30 hours of graduate-level mathematics courses. The following are required:

| 1. Algebra: | MATH 417G |
| :---: | :--- |
| Analysis: | MATH 431G |
| Topology: | MATH 439G |

If equivalent courses were taken at the undergraduate level, then the student must substitute appropriate graduate mathematics courses selected in consultation with a Mathematics Department graduate advisor.
2. An applied Mathematics course selected from MATH 529, 531, 535, 536, 540, 541, 542, 550, 570, STAT 549, or as approved by the Departmental Graduate Committee.
3. MATH 532.
4. One of the following two-course sequences:

MATH 417G-517, 439G-539, 450G-550, 435G-535, 470G-570, 529-540, 435G-531, 535-536; 405G406G can be taken by students who have substituted a 500-level course for at least one of the three courses listed in (1).

Students who choose to write a thesis are required to complete 6 hours of MATH 599 Thesis Research and Writing and to give an oral defense of the thesis.

The remaining mathematics course in the students program must be chosen from MATH 405G, 406G, 415G, 423G, 435G, 450G, 470G, 504, 517, 523, 529, 531, 535, 536, 539, 540, 541, 542, 550, 560, 570, 590, or STAT 549.

A maximum of 12 hours at the 400G level may be included in the entire program.
A research tool is required and may entail course work beyond the 30 hours of mathematics. The research tool must be completed during the first 15 hours of course work and may be fulfilled by a mathematics reading course, a computer science course, a foreign language examination, or another option approved by a Mathematics Department graduate advisor.

In addition, all students in the M.S. program must have a working knowledge of a high-level programming language or computer algebra system.

A student may, upon prior approval of the Mathematics Department Graduate Committee, include in his/her program a maximum of 6 hours of course work from a related field.

Comprehensive exams are required.

## Master of Arts in Mathematics, Ref. \# 049

This program is intended for students who already hold secondary teacher certification and are seeking Rank II teaching status through attainment of a master's degree.

Admission requirements for the M.A. in Mathematics include a GAP score of 3000 ((GRE Verbal + GRE Quantitative) x Undergraduate GPA). Also required are either a (1) bachelor's degree in mathematics or (2) completion of the following undergraduate courses: (a) a calculus sequence through multivariable calculus, (b) linear algebra, (c) discrete mathematics, (d) probability or calculus-based statistics, (e) abstract algebra, and (f) geometry. Applicants without a bachelor's degree in mathematics may be admitted with at most one deficiency in the undergraduate courses listed above.

The Master of Arts in Mathematics requires a minimum of 30 hours of graduate-level courses. The following are required:

Core Mathematics Courses (four of the following):
MATH 501 Introduction to Probability and Statistics I
MATH 503 Introduction to Analysis
MATH 511 Secondary Mathematics from an Advanced Perspective I
MATH 512 Secondary Mathematics from an Advanced Perspective II (or MATH 423G
Geometry II or MATH 523 Topics from Geometry)
MATH 514 Applications and Modeling for Secondary Teachers
Education Courses
PSY 510 Advanced Educational Psychology or PSY 511 Psychology of Learning
SEC 580 The Curriculum
EDU 544 Classroom Teaching Strategies
SEC 534 Seminar in Mathematics Education

## Elective Courses

Six hours of mathematics courses chosen from those listed above or MATH 405G, 406G, 409G, 415G, 417G, 421G, 429G, 431G, 432G, 435G, 439G, 450G, 470G, 475G, 500, $504,509,517,531,532,535,536,539,540,541,542,550,560,570,590,599$, STAT 549.

A maximum of 9 hours at the 400G level may be included in the entire program.
Comprehensive exams are required. Each student must develop and submit a professional portfolio to demonstrate mastery of the Kentucky Experienced Teacher Standards. A thesis student is required to complete 6 hours of MATH 599 Thesis Research and Writing and to give an oral defense of the thesis.

## Graduate Courses in Mathematics

All courses worth 3 credits unless otherwise noted.
MATH 403G Geometry for Elementary and Middle School Teachers
MATH 405G Numerical Analysis I
MATH 406G Numerical Analysis II
MATH 409G History of Mathematics
MATH 411G Problem Solving for Elementary and Middle Teachers
MATH 413G Algebra and Technology for Middle Grades Teachers
MATH 415G Algebra and Number Theory
MATH 417G Algebraic Systems
MATH 421G Problem Solving for Secondary Teachers
MATH 423G Geometry II
MATH 429G Probability and Statistics II
MATH 431G Intermediate Analysis I
MATH 432G Intermediate Analysis II
MATH 435G Partial Differential Equations
MATH 439G Topology
MATH 450G Complex Variables
MATH 470G Introduction to Operations Research
MATH 475G Selected Topics in Mathematics (1 to 3 hours)
MATH 500 Readings in Mathematics (1 to 3 hours)
MATH 501 Introduction to Probability and Statistics I
MATH 502 Introduction to Probability and Statistics II
MATH 503 Introduction to Analysis

MATH 504 Computer Applications to Problems in Mathematics
MATH 508 Number Concepts for Elementary and Middle Grades Teachers
MATH 509 History of Modern Mathematics
MATH 511 Secondary Mathematics from an Advanced Perspective I
MATH 512 Secondary Mathematics from an
Advanced Perspective II
MATH 514 Applications and Modeling for Secondary Teachers
MATH 517 Topics from Algebra
MATH 523 Topics from Geometry
MATH 529 Applied Probability
MATH 531 Advanced Differential Equations
MATH 532 Real Analysis
MATH 535 Advanced Applied Mathematics I
MATH 536 Advanced Applied Mathematics II
MATH 539 Topology II
MATH 540 Stochastic Processes
MATH 541 Graph Theory
MATH 542 Advanced Topics in Discrete Mathematics
MATH 550 Complex Analysis
MATH 560 Functional Analysis
MATH 570 Topics in Operations Research
MATH 590 Special Topics in Mathematics
MATH 599 Thesis Research and Writing (6 hours)
MATH 600 Maintaining Matriculation (1 to 6 hours)

## Graduate Courses in Statistics

 All courses worth 3 credits unless otherwise noted.STAT 549 Statistical Methods I

# Department of Physics \& Astronomy 

Keith Andrew, Head

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(270) 745-4357 Office
(270) 745-2014 Fax

## Graduate Faculty

Professors: K. Andrew, D. Harper, R. Scott, W. van der Meer
Associate Professors: R. Gelderman, P. Womble
Assistant Professors: A. Barzilov, S. Bonham, I. Novikov

## Master of Science in Homeland Security Sciences, Ref. \#0413

This multi-disciplinary program prepares science professionals for careers in the Homeland Security area. The program features hands-on research components to enable students to apply their training to real-world problems. The Physical Threats area involves the study of applications of physics, biology and chemistry to detect, quantify, prevent and decontaminate radiological, nuclear, biological, explosive and chemical threats. The Cyber Defense area involves the study of prevention, detection, and remediation of attacks on information systems. In addition to the University Graduate Studies requirements, admission to the program requires a Bachelors degree in Biology, Chemistry, or Physics.

The program requires a minimum of 31 hours. The curriculum consists of a 24 credit hour core, divided into three levels; with 6 hours of electives.

A weekly one hour seminar course, An Overview of Homeland Security, will be also be required and available as a real-time webcast or a down loadable PEG file on the departmental websites. The seminar speakers will be recruited from Department of Homeland Security personnel, businesses in the Homeland Security arena, and other recognized national and international experts in this area. This course will be taken during the first semester of matriculation ${ }^{6}$.

Level 1: 6 hours required from the following courses

| PHYS 560 | 3 hours |
| :--- | :--- |
| BIO 550 | 3 hours |
| CHEM 560 | 3 hours |

Level 2: 8 credit hours required, including two of the following courses

| PHYS 570/571 (lecture and lab) | 4 hours |
| :--- | :--- |
| CHEM 572/573 (lecture and lab) | 4 hours |
| BIOL 552/553 (lecture and lab) | 4 hours |

Level 3: 10 hours required. Six hours for thesis writing and research and at least four-credit hours from the following list:
PHYS 590/591 (lecture and lab) 4 hours
CHEM 592/593 (lecture and lab) 4 hours
EHS 5723 hours
BIOL 5551 hour
Elective Courses:
Additional courses from Level 2 or 3 and courses provided by other Departments: Engineering, Languages, Political Science, Health, History, Management, or established 500-level courses from the Departments of Physics and Astronomy, Biology, and Chemistry.

Students are strongly encouraged to utilize elective courses from other Kentucky colleges and universities such as graduate courses from Eastern Kentucky University's Safety, Security \& Emergency

[^10]Management program such as:
HLS 800--Homeland Security Policy Analysis (3 credit hours)
HLS 810--Critical Infrastructure Protection (3 credit hours)
HLS 820--Intelligence for Homeland Security (3 credit hours)
HLS 830--Hazards and Threats to Homeland Security (3 credit hours)
Any course, other than these EKU courses, must receive approval from the graduate director of the program before being considered as an elective ${ }^{7}$.

## Master of Arts in Education Physics, minor Ref. \# 024

The department offers a Physics minor in the Master of Arts in Education. The 12-hour minor may include physics and astronomy courses to familiarize the teacher with modern instructional developments and to strengthen the academic background. The remainder of the 30 -hour degree program will be taken in professional education.

## Graduate Courses in Astronomy

AII courses worth 3 credits unless otherwise noted.
ASTR 405G Astronomy for Teachers

## Graduate Courses in Physics

All courses worth 3 credits unless otherwise noted.
PHYS 402G Laboratory for Application of Modern Physics I (1 hour)
PHYS 403G Laboratory for Application of Modern
Physics II (1 hour)
PHYS 404G Optics Laboratory (1 hour)
PHYS 410G Physics for Teachers
PHYS 420G Applications of Modern Physics I
PHYS 430G Applications of Modern Physics II
PHYS 431G Radiation Biophysics (4 hours)
PHYS 440G Electromagnetism I
PHYS 441G Optics

PHYS 501 Classical Developments in Physics PHYS 502 Modern Developments in Physics PHYS 503 Physics Demonstrations and Laboratory Exercises PHYS 505 Investigations in Physics PHYS 560 Physics in Homeland Security PHYS 570 Nuclear Detection PHYS 571 Nuclear Detection Laboratory I PHYS 590 Physics of CBE Detection PHYS 591 CBE Physics Lab

[^11]
## Potter College of Arts and Letters

David Lee, Dean

## Departments

Art
Communication
English
Folk Studies \& Anthropology
History
Modern Languages
Music
Philosophy and Religion*
Political Science

Sociology

## Schools

School of Journalism \& Broadcasting*

## Degrees Offered

Master of Arts
Communication
English
Folk Studies
History
Sociology
Master of Arts in Education
Art Education
Music Education

## Master of Public Administration

*These academic areas do not offer degrees; however, they do offer course work as content area to other programs.

## Department of Art

Brent Oglesbee, Interim Head
Ivan Wilson Fine Arts Center 441
art@wku.edu
(270) 745-3944 Office
http://www.wku.edu/art.html

## Graduate Faculty

Professors: J. Chalmers, L. Notheisen, J. Oakes, B. Oglesbee
Associate Professors: T. Bartel, M. Choe, Y. Petkus
Assistant Professors: G. Jordan, J. Sung

## Master of Arts in Education Art, major Ref. \# 055 or minor Ref. \#002

Applicants must meet Graduate Studies requirements for admission. They are also expected to present to the Department of Art a portfolio of their work for departmental review. The program requires a minimum of 30 to 33 semester hours.

## Requirements for art majors:

Studio \& Art Education courses-18 hours
This includes one advisor-approved education specific assessment/research course.
Secondary Education courses-12 hours
Please refer to the Department of Curriculum \& Instruction for information on secondary education requirements.

Requirements for art minors:
Studio \& Art Education courses-12 hours
This includes one advisor-approved art education specific assessment/research course.
Secondary Education courses-18 hours
Please refer to the Department of Curriculum \& Instruction for information on secondary education requirements.
For all art majors/minors, a terminal project and/or comprehensive written examination must be satisfactorily completed.

## Graduate Courses in Art

All courses worth 3 credits unless otherwise noted.
ART 500 Early Medieval Art
ART 501 Romanesque and Gothic Art
ART 511 Investigations in Art Education
ART 512 Investigations in Art Education
ART 520 Ceramic Art (3 to 9 hours)
ART 540 Drawing (3 to 9 hours)
ART 550 Printmaking (3 to 9 hours)
ART 560 Painting (3 to 9 hours)

ART 570 Sculpture (3 to 9 hours)
ART 580 Weaving (3 to 9 hours)
ART 590 Workshop in Arts and Humanities Education
(May be repeated once with a different topic)
ART 591 Investigations in Art History
ART 599 Thesis Research and Writing (6 hours)
ART 600 Maintaining Matriculation (1 to 6 hours)
ART 401G Art in the Italian Renaissance
ART 405G Art Theory and Criticism

## Department of Communication

Sally J. Ray, Head
Ivan Wilson Fine Arts Center 130
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comm.ma@wku.edu

## Graduate Faculty

Professors: C. Garmon, C. Kell
Associate Professors: E. Bonaguro, L. Caillouet, S. Ray
Assistant Professors: K. Ishii, A. Jerome, J. Lewis, H. Payne, J. Mize Smith, B. Thompson
Optional Retiree: L. Winn

## Master of Arts in Communication, Ref. \# 109

This degree provides a distinctive experience in applied organizational communication. The program features course work in traditional areas of organizational, interpersonal, small group, and public communication, but goes beyond these to offer intercultural and international emphases. The program prepares students for a variety of careers and pursuits in which advanced communication study is helpful, especially management and personnel relations, group decision-making, and other areas requiring specialized communication skills. The degree also helps prepare students for further graduate study and college teaching. We offer weeknight and weekend courses. Many of our students attend weekend classes, held on Friday evening and during the day on Saturday. We also offer a variety of distance learning opportunities that include interactive television and web-based technology. All of these possibilities meet the needs of students who wish to pursue a master's degree while continuing in their careers.

The MA in Communication requires a total of 33 hours above the bachelor's degree. Students are required to take COMM 502 Survey Research Methods in Communication and COMM 503 Foundations of Communication Concepts, and either COMM 501 Qualitative Methods of Communication Research or COMM 504 Ethnographic Methods of Communication Research. Students may apply to the Department Head or Department Graduate Director for course substitution based on previous course work or career goals. Students may choose to write a thesis for six hours of credit, or to complete a non-thesis option. They may, with advisor's prior approval, take up to six hours in another discipline or transfer up to six hours from another university. Students must maintain a grade point average of 3.0 or better. The department requires that students complete a capstone experience (including an oral presentation), which demonstrates competencies in various areas of communication.

## Certificate in Organizational Communication, Ref. \# 175

The Certificate in Organizational Communication is designed for managers and supervisors who wish to enhance their skills in the areas of organizational communication but do not see a current need for an advanced degree. Students will take graduate courses that focus on general organizational communication theory, the communication strategies useful in multinational businesses, either interpersonal or small group communication theoretical applications, and one other course chosen by participants as especially relevant to their own work and interests. Students' applied projects may be designed to address specific real-life communication problems in their own organizations.

A person seeking the Certificate in Organizational Communication must satisfy the Graduate Studies admission requirements and must provide to the Department of Communication a letter of application and one letter of recommendation supporting the applicant's capacity for studying organizational communication.

## Certificate Requirements-12 hours

Core Courses-6 hours
COMM 461G Organizational Communication
COMM 561 Multinational Business Communication
Electives-6 hours
COMM 586 Processes of Group Communication
or COMM 578 Seminar in Interpersonal Communication
And one of the following:
COMM 563 Issue Management
COMM 564 Crisis Communication
COMM 565 Communication and Conflict
COMM 566 Corporate \& Organizational Advocacy
COMM 571 Computer Mediated Communication in Organizations
COMM 578 Seminar in Interpersonal Communication
COMM 581 Applied Organizational Communication
COMM 586 Process of Group Communication
COMM 587 Communication in Intercultural Negotiation \& Mediation

## Graduate Courses in Communication

All courses worth 3 credit hours unless otherwise noted.
COMM 443G Persuasion in Contemporary Society
COMM 461G Organizational Communication
COMM 463G Intercultural Communication
COMM 501 Qualitative Methods of Communication
Research
COMM 502 Survey Research Methods in
Communication
COMM 503 Foundations of Communication
Concepts
COMM 504 Ethnographic Methods of Communication Research
COMM 510 Strategies for Teaching Speech
Communication (1 hour)
COMM 522 Seminar in Mass Communication
COMM 525 Interpersonal Support in the Workplace
COMM 542 Practicum in Communication
Consulting
COMM 544 Persuasive Communication
COMM 551 Employee Communication
COMM 561 Multinational Business Communication

COMM 562 Special Topics in Intercultural
Communication
COMM 563 Issue Management
COMM 564 Crisis Communication
COMM 565 Communication and Conflict
COMM 566 Corporate \& Organizational Advocacy
COMM 569 Values and Leadership in
Organizational Communication
COMM 571 Computer Mediated Communication in Organizations
COMM 572 Nonverbal Communication
COMM 576 Principles of Group Communication
COMM 578 Seminar in Interpersonal
Communication
COMM 581 Applied Organizational Communication
COMM 586 Processes of Group Communication
COMM 587 Communication in Intercultural
Negotiation \& Mediation
COMM 595 Independent Study in Communication
COMM 599 Thesis Research and Writing (6 hours)
COMM 600 Maintaining Matriculation
(1 to 6 hours)

## Department of English

Karen Schneider, Head
http://www.wku.edu/English/

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## Graduate Faculty

Professors: L. Davies, J. Hagaman, D. Logan, E. Oakes, J. Olmsted, K. Schneider
Associate Professors: L. Crouther, L. Dill, N. Endres, K. Green, J. Hardin, T. Hovet, D. LeNoir, K. Reames

Assistant Professors: W. Berry, J. Fife, A. Ganze, S. Hughes, T. Hunley, A. Jones, A. Poole, D. Rigby, J. Szerdahelyi, E. Weston, E. Winkler

Optional Retirees: C. Allmon-Mosby, R. Eckard, J. Flynn, J. Glaser

## Master of Arts in English, Ref. \# 067

The master's program prepares students for teaching in high school or college, for continuing graduate work toward a doctorate in English, or for many other careers that involve strong communication skills. The MA in English can be taken with a concentration in literature, creative writing, rhetoric and composition, teaching, or TESL. All five options may lead to Rank II/I for secondary teachers.

In addition to Graduate Studies requirements, admission to a concentration in literature or teaching requires 27 hours of undergraduate English with a GPA of 3.0 or better. Admission requirements for the creative writing, rhetoric and composition, and TESL concentrations include a minimum of four undergraduate English courses beyond general education requirements, at least two being upper-level literature courses, with a GPA of 3.0 or better. A satisfactory writing sample is required for the creative writing option. A thesis is mandatory in the creative writing specialization but optional in the others.

Those students seeking Rank II or Rank I certification for Grades 8-12 must possess a secondary school teaching certificate and must include a copy with the application for admission.

All students in the MA program take English 520 (which should be taken in the first semester of graduate study), 6 hours of American literature, and 6 hours of British literature. Literature specialists also take a non-literature elective and an additional 12 hours of literature or 6 hours of literature and 6 hours of thesis credit. TESL specialists take $565,556,407 \mathrm{G}, 408 \mathrm{G}$, and an elective. Creative writing specialists take 501, a 3-hour writing elective, a 3-hour elective, and write a creative thesis. Rhetoric and Composition specialists take 412G and 12 hours of writing classes or 6 hours and a thesis. Teaching track specialists take 3 hours of English composition, SEC 580, EDU 544, PSY 510 or 511, and a 3-hour elective in the College of Education and Behavioral Sciences.

All specializations include a research tool requirement, which the student may satisfy by demonstrating reading proficiency in a foreign language or by completing English 520. If English 520 is designated as the research tool, it may not be included in the 30 credit hours required for the degree, and students must take an additional 3 hours for a total of 33 hours.

An examination over the course work, related materials, and thesis (if there is one) must be completed. Rank II/I candidates also present a portfolio at the time of the examination. Early in the graduate program, the student should obtain from the English graduate advisor a copy of the Reading List for the MA oral examination.

## Master of Arts in Education English minor, Ref. \# 096

This degree qualifies the student for the professional high school certificate. To pursue a minor in English, the student must have completed at least 24 hours of undergraduate work in English with a GPA of 3.0 or better in English. Students minoring in English take 12 hours in English, including 3 hours of American literature, 3 hours of British literature, 3 hours in composition or English language studies, and

3 hours of electives. Students take a written test in the minor. For more information on secondary education requirements, please refer to the Department of Curriculum \& Instruction.

## Endorsement to Teach English as a Second Language (TESL)

Persons who have certification to teach in the elementary, middle, or secondary grades and who have completed 6 semester hours of a foreign language (or its equivalent) can add on to that certification an endorsement in teaching English as a Second Language by completing the courses below, and by completing a minimum of 30 clock hours of ESL teaching and the ESL Praxis test (with a minimum score of 625).

ENG 565 Integrated Teaching ESL<br>ENG 566 Teaching and Testing ESL Grammar<br>ENG 407G Linguistic Analysis<br>ENG 408G Psycholinguistics and Sociolinguistics

## Graduate Courses in English

All courses worth 3 credit hours unless otherwise noted.

ENG 401G Advanced Composition
ENG 402G Editing and Publishing
ENG 403G Writing Memoir and Autobiography
ENG 404G History of the English Language
ENG 407G Linguistic Analysis
ENG 408G Psycholinguistics and Sociolinguistics
ENG 410G Theories of Rhetoric and Composition
ENG 412G History of Rhetoric
ENG 415G Writing and Technology
ENG 457G Modern British Literature
ENG 460G Literary Criticism: Historical Perspectives
ENG 462G Topics in Contemporary Literary Theory
ENG 465G Film Genres
ENG 466G Film Theory
ENG 481G Chaucer
ENG 482G Shakespeare I
ENG 483G The English Renaissance
ENG 484G The Romantic Movement
ENG 485G The Seventeenth Century
ENG 486G The Eighteenth Century
ENG 487G Dante
ENG 488G Literature of the Victorian Age
ENG 489G The English Novel
ENG 490G The American Novel
ENG 493G Major American Poets
ENG 494G Kentucky Literature
ENG 495G Southern Literature
ENG 496G Women's Poetry

ENG 497G Women’s Fiction
ENG 498G Robert Penn Warren
ENG 501 Graduate Writing Workshop
ENG 502 Graduate Directed Writing
ENG 508 TESL Field Experience
ENG 509 Practicum in One-to-One Writing Instruction
ENG 510 Graduate Rhetoric and Writing
ENG 520 Introduction to Graduate Studies
ENG 553 Studies in Restoration \& 18th Century Literature
ENG 560 Studies in Literary Criticism
ENG 565 Integrated Teaching ESL
ENG 566 Teaching \& Testing ESL Grammar
ENG 571 British Masterpieces in the Classroom
ENG 572 American Masterpieces in the Classroom
ENG 579 Studies in Victorian Literature
ENG 583 Shakespeare II
ENG 585 Milton
ENG 586 Seminar in British Writers
ENG 587 Wordsworth and Keats
ENG 591 American Romanticism
ENG 592 Realism and Naturalism in American Literature
ENG 595 Postcolonial Literature and Theory
ENG 594 Contemporary Fiction
ENG 596 Seminar in American Writers
ENG 597 Special Topics in English
ENG 598 Advanced Directed Study
ENG 599 Thesis Research and Writing (6 hours)
ENG 600 Maintaining Matriculation (1 to 6 hours)

# Department of Folk Studies \& Anthropology 

Michael Ann Williams, Head
http://www.wku.edu/fsa

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Graduate Faculty
Professors: E. Brady, M. Williams
Associate Professors: D. Applegate, T. Evans, J. Njoku
Assistant Professors: C. Antonsen, K. Dowell, K. Hudepohl

## Master of Arts in Folk Studies, Ref. \# 069

The study of folklore and folklife involves examination and analysis of traditional expressive culture in all its forms including verbal, musical, material, and customary. In every society, agricultural and industrial, rural and urban, folklore is a vital part of life. The discipline has close affinities with literature, anthropology, sociology, history, geography, linguistics, philosophy, ethnomusicology, and psychology. Adequate undergraduate preparation in any of these disciplines will be acceptable for admission to graduate study in folk studies. The student with a GPA below 3.0 will be asked to submit three letters of recommendation prior to consideration for admission.

## Plan A (Thesis Option)

This option provides advanced knowledge of the theoretical and methodological aspects of folklore and folklife. Course work will emphasize the history of the discipline, field research techniques, and surveys of various folklore genres. It is designed to prepare students for both academic and public sector professions and for further academic research.

Plan A requires a minimum of 36 hours plus the research tool. Specific requirements are FLK 577, 578, 569 (must be taken in the first year); three of the following genre courses: FLK 561, 571, 575, 576; 12-15 hours of electives selected with advisor's approval (hours depend on whether FLK 578 is used as the research tool); and six thesis hours (FLK 599).

The research tool requirement may be met by demonstrating proficiency in a foreign language or by completing FLK 578 and taking an additional folklore course. The student must also pass a comprehensive written examination based on course work and a program reading list.

## Plan B (Public Folklore Option)

This option requires additional course work rather than thesis writing. It also permits individually planned programs (with advisor) stressing those combinations of course-related research, "hands on" skills, and writing experiences that will best prepare individuals for their personal and professional goals.

Plan B requires 36 hours of course work plus the research tool. Specific requirements include FLK 569, 577, and 578 (to be taken in the student's first year); and three of the following core courses: FLK 561, 571, 575 or 576. In addition, FLK 562, 572, 589, and 9-12 hours of electives are required. Electives may be chosen from the following: FLK 462G, 470G, 560, or other electives chosen with the advisor's approval (hours depend on whether FLK 578 is used as the research tool).

The research tool requirements are the same as for Plans A and C. The student must also pass a comprehensive written examination based on course work and a program reading list, and submit a portfolio of professional-level work for the degree.

## Plan C (Historic Preservation Option)

While firmly grounded in the folk studies curriculum, the historic preservation option introduces students to the multiple facets of historic preservation and cultural conservation theory and practice. Internships with a variety of local, regional, and national institutions will also provide opportunity for practical work experience in historic preservation.

Plan C requires a minimum of 36 hours of course work plus the research tool. Specific requirements are FLK 569, 577, 578 (to be taken in the first year); and three of the following genre courses: FLK 561, 571, 575, 576. In addition, 470G, 464G, and 560 are required. The student must select 9-12 hours of preservation electives chosen with the advisor's approval (hours depend on whether FLK 578 is used as the research tool).

The research tool requirements, the written examination, and the portfolio are the same as for Plan B.

## Master of Arts in Education, Folk Studies minor, Ref. \# 009

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

All courses worth 3 credits unless otherwise noted.
FLK 410G African American Music
FLK 445G American Architectural History
FLK 446G Restoration of Historic Interiors
FLK 447G History of Architecture Interiors III
FLK 462G Folklore and Medicine
FLK 464G Vernacular Architecture
FLK 470G Museum Procedures and Preservation Techniques
FLK 478G Folklore and Literature
FLK 480G Women's Folklife
FLK 560 Cultural Conservation
FLK 561 Folk Arts and Technology
FLK 562 Folklore and Education
FLK 566 Oral History Materials and Methods
FLK 567 Folklife Studies
FLK 569 Folklore Genres
FLK 570 Appalachian Folklore and Folklife
FLK 571 Folk Narrative
FLK 572 Public Folklore
FLK 574 Urban Folklore
FLK 575 Folk Belief
FLK 576 American Traditional Music
FLK 577 Folklore Theory
FLK 578 Folklore Fieldwork
FLK 579 Directed Study and Research in Folklore
FLK 580 Folklore Conversation and Communication
FLK 585 Topics in Folklore
FLK 589 Internship in Folk Studies
FLK 599 Thesis Research and Writing (6 hours)
FLK 600 Maintaining Matriculation (1 to 6 hours)

## Graduate Courses in Anthropology

All courses worth 3 credits unless otherwise noted.
ANTH 430G Kentucky Archaeology
ANTH 432G Field Course in Archaeology
(1 to 9 hours)
ANTH 434G Graveyard Archaeology

ANTH 436G Applied Archaeology
ANTH 448G Visual Anthropology
ANTH 493G Archaeology Stewardship
ANTH 495G Directed Study (1 to 4 hours)

Robert Dietle, Head<br>http://www.wku.edu/History/

Cherry Hall 200

## Graduate Faculty

Professors: R. Antony, C. Crowe-Carraco, H. Phillips, J. Thacker, R. Weigel
Associate Professors: R. Dietle, M. Formes, J. Hardin, G. LaFantasie, A. McMichael,
P. Minter

Assistant Professors: D. Browder, A. Duffin, A. Harkins, R. Keyser, B. Plummer, E. Reed

## Master of Arts in History, Ref. \# 078

This program is designed to prepare students for the teaching of history on the junior or senior college level and to provide the initial graduate work for those who intend to pursue a doctoral degree.

In addition to meeting general Graduate Studies requirements, the applicant must present a major or minor in history with approximately a B average in this field. Students who meet the Graduate Studies requirements, but who do not meet departmental requirements, may be admitted after achieving at least a 3.0 grade point average on at least six graduate hours in history taken as an unclassified student.

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 Advisor. 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 course work, including Historiography (HIST 535), and the thesis. Reading proficiency in a modern foreign language must be demonstrated.

Plan B requires 36 hours. Historiography (HIST 535) must be included in the program or used as a research tool. The research tool may be met by demonstrating proficiency in a foreign language, completing Math 203 or Statistics, or completing History 535.

Students should contact the History Graduate Advisor early in their programs for help in compiling a list of books to study in preparation for the comprehensive exam. Students must pass the comprehensive exam (oral and written) over course work, bibliography, and (if Plan A) thesis.

## Master of Arts in Education History, major Ref. \# 111 or minor Ref. \# 017

Since this program is designed for the public school teacher, the student following it must meet all requirements for renewing the teaching certificate. 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. For additional information regarding the secondary education aspects of this degree, consult the Department of Curriculum \& Instruction.

## Certificate in History, Ref. \# 165

Twelve (12) hours of course work is required for the following areas of certificate completion:

[^12]Graduate Courses in History
All courses worth 3 credit hours unless otherwise noted
HIST 404G Ancient Egypt
HIST 407G The Crusades
HIST 419G Tudor-Stuart England
HIST 422G The French Revolution and Napoleonic Era
HIST 425G Modern Germany
HIST 426G Hitler and Nazi Germany
HIST 428G England Since 1914
HIST 440G Colonial History of America to 1776
HIST 441G The American Revolution \& Early Republic, 1776-1815
HIST 442G The Jacksonian Era, 1815-1850
HIST 443G Civil War and Reconstruction, 1850-1877
HIST 444G Gilded Age America
HIST 445G American Legal History to 1865
HIST 446G American Legal History since 1865
HIST 447G History of American Popular Culture
HIST 449G Korea and Vietnam
HIST 450G Diplomatic History of the US to 1898
HIST 451G Diplomatic History of the US since 1898
HIST 453G American Women's History
HIST 454G The History of Religion in America
HIST 456G Kentucky History
HIST 457G The Old South
HIST 464G Latin America and the United States
HIST 465G The Mexican Republic
HIST 471G Modern China
HIST 472G Modern Japan
HIST 479G Topics in the Third World
HIST 480G A Social History of Science
HIST 490G Topics in History I
HIST 491G Topics in History II
HIST 492G The History of Canada
HIST 501 World History for Secondary Teachers

HIST 502 United States History for Secondary Teachers
HIST 505 Cultural Diversity in American History
HIST 515 Nineteenth Century Britain
HIST 520 United States 1900 to 1945
HIST 525 Social and Intellectual History of the US: 19th Century
HIST 526 Social and Intellectual History of the US: 20th Century
HIST 527 Social and Intellectual History of Europe: 19th Century
HIST 535 Historiography
HIST 554 Discovery and Interpretation of Local History
HIST 569 Cooperative Education in History
HIST 579 Internship in Community College Teaching
HIST 590 Advanced Individual Study (May be repeated once with different topic)
HIST 599 Thesis and Research Writing (6 hours)
HIST 600 Maintaining Matriculation (1 to 6 hours)
HIST 605 Seminar in Ancient History (May be repeated once with different topic)
HIST 606 Seminar in European History (May be repeated once with different topic)
HIST 615 Seminar in Non-Western History (May be repeated once with different topic)
HIST 619 Seminar in United States Diplomatic Relations (May be repeated once with different topic)
HIST 622 Seminar in American Borderlands \& the West (May be repeated once with different topic)
HIST 630 Seminar in United States History
(May be repeated once with different topic)
HIST 631 Seminar in Kentucky History

## School of Journalism \& Broadcasting

Pam McAllister Johnson, Head
http://www.wku.edu/Journalism/

Mass Media \& Technology Hall 216
(270) 745-4143 Office
(270) 745-5835 Fax

A graduate program is not offered by the School of Journalism and Broadcasting. However, students in other departmental programs may select course work from the limited offering in this area.
The following 400-level courses may be taken for graduate credit. Students receiving graduate credit in 400G courses will be required to do additional research, readings, or other appropriate assignments.

JOUR 427G School Journalism
JOUR 481G Problems in Mass Communications

## Department of Modern Languages

Carol Wilkerson, Head
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http://www.wku.edu/modernlanguages/

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(270) 745-2401 Office
(270) 745-6859 Fax

## Graduate Faculty

Professors: M. Stewart, C. Wilkerson
Associate Professors: K. Egloff, N. Love, L. McGee, I. Pertusa-Seva
Master of Arts in Education French minor, Ref. \#010; German minor, Ref. \#012;
Spanish minor, Ref. \#038
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 renewing the teaching certificate. Those persons minoring in French, German, or Spanish may take a minimum of 12 and a maximum of 15 hours. The remaining hours will be taken in professional education. No more than four 400G-level courses can be counted overall among the 30 required hours.

## Graduate Courses in French

All courses worth 3 credit hours unless otherwise noted.
FREN 420G Advanced French Composition and Stylistics
FREN 421G Advanced French Conversation
FREN 427G Francophone Culture
FREN 445G French Canadian Literature
FREN 450G Topics in Francophone Cinema
FREN 499G Advanced Studies
(1 to 4 hours, up to 6 hours)
FREN 520 Seminar in French Literature or Language

## Graduate Courses in German

All courses worth 3 credit hours unless otherwise noted.
GERM 430G Advanced German Composition and
Conversation
GERM 435G German Literature of the 19th and 20th
Centuries
GERM 436G German Literature of the Classical Period
GERM 437G German Literature and Film
GERM 499G Advanced Studies
(1 to 4 hours, up to 6 hours)
GERM 555 Topics in German Literacy \& Cultural Studies

Graduate Courses in Spanish
All courses worth 3 credit hours unless otherwise noted.
SPAN 470G Advanced Oral Spanish
SPAN 471G Advanced Spanish Composition
SPAN 476G Twentieth Century Spain
SPAN 490G Hispanic Cinema
SPAN 499G Advanced Studies
(1 to 4 hours, up to 6 hours)
SPAN 555 Topics in Hispanic Literacy \& Cultural Studies
SPAN 578 Seminar in Hispanic Literature or Language
(May be repeated up to 6 hours)

## Graduate Courses in Modern Languages

All courses worth 3 credit hours unless otherwise noted.
MLNG 410G Second Language Acquisition
MLNG 420G Multimedia Technologies in Teaching Foreign Language
MLNG 474G Teaching Foreign Language
MLNG 480G Topics in Modern Language Cultures and Pedagogy ( 1 to 3 hours, up to 6 hours)

## Department of Music

Mitzi Groom, Head
mitzi.groom@wku.edu
http://www.wku.edu/Music/

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(270) 745-3751 Office
(270) 745-6855 Fax

## Graduate Faculty

Professors: M. Groom, M. Kallstrom, M. Scott, R. Swanson
Associate Professors: R. Pope, M. Wolinski
Assistant Professor: P. Hondorp
The graduate program in music functions to provide continued development of (1) individual students which will result in enrichment of their personal lives and will enable them to preserve and extend our cultural heritage, and (2) professional and scholarly competence in organization, interpretation, evaluation, communication and dissemination of knowledge in the discipline. The Master of Arts in Education (Music Major) further enables the teacher/practitioner to meet certification renewal requirements mandated by the state of Kentucky. The applicant must demonstrate ability and knowledge through examination in music theory and music literature upon entering the program. A comprehensive written examination is required of all degree-seeking candidates near the end of their course work.

## Master of Arts in Education Music major, Ref. \# 089; Rank II, Ref.\# 089; minor, Ref. \# 022

The Master of Arts in Education Music major degree program requires a minimum of 30 hours, maximum 33 hours. Since this program is designed for the public school teacher, the student following it must meet all requirements for professional certification. Twelve-fifteen hours from the following courses: MUS 511 or EDFN 500, SEC 580 or MGE 571 or ELED 503, EDU 544, PSY 510 or PSY 511 and EXED 516. EXED 516: Child with Exceptionalities is required unless an EXED course is on the undergraduate transcript.

The music specialization component must include nine-twelve hours, with at least two fields represented. Selections will be made from: MUS 500, 513, 518, 525, 530, each three hours; 453G for a maximum of two hours; and 440G, 441G, 444G, 445G, 448G, 449G and 471G for a maximum of one hour.

The Music Education component requirements are EDU/MUS 501: Seminar: Designing the PDP (1 hour) and EDU/MUS 596: Seminar: Standards Based Professional Portfolio (2 hours). An additional required six hours could be selected from the following list: MUS 509, 512, 513, 514, 525, each three hours. In consultation with the music education advisor, 453G for a maximum of two hours; and 440G, 441G, 444G, 445G, 448G, 449G and 471G for a maximum of one hour may be used in the music education component. Each of the courses, MUS 512, 513, and 530 may be repeated for an additional three hours credit with approval of the advisor.

The Rank II non-degree program requires 32 hours of course work and follows the same component requirements as the MAE/Music Major program. Rank II non-degree students are not required to take a research course MUS 511 or EDFN 500 or comprehensive examinations.

The minor requires a minimum of twelve or a maximum of fifteen hours in music. The remaining hours will be taken in professional education courses. 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

All courses worth 3 credits unless otherwise noted.
MUS 440G Choral Union (1 hour)
MUS 441G University Choir (1 hour)
MUS 444G Orchestra (1 hour)
MUS 445G Chamber Singers (1 hour)
MUS 448G Band (1 hour)
MUS 449G Chamber Music (1 hour)
MUS 453G Applied Music Principal (2 hours)
MUS 471G Jazz Ensemble (1 hour)
MUS 500 Seminar in Theory
MUS 509 General Music in the Elementary and Middle Schools

MUS 511 Investigations of Music Education
MUS 512 Music Education Workshop (1 to 3 hours)
MUS 513 Directed Individual Study: Music Education
MUS 514 General Music in the Secondary Schools MUS 518 Advanced Conducting
MUS 525 Music and the Human Experience
MUS 530 Music Literature
MUS 538 Directed Individual Study: Music

## Department of Philosophy \& Religion

Eric Bain-Selbo, Head
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http://www.wku.edu/Philosophy/

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(270) 745-5261 Fax

## Graduate Faculty

Professors: A. Anderson, J. Garrett, C. Pinnick, M. Seidler, J. Trafton, A. Vos
Associate Professors: E. Bain-Selbo, L. Snyder
Assistant Professors: I. Mukonyora, J. Samuels, O. Scharbrodt
A graduate program is not offered by this department; however, course work may serve as content area or electives in other programs.

## Graduate Courses in Philosophy

All courses are worth 3 credits unless otherwise noted
PHIL 401G Readings in Philosophy
PHIL 402G Theory of Knowledge
PHIL 403G Metaphysics
PHIL 405G Existentialism
PHIL 415G Advanced Logic
PHIL 426G Philosophy and Old Age
PHIL 499G Research in Philosophy
PHIL 500 Humanities Seminar
PHIL501 Readings in Philosophy
PHIL 598 Humanities Essay
PHIL 599 Thesis Research and Writing (6 hours)

Graduate Courses in Religious Studies
All courses are worth 3 credits unless otherwise noted
RELS 400G Contemporary Religious Thought
RELS 401G Religious Studies Seminar
RELS 402G Religious Studies as a Discipline
RELS 415G Old Testament Themes
RELS 430G Christianity to 1517
RELS 431G Christianity from 1517 to the Present
RELS 440G Judaism
RELS 445G Religious Traditions of Israel
RELS 501 Graduate Seminar in Religious Studies
RELS 510 Seminar in Religious Literature
RELS 520 Seminar in Religious History
RELS 530 Seminar in Religious Thought

## Department of Political Science

Saundra Ardrey, Head

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(270) 745-2945 Fax

## Graduate Faculty

Professor: E. Yager
Associate Professors: S. Ardrey, R. Murphy
Assistant Professors: J. Chappell, V. Gordon, J. Kash, S. Kiasatpour, S. Lasley

## Master of Public Administration, Ref. \#051

The MPA program serves three primary categories of students: (1) those preparing for careers in the public sector who possess little or no practical experience in governmental employment, (2) those experienced public administrators who seek additional academic and practical knowledge as a means to increase their administrative potential, and (3) members of the U.S. military service who seek a master's degree to enhance their management potential for command officer status and professional development.

The degree requires 39 semester hours of course work including completion of 21 hours of core courses.

An internship is required of all students unless exempted based on previous administrative or managerial experience. A final written comprehensive examination must be passed. Thesis is not required.

Requirements are as follows:
Core courses-18 hours
PS 541 Public Personnel Administration
PS 542 Government Financial Administration
PS 501 Methods of Political Inquiry
PS 538 Ethics and Bureaucracy
PS 540 Seminar in Public Sector Organizations
PS 545 Seminar in Public Policy Analysis
or PS 546 Public Policy Evaluation
Electives-18 hours
See MPA Advisor for list of approved electives
Internship-3 hours

## Graduate Courses in Political Science

All courses worth 3 credits unless otherwise noted.
PS 412G Kentucky Government and Politics
PS 424G Administrative Law
PS 500 Workshops in Public Administration
(1.5 hours, may be repeated up to 6 hours)

PS 501 Methods of Political Inquiry
PS 505 Washington Internship and Academic Seminars
PS 510 Problems in National Government
PS 511 Seminar in State Government
PS 538 Ethics and Bureaucracy

PS 540 Seminar in Public Sector Organizations
PS 541 Public Personnel Administration
PS 543 Politics and Administration in Rural Communities
PS 545 Seminar in Public Policy Analysis
PS 546 Public Policy Evaluation
PS 549 Special Problems in Public Administration
PS 580 Directed Study
PS 597 Professional Seminar in Public Administration
PS 598 Internship in Public Administration

## Department of Sociology

Paul Wozniak, Head<br>Grise Hall 101<br>paul.wozniak@wku.edu<br>http://www.wku.edu/Dept/Academic/AHSS/Sociology<br>(270) 745-3759 Office<br>http://www.wku.edu/Sociology/gradstdy.htm<br>\section*{Graduate Faculty}<br>Professors: E. Bohlander, J. Faine, A. Goetting, S. Groce, P. Wozniak<br>Associate Professors: J. Kanan, A. Krull, J. Musalia, A. Onyekwuluje, M. Pruitt, D. Smith<br>Assistant Professors: D. Banerjee, J. Daday, H. Drummond, K. Nemoto<br>Optional Retiree: J Grimm<br>Professor Emerita: J. Krenzin

## Master of Arts in Sociology, Ref. \# 105

This program aims to develop specific skills, especially those related to the quantitative and qualitative research processes, micro computing, and report/proposal preparation. Completion of the MA in Sociology will prepare graduates for positions in public or private agencies and give thorough preparation for teaching and for advanced study at the doctoral level. The course of study includes training in general sociological theory, social research methods, statistics, and professional writing. Additional academic training is provided in substantive areas as well as through directed study.

Admission to the program requires a GAP score of at least 2200 (GAP = GRE verbal and quantitative scores combined times the undergraduate grade point average). Students desiring to earn assistantships must have a GAP score of at least 2700 . Also, a minimum score of 3.5 on the analytical writing section of the GRE is expected for both admission and an assistantship. In addition, preference is given to students who have completed the required courses for a sociology major or minor (Introductory Sociology, Using Statistics in Sociology, Strategies of Social Research, and Sociological Theory) with an average grade of $B$ or better.

Interested students should send applications for admission, GRE scores, and transcripts to the Office of Graduate Studies. Students seeking assistantships should also include applications for assistantships and three letters of recommendation. Acceptance is competitive, but some advantage is usually gained by early applicants.

The Sociology MA program is comprised of a thesis and a non-thesis option. Both options require the following courses:

SOCL 510 Qualitative Research Methods
SOCL 512 Sociological Theory
SOCL 513 Quantitative Research Methods
SOCL 514 Advanced Social Statistics
The 30 -hour thesis option consists of 24 hours of course work (12 hours in the required courses listed above and 12 hours in elective courses), and 6 hours of thesis credit (SOCL 599). In addition, the research tool requirement must be completed.

The non-thesis option consists of 36 hours of course work ( 12 hours in the required courses listed above and 24 hours in elective courses). In addition, the research tool requirement must be completed. Students selecting this option also must pass a comprehensive examination during their final semester.

In both options three hours of credit may be taken in a 400-level course with a graduate designation, in SOCL 595 (Directed Study), or in a graduate course in a related field outside the Department of Sociology. To receive credit for more than one of these courses listed in this paragraph the student must receive advance approval from the graduate advisor.

The department offers two courses (SOCL 500: Seminar in Teaching and SOCL 501: Practicum in Teaching) for those students interested in teaching. Students who have completed 18 graduate hours including SOCL 500 can be designated Graduate Teaching Associates and become eligible to teach their
own sections of Introductory Sociology while taking SOCL 501.
The research tool requirement may be met by either passing a foreign language examination that demonstrates reading proficiency in a foreign language or earning a grade of B or better in SOCL 520, Professional Research and Writing in Sociology. If the research tool requirement is satisfied by a foreign language exam, SOCL 520 may be used as an elective course in the graduate program.

## Graduate Courses in Sociology

All courses worth 3 credits unless otherwise noted.

SOCL 408G Survey Applications
SOCL 420G Political Sociology
SOCL 430G Penology
SOCL 432G Sociology of Criminal Law
SOCL 433G Community Corrections
SOCL 434G Organized Crime
SOCL 435G Family Violence
SOCL 440G Medical Sociology
SOCL 450G Occupations and Professions
SOCL 500 Seminar in the Teaching of Sociology (2 hours)
SOCL 501 Practicum in the Teaching of Sociology (1 hour)
SOCL 510 Qualitative Methods of Social Research
SOCL 512 Sociological Theory
SOCL 513 Quantitative Methods of Social Research

SOCL 514 Advanced Social Statistics
SOCL 515 Advanced Data Analysis
SOCL 520 Professional Research and Writing in Sociology
SOCL 531 Deviant Behavior
SOCL 532 Criminology
SOCL 541 Demography
SOCL 542 Community
SOCL 545 Rural Poverty
SOCL 561 Advanced Social Interaction
SOCL 571 Topical Seminar in Sociology
SOCL 595 Directed Study (1-3 hours)
SOCL 598 Internship in Sociology (3-6 hours)
SOCL 599 Thesis Research and Writing (6 hours)
SOCL 600 Maintaining Matriculation (1-6 hours)

## Graduate Studies and Research

Richard G. Bowker, Interim Dean
gradauate.studies@wku.edu
Wetherby Administration Building 207
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http://www.wku.edu/graduate

## Degrees Offered

## Master of Arts

Administrative Dynamics

## Certificate Programs

Community College Faculty Preparation Leadership Studies
Women's Studies

## Master of Arts in Administrative Dynamics, Ref. \# 041

Nevil Speer, Director
nevil.speer@wk.edu

Environmental Science \& Technology 234
(270) 745-5959 Office

The Master of Arts in Administrative Dynamics is designed to meet needs of diverse students for professional training that is broadly based upon knowledge from business, economics, communication, organizational functioning, leadership principles, psychology, political science, and research. Students have the opportunity to develop and refine administrative knowledge and skills applicable to a variety of modern organizations within both the public and private sector.

Students seeking admission to the MA in Administrative Dynamics have two options:

1. Submit GRE scores and meet GAP requirements, or
2. Submit GMAT scores of at least 400 and an overall undergraduate grade point average of 2.75/4.0.

The program includes 24 hours of required courses and 9 hours of electives.
Required Core - 24 hours
BA 500 Management Dynamics
BA 501 Survey of Economics
COMM 461G Organizational Communication
PSY 512 Experimental Design
OR SOCL 513 Methods of Social Research
PSY 551 Social Psychology of Organizations
LEAD 500 Leadership Perspectives
PS 538 Ethics and Bureaucracy
GRST 597 Contemporary Organizational Administration
Electives - 9 hours (chosen from the following):
Note: At least two separate disciplines must be represented in the electives
COMM 563 Issue Management
COMM 564 Crisis Communication
COMM 586 Processes of Group Communication
PSY 570 Job Analysis and Compensation
BA 505 Survey of Accounting Principles
COMM 561 Multinational Business Communication
COMM 565 Communication and Conflict
COMM 569 Values and Leadership in Organizational Communication
CNS 555 Social and Cultural Diversity
GEOG 525 Advanced Political Geography
PS 440G Elements of Public Administration

PS 541 Public Personnel Administration

## Certificate in Community College Faculty Preparation, Ref. \# 162

Lisa Murrell, Director
Graduate Studies \& Research
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The Community College Faculty Preparation (CCFP) certificate program combines critical components to prepare students to enter community college teaching. These components include: a master's degree in a teaching discipline, a three-hour graduate course in adult teaching/learning psychology, a three-hour seminar on topics relevant for teaching in the community college, and a threehour teaching experience/internship at a community college. A certificate will be awarded to the students who successfully complete these requirements.

The CCFP program will empower certificate holders to be more competitive for community college faculty positions and to advance more rapidly in fulfilling the new faculty role. Faculty and administrators from several community colleges contributed to the development of the program and continue to be involved in various aspects of the program.

Participation in the CCFP program is optional to all graduate programs in the University. Graduate students may take courses as they approach the end of their master's degree or following completion of the master's degree. Application to the CCFP program is made in the Office of Graduate Studies.

The certificate program includes nine hours of required courses:
ADED 611 Adult Development and Learning
EDFN 612 Seminar in Community College Teaching
DEPT 589 Academic Discipline - Internship in Community College Teaching or Appropriate
Departmental Internship *

* Appropriate course will be determined by CCFP director and departmental faculty.


## Leadership Studies Program

Cecile Garmon, Director
Cravens Library
lead.stu@wku.edu
(270) 745-8973 Office
http://www.wku.edu/leadership/
(270) 745-5150 Fax

The goal of the Leadership Studies Certificate Program is to provide an opportunity for students to study leadership theories, ethical and social responsibility issues, human relations and interpersonal communication, and critical thinking and decision making. Students will acquire the skills necessary for leadership in school systems, governmental agencies, for-profit businesses, and non-profit organizations. Students who complete a Leadership Studies Certificate are identified as possessing special understanding of and experiences at leadership development. They will be able to carry these characteristics into the various phases of their lives, including occupational, civic, social, political, and educational areas. Effective leadership is a necessary function in virtually every type of organization. Anyone who has an interest in leadership theory and practice should consider enrolling in this Western Kentucky University program.

## Certificate in Leadership Studies, Ref. \# 163

The Leadership Studies Certificate program provides an interdisciplinary academic graduate program through which students can enhance their understanding of leadership theory and practice while applying it directly toward their academic or professional area of interest. The academic requirements offer students a common basic curriculum of leadership theory at the graduate level (LEAD 500 - 3 credit hours) and practical application of that theory to a specialized area of interest to the student (LEAD 600 2 credit hours). Additionally, the program allows the student to choose three courses from a broad interdisciplinary selection of courses for a total of 14 credit hours. Students applying to Graduate Studies at WKU can elect to pursue the graduate Certificate in Leadership Studies either by itself or in conjunction with a graduate program in a selected specific discipline.

```
Certificate requirements-14 hours
Core Courses-5 hours
    LEAD 500 Leadership Perspectives (Normally first course in the series)
    LEAD }600\mathrm{ Capstone Leadership Experience or NURS 530 (for MSN students only)
    (Normally completed after the last leadership studies course)
Electives
Students will complete one course in each of the following categories:
(Substitutions for these courses may be made with consent of the advisor. LEAD 575, Leadership Special Topics, may
be substituted in any of the three categories depending on the course topic.)
```


## Ethics and Social Responsibility

```
ECON 434G The Economics of Poverty \& Discrimination
GEOG 580 Problems in Urban Geography
HCA 544 Health Care Systems Design and Behavior
HCA 555 Health Care Preparedness and Leadership
NURS 501 Nursing Politics and Health Policy (2 hrs) and NURS 508 Adv Issues/Prof Nursing (1 hr)
PH 447G Human Values and the Health Sciences
PH 583 Public Health Administration
PHIL 525 Ethics and Leadership
PS 538 Ethics \& Bureaucracy
PSY 541 Professional Issues and Ethics in Psychology
PSY 670 Equal Employment Opportunity, the Law, \& Ethical Considerations
WOMN 545 Theories of Gender, Race \& Class
Critical Thinking and Empirical Assessment
BA 501 Survey of Economic Theory
BA 511 Applied Microeconomic Theory
BA 512 Problem Solving, Data Modeling, \& Managerial Decisions
COMM 502 Survey Methods of Research
COMM 544 Persuasive Communication
EDFN 500 Research Methods
NURS 510 Graduate Nursing Research
PH 501 Research Methods
PH 591 Health Program Evaluation
PS 545 Seminar in Public Policy Analysis
PS 546 Public Policy Evaluation
SOCL 513 Quantitative Methods of Social Research
```


## Human Relations

```
BA 500 Management Dynamics
BA 510 Organizational Theory
BA 560 Contemporary Human Resource Management
CNS 555 Social and Cultural Diversity
COMM 561 Multinational Business Communication
COMM 564 Crisis Communication
COMM 565 Communication \& Conflict
COMM 578 Seminar in Interpersonal Communication
COMM 586 Processes of Group Communication
ECON 595 Labor and Human Resource Economics
EDAD 590 Administration of School Personnel
HCA 542 Health Care Human Resources Administration
HIST 505 Cultural Diversity in American History
```

NURS 528 Leadership \& Management in Nursing Administration
PS 541 Public Personnel Administration
PSY 571 Personnel Psychology
PSY 572 Organizational Psychology
SOCL 542 Health Services Human Resources Management
WOMN 555 Feminist Methodologies \& Global Perspectives

## Certificate in Women's Studies, Ref. \# 161

| Jane Olmsted, Director | Women’s Studies Center |
| :--- | :--- |
| jane.olmsted@wku.edu | 1532 State Street |
| http://www.wku.edu/womensstudies/ | (270) 745-6477 Office |
|  | $(270) 745-6861$ Fax |

The purpose of the Graduate Certificate is to facilitate exploration of the rapidly expanding interdisciplinary scholarship in women's studies, thereby enriching Western's current graduate curricula. Even in those classes that include scholarship on women, students often encounter it in a marginal way. The systematic focus of a certificate will remedy this situation and offer a credential that can be a substantial asset in the job market. Students' ability to articulate what they have learned about interdisciplinary scholarship as it pertains to gender, race, and class, will enhance their potential for success in their professions. An online version of the Certificate is available with core courses and some electives offered online in alternate years. Federal financial assistance is available for this program.

## Requirements- 15 hours

Core Course (6 hours)
WOMN 545 Feminist Knowledge \& Social Change
WOMN 555 Global \& Cross-cultural Perspectives on Women
Electives (9 hours)
Students may take any three of the electives listed below, with the following stipulation: one of the three electives must be outside a student's primary discipline.

```
ENG 488G Literature of the Victorian Age
ENG 496G Women's Poetry
ENG 497G Women's Fiction
ENG 579 Studies in Victorian Literature
FLK }579\mathrm{ Foodways
PH 464G Women's Health
PSY 430G Psychology of Women
HIST 446G American Legal History
HIST 453G American Women's History
SOCL 435G Family Violence
WOMN 421G Women and Science
WOMN 589 Internship in Women's Studies
```

Faculty and students may make recommendations to include other courses at any time. All new courses are reviewed by the Women's Studies Curriculum Committee. Students should check with the Women's Studies Office for an updated list of electives

## Graduate Courses in Women's Studies <br> All courses worth 3 credits unless otherwise noted. <br> WOMN 470G Special Topics in Women’s Studies <br> WOMN 535 Roots of Feminism <br> WOMN 545 Feminist Knowledge \& Social Change

WOMN 555 Global \& Cross-cultural Perspectives on Women
WOMN 590 Directed Study in Women's Studies WOMN 625 Women and Leadership

## ACCT 500 ADV FIN ACCT THRY \& PRAC

3 hours
Prerequisite: ACCT 402 or its equivalent. Study of development of financial accounting theory and external financial reporting, including a critical appraisal of trends in its application. Emphasis placed on analysis of contemporary reporting problems.

## ACCT 540 ADV AUDIT STAND \& APPL

## 3 hours

Prerequisite: ACCT 450 or equivalent. Philosophy and development of auditing; audit efficiency; risk assessment; sampling; and analytical procedures; the ethical and legal environment of auditing; organizing and managing the audit firm under differing management styles; internal auditing; and careers in education

## ACCT 598 IND STUDY ACCOUNTING 3 hours

Prerequisite: Admission to MPA program. Directed study and research in selected topics in accounting. Prerequisites are determined by the faculty member directing the study.
ADED 510 INTRO TO ADULT EDUCATION - 3 hours
Prerequisite: EDFN 500. Co-requisite: ADED 520. Survey of principles, models and techniques of adult education. Topics will include history, philosophies, and theories of educational adults.
ADED 520 METHODS FOR TEACHING ADULTS 3 hours
Prerequisite: EDFN 500. Co-requisite: ADED 510. Adult educational theories, models, and approaches and their use in practice.
ADED 530 PROGRAM DEVELOPMENT FOR ADULTS $\mathbf{3}$ hours
Prerequisite: ADED 520. Program planning and development for adults in technical schools, colleges, workplace, and lifelong learning
endeavors. Includes methods for designing, implementing, and evaluating programs and their objectives.

## ADED 540 PHIL \& HISTORY OF ADULT ED 3 hours

Prerequisite: ADED 510. Philosophy and history of adult education in the United States. Covers history of adult education from the colonial period to today. Includes major philosophies that guide adult education.
ADED 597 DIRECTED STUDY IN ADULT ED 3 hours
Prerequisites: Restricted to students admitted to MAE-Adult Education; completion of at least 21 hours in the program, including all other core requirements. Permission of faculty supervisor required. Description: Directed study related to best practices in adult education. Requires completion of research or applied project on approved topic.
ADED 598 ADULT EDUCATION SEMINAR 3 hours
Prerequisite: ADED 510. Issues in the field of Adult Education. Topics will vary with faculty and student interest.
ADED 611 ADULT DEVELOPMENT AND LEARNING 3 hours
Psychological factors affecting adult development, learning, and motivation. Emphasis on how diverse academic career/experiential backgrounds and objectives affect classroom environments, teaching strategies, and testing and evaluation.
AFAM 480G IND STUDY/AFRICAN AMER 1-3 hours
Prerequisite: AFAM 190 or permission of instructor. Designed primarily for advanced students. This course will permit students to pursue selected topics dealing with the life and times of the people of African ancestry in Africa and America.

## AFAM 490G AFRICAN AMER SEM 3 hours

Prerequisite: AFAM 190 or permission of instructor. Designed primarily for advanced students. This seminar will include topics dealing with the African American, present or past.

## AGEC 460G AGRICULTURAL POLICY 3 hours

Prerequisite: AGEC 360.The role of agriculture in the national economy; objectives of agricultural policy; appraisal and proposed agricultural programs; legislation for economics action.

## AGEC 461G ADV FARM MANAGEMENT 3 hours

Prerequisite: AGEC 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.

## AGEC 463G AGRICULTURAL FINANCE 3 hours

Prerequisite: AGEC 361 or permission of instructor. Farm finance problems including capital requirements, investment decisions, budgeting techniques, etc. Lending agencies and alternative means of acquiring capital.

## AGEC 468G WORLD FOOD DEVELOPMENT 3 hours

Problems and opportunities in feeding an ever-increasing population. Assessment of world food production, poverty, businesses and cultures; ways of increasing production.
AGEC 482G AGRIC RESOURCES/REC 3 hours
Prerequisite: Upper division or instructors consent. Principles in developing physical facilities for various rural recreational enterprises are studied. Topics include enterprise selection, program planning, site selection, promotion financing, management and construction of facilities.

## AGEC 561 AG PROD ECONOMICS 3 hours

Production and cost functions, programming and decision-making principles and their application to agriculture.
AGEC 675 ADVANCED TOPICS AG ECON 3 hours
AGED 470G METH/TEACH/VOC AGRIC 3 hours
Prerequisite: AGMC 170, or permission of instructor. Basic principles, design options, and economic considerations for hay and grain handling systems and for silage and manure systems. Field trips as needed.

## AGED 471G ORGANIZATION/PLAN AG EDU 1-4 hours

Prerequisites: AGED 250 (EDU 250), EXED 330, AGRI 398, PYS 310, Admission to student teaching.
A teacher preparation course designed to prepare pre-service teachers for the student teaching experience and for a full-time teaching position. Unit planning, lesson preparation, and delivery comprise the major portion of this course.

## AGED 475G TOPICS IN AG EDUCATION 1-3 hours

Prerequisite: Consent of instructor. Special topics acquaint advanced undergraduate students with scientific developments of current interest in agriculture. Appropriate topic titles are assigned. Lecture and assignments vary with credit. May be repeated with change in content.

## AGED 583 CURRIC DEVELOP/VOC AG <br> 3 hours

Principles of curriculum development, curriculum alignment, and assessment of content standards.
AGED 584 PROG DEVEL/VOC AGRIC
3 hours
For new and returning ag-ed teachers. Covers planning, conducting, and following through instructional programs for secondary, post-secondary, and/or adult students.
AGED 589 IND SPEC PROB AGRIC EDUC 1-3 hours
Supervised individual study in agricultural education. May be repeated to a maximum of 6 hours.
AGED 675 ADV TOPICS IN AG EDUCAT 1-3 hours
AGMC 470G AG MATERIALS HANDLING 3 hours
Prerequisite: AGMC 170 or permission of instructor. Basic principles, design options and economic considerations for hay handling systems, silage systems and grain handling systems are covered. Field trips as needed.

## AGMC 475G SELECT TOPIC AG MECH

1-3 hours
Prerequisite: Consent of instructor.
Special topics acquaint advanced undergraduate students with scientific developments of current interest in agriculture. Appropriate topic titles are assigned. Lecture and assignments vary with credit. May be repeated with change in content.

## AGMC 675 ADVANCED TOPICS AG MECH 1-3 hours

AGRI 450G RURAL HLTH \& SFTY
3 hours
Students will explore a variety of health and safety issues unique to rural populations. The interdisciplinary team concept will be used throughout the course to foster collaboration that facilitates sharing of the expertise of students and faculty.

## AGRI 473G CAVE \& KARST ENVIRONMENT 3 hours

Prerequisites: Biology 120/121 or equivalent. Discussion of biological diversity, groundwater and humanity's role in utilizing and conserving the unique features of karst areas and use of these areas in teaching. Not applicable to a major or minor in agriculture, biology or geography and geology. Cross listed with Biology and Geography.

## AGRI 475G SELECTED TOPICS/AGRIC

Prerequisite: Permission of instructor. Special topics on significant problems and scientific developments of current interest in agriculture. Lecture and assignments are variable with credit. May be repeated with change in content.

## AGRI 491G DATA ANALYSIS/INTERPRET $\mathbf{3}$ hours

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.

## AGRI 493G SUSTAINABLE AGRICULTURE 3 hours

Prerequisites: Upper division standing, minimum of 18 hours in agriculture and related areas, or permission of instructor. Effect of diminishing resources, environmental pollution, and short-term economics on the sustainability of productive agriculture. Emphasis on managing crops, livestock, and other farm resources in providing an ecological-economical balance in agricultural production.

## AGRI 528 POPULATION GENETICS 3 hours

Prerequisites: BIOL 327 and AGRI 491 or equivalent. Application of genetic and statistical concepts to populations of plants and domestic animals.

## AGRI 590 EXPERIMENTAL DESIGN 3 hours

Prerequisite: AGRI 491 or permission of instructor. Statistical consideration in experimental design; covariance, multiple regression, factorial design, and incomplete block designs.
AGRI 597 IND SPEC PROB/AGRIC 1-3 hours
Prerequisite: Permission of instructor. Supervised individual study in agriculture. May be repeated to a maximum of 9 hours.
AGRI 598 SEMINAR 1 hour
Problems and research in agriculture. Required of all graduate students. Repeated for a minimum of 3 hours.
AGRI 599 THESIS RESEARCH/WRITING $\mathbf{1 - 6}$ hours ( 6 total)
AGRI 600 MAINTAIN MATRICULATION 1-6 hours
AGRI 675 ADV TOPICS/AGRIC 1-3 hours
Prerequisite: Permission of instructor. Issues and scientific developments of current interest. May be repeated to a maximum of 10 hours with different topics.
AGRO 409G WEED SCIENCE 2 hours
Corequisite: AGRO 410G.Prerequisite: BIOL 120 and AGRO 110; CHEM 105 and 107 or equivalent. Identification of prominent weed species; relationship of weeds to crop production problems; physical and chemical control measures.
AGRO 410G WEED SCIENCE LAB 1 hour

Corequisite: AGRO 409G. A laboratory course correlated with AGRO 409G.
AGRO 414G CROP IMPROVEMENT 3 hours
Prerequisites: Six hours of plant science and upper division or graduate standing. Identification, development, and utilization of genetic
differences in the improvement of cultivated plants.
AGRO 420G FORAGE CROPS 2 hours
Corequisite: AGRO 421G. Prerequisite: AGRO 110, 350 and BIOL 120. Distribution, improvement, morphology, culture, harvesting and utilization of forage crops are presented.
AGRO 421G FORAGE CROPS LABORATORY 1 hour
Corequisite: AGRO 420G. A laboratory course correlated with AGRO 420G. Laboratory, two hours.

## AGRO 422G FIELD CROPS 3 hours

Prerequisite: AGRO 110, 350, and BIOL 120 or permission of instructor. Distribution, improvement, morphology, culture, harvesting, and utilization of field crops are presented. Lecture, three hours.

## AGRO 451G SOIL MANAGEMENT 3 hours

Prerequisites: AGRO 350, AGRO 351 and AGEC 361, or permission of instructor. Evaluation of characteristics which determine the productive potential of soils and the prevailing climate to maxi-mize production or net income.

## AGRO 452G SOIL MICROBIOLOGY 3 hours

Prerequisites: AGRO 350 and BIOL 207, 208. Soil microbial populations and systems and their influence on plant nutrition. Soil organic matter, its decomposition and associated microorganisms; oxidation-reduction process; nitrogen fixation.

## AGRO 454G SOIL MGMT \& CONSERV 3 hours

Prerequisite: AGRO 350. Economic utilization of land for agricultural recreation and public purposes; interpretation and application of soil conservation; public and industrial uses; practice in designing land-use maps.
AGRO 455G SOIL CHEMISTRY 2 hours
Corequisite: AGRO 456G. Prerequisite: AGRO 350. Analytical techniques used in soil chemistry and soil fertility studies, nutrient determination; colloidal systems; chemical properties related to plant nutrition.
AGRO 456G SOIL CHEMISTRY LAB
1 hour

Corequisite: AGRO 455G. A laboratory course correlated with AGRO 455G.
AGRO 457G SOIL FORM/CLASS/MAP 2 hours
Corequisite: AGRO 458G. Prerequisite: AGRO 350Soil origin; classification schemes; profile description, mapping and interpretation of soil survey information are discussed, emphasizing Kentucky soils.
AGRO 458G SOIL FORM/CLASS/MAP LAB 1 hour
Corequisite: AGRO 457GA laboratory course correlated with AGRO 457G.
AGRO 475G TOPICS AGRONOMY
1-3 hours
Prerequisite: Consent of instructor. Special topics acquaint advanced undergraduate students with scientific developments of current interest in agriculture. Appropriate topic titles are assigned. Lecture and assignments vary with credit. May be repeated with change in content.

AGRO 521 PASTURE MANAGEMENT 3 hours
Prerequisites: AGRO 420/421 and ANSC 448 or permission of instructor. Development of pastures, physiological principles related to forage production, pasture management, and preservation and use of conserved forages.

## AGRO 551 ADVANCED SOIL FERTILITY 3 hours

Prerequisite: AGRO 352 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.

## AGRO 675 ADV TOPICS AGRONOMY 1-3 hours

AMS 505 ARCHITECTURAL DESIGN STUDIO 6 hours
Prerequisite: Graduate Standing. A study of the built environment including both exterior and interior design features. Student is required to identify a project and present their design portfolio to a panel of jurors.

## AMS 510 EMERGING TECHNOLOGIES 3 hours

Discovery of powerfully disruptive technologies, evaluating them accurately and implementing change for profitability.
AMS 520 RESOURCE MANAGEMENT 3 hours
A comprehensive study of efficient allocation of materials and money. Includes review of basic decision-making techniques, cost-benefit ratio analysis, depreciation, salvage value of equipment, and time value of money.
AMS 525 INDUSTRIAL RESOURCE ALLOCATION 3 hours
A comprehensive study of efficient allocation of resources. Topics related to manufacturing operation analysis with emphasis on efficient and practical techniques for estimating costs based on existing relationships among inflation, labor, material, forecasting, and activity.

## AMS 530 AUTO DATA COLLECTION SYS

## 3 hours

Information systems for industry; collecting and analyzing real time data to make production decisions regarding profitability and quality.

## AMS 535 WORKFORCE DEVELOPMENT

3 hours
Strategies for developing educational opportunities for personnel in industry and appropriate appraisal techniques for program improvement. Includes topics crucial to developing the nation's workforce, including sociological foundations of workforce education, career development theory, needs assessment, developing objectives, performance assessment and private sector providers of workforce education programs.

## AMS 571 RESEARCH METH IN TECH MANG

## 3 hours

A comprehensive study of research methods and experimental design applicable to industrial and technical operations. This course includes a review of basic statistics, quality control techniques, and quality assurance.
AMS 590 OPERATIONS LEADERSHIP
3 hours

Provides technical professionals with leadership and management skills needed to be effective throughout their career.
AMS 599 THESIS RESEARCH AND WRITING 1-6 hours (6 total)
AMS 630 LEGAL AND ETHICAL ISSUES IN TECHNOLOGY 3 hours
A study of ethics and social responsibility, international and contemporary legal issues in business and industry, and e-commerce.
AMS 650 INDUSTRIAL DISTRIBUTION
3 hours
An integrated and comprehensive treatment of operations and supply chain issues. Students study how firms link with their supply chain partners to gain a market advantage and competitiveness.

## AMS 671 QUALITY MANAGEMENT 3 hours

An examination of philosophies, concepts, tools and techniques used in continuous quality improvement programs. Non-Thesis Option.
AMS 690 GRADUATE PROJECT

## 6 hours

An applied research project, using standard procedures of problem identification, possible solutions, and a final report. Can be either field or laboratory based and must be approved by a graduate faculty committee.
ANSC 437G PHYSIOLOGY/REPRODUCTION
2 hours
Corequisite: ANSC 438G Prerequisite: AGRI 140 and BIOL 120. Ednocrinology and physiology of reproductive systems; anatomical physiology and biochemical bases of reproduction, artificial insemination, synchronized estrus and related topics are presented.

## ANSC 438G PHYSIOLOGY/REPRO LAB 1 hour

Corequisite: ANSC 437G. A laboratory course correlated with ANSC 437G. Laboratory, two hours.
ANSC 446G ANIMAL BREEDING 2 hours
Corequisite: ANSC 447GPrerequisite: ANSC 140 and BIOL 120. Application of genetic and statistical principles of breeding and improvements of farm animals; the role of selection in changing populations; the effects of different mating systems upon improvement of farm animals are investigated.
ANSC 447G ANIMAL BREEDING LAB 1 hour
Corequisite: ANSC 446GA laboratory course correlated with ANSC 446.
ANSC 448G FEEDS FEEDING PRACTICES 1-4 hours
Prerequisites: ANSC 345 or permission of instructor. Livestock feeds and their nutrients; functions of and requirements for nutrients; evaluation of feeds; feeding practices and formulation of rations for all classes of livestock are included.

## ANSC 449G LAB METHODS ANIMAL NUTRI 3 hours

Prerequisite: ANSC 448. Laboratory methods for determining major minerals and vitamins in feeds, proximate analysis of feeds, products of fermentation, feed residues and contamination.
ANSC 475G SELECTED TOPICS 1-3 hours
Prerequisite: Consent of instructor.
Special topics acquaint advanced undergraduate students with scientific developments of current interest in agriculture. Appropriate topic titles are assigned. Lecture and assignments vary with credit. May be repeated with change in content.
ANSC 533 PHYSIOLOGY OF LACTATION
3 hours
Prerequisite: ANSC 344. 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.
ANSC 545 RUMINANT NUTRITION 3 hours
Prerequisite: ANSC 345, 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.
ANSC 546 ADV ANIMAL BREEDING 3 hours
Prerequisites: ANSC 446 and AGRI 528, 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.
ANSC 547 ADV ANIMAL NUTRITION
3 hours
Prerequisite: ANSC 345, BIOL 446 or equivalent, or permission of instructor. The nutrient requirements of the monogastric animals, structure, metabolism and function of each nutrient class, interrelationship of the nutrient classes, deficiency and toxicity symptoms.
ANSC 675 ADV TOPICS IN ANIMAL SCI
1-3 hours

## ANTH 430G KENTUCKY ARCHAEOLOGY

3 hours
Detailed archaeological examination of prehistoric and historic occupations in the Commonwealth, emphasizing diagnostic artifacts and representative sites. Field trips required.

## ANTH 431G FIELD COURSE IN ARCHAEOLOGY 1-4 hours

Includes archaeological survey, site mapping, artifact recovery, recording, and cataloging. Work is usually conducted on prehistoric Indian sites.

## ANTH 432G FLD CRSE IN ARCH

 1-9 hoursPrerequisite: ANTH 130 or consent of instructor. Includes archaeological survey, site mapping, artifact recovery, recording, and cataloging. Work is usually conducted on prehistoric Indian sites. The number of credit hours will be determined in consultation with instructor. May be repeated for a maximum of nine hours of credit.

## ANTH 434G GRAVEYARD ARCHAEOLOGY 3 hours

Application of archaeological methods in the documentation of historic graveyards, emphasizing legal mandates, formation processes, subsurface prospecting, remote sensing, mapping and headstone recording. Travel to field site required

## ANTH 436G APPLIED ARCHAEOLOGY

Examines contract archaeology and public archaeology within the context of cultural resource management, emphasizing legal mandates, field methods, public education programs, and ethical considerations.
ANTH 448G VISUAL ANTHROPOLOGY 3 hours
Prerequisite: Junior level or higher. This course examines photography and film as tools and products of cross-cultural research with special emphasis on cultural and political biases presented through visual means.

## ANTH 449G ETHNOGRAPHIC VIDEO PRODUCTION $\mathbf{3}$ hours

Prerequisite: Permission of instructor. Training in video production skills as research methodology in anthropology. Practical exercises and collaborative student projects. Students will produce their own short ethnographic videos. Explores practices of representing cultures through media. This course will include a lab fee and students will be expected to purchase their own mini DV tapes for the course.

## ANTH 450G MODERN HUMAN BIOL VARIATION

## 3 hours

Uses evolutionary theory to study biological similarities and differences among living human populations or morphological, skeletal, and molecular levels, emphasizing anthropology, racial classification, inheritance, population genetics, adaptation, disease and intelligence.
ANTH 493G ARCHAEOLOGY STEWARDSHIP 3 hours
Prerequisites: Course pass, ANTH 130, 6 additional credits in anthropology and graduate standing. Field monitoring of local archaeological sites threatened by cultural and natural formation processes. Travel to field sites required.
ANTH 495G DIRECTED STUDY 1-4 hours
Prerequisite: Junior standing and consent of department head. Course pass required. Available to superior students who wish to conduct individual, intensive reading and research in specific area of anthropology in close cooperation with supervising faculty. Submission of such projects to student sections of regional professional meetings is encouraged. Number of credit hours will be determined in consultation with instructor. May be repeated for a maximum of 8 hours of credit.

## ART 401G ART/ITAL RENAISSANCE 3 hours

This course analyzes the architecture, sculpture and paintings of Italian Renaissance with an emphasis on the examination of selected examples. Graduate students will be required to display advanced research skills.

## ART 405G ART THEORY/CRITICISM 3 hours

Major theories of art, both historical and contemporary, and various approaches to qualitative judgments about individual works of art. Graduate students will be required to display advanced research skills.
ART 420G CERAMICS 3 hours
Prerequisite: ART 321. A continuation of production in clay form and research in experimental clay and glaze composition.

## ART 421G CERAMICS 3 hours

Prerequisites: ART 420. This course requires advanced individual performance in creative design concepts and in research and recording.
ART 422G CERAMICS 3 hours
Prerequisite: ART 421. This course is a continuation of ART 421.
ART 440G DRAWING 3 hours
Prerequisite: ART 341. Advanced drawing explorations through individual problem solving.
ART 450G PRINTMAKING
3 hours
Prerequisite: ART 351. Stresses advanced printmaking techniques and requires students to have strong personal imagery.
ART 451G PRINTMAKING 3 hours
Prerequisite: ART 450. Corequisite: Art 452. Printmaking exploration through research and creative activity.
ART 452G PRINTMAKING 3 hours
Corequisite: ART 451. This course consists of advanced research problems in printmaking.
ART 460G PAINTING 3 hours
Prerequisite: ART 361. Research problems in selected painting materials are provided in this course.
ART 461G PAINTING 3 hours
Prerequisite: ART 460. This course consists of advanced individual research problems in painting.
ART 462G PAINTING 3 hours
Prerequisite: ART 461. This course is a continuation of 461 Painting.
ART 470G SCULPTURE
3 hours
Prerequisite: ART 371. Sculptural problems. Introduction to metal casting using sand molds.
ART 471G SCULPTURE 3 hours
Prerequisites: ART 371 and 372. Sculptural problems. Introduction to the lost-wax method of casting.
ART 472G SCULPTURE 3 hours
Prerequisites: ART 471. Experience in solving problems met in professional practice.
ART 480G WEAVING
3 hours

Prerequisite: ART 381. This course consists of creative research in the areas of double-weave, ikat, the use of indigenous fibers and other more complicated techniques.
ART 481G WEAVING
3 hours
Prerequisite: ART 480.
This course provides for the development of special creative problems involving techniques investigated in Weaving 480.
ART 482G WEAVING 3 hours
Prerequisite: ART 481. This course involves advanced individual research in weaving.
ART 490G SPECIAL PROBLEMS 3-6 hours
Independent course work done on an individual basis under the guidance of a selected faculty member.

## ART 491G SPECIAL STUDIES 3 hours

Independent course work done on an individual basis under the guidance of a selected faculty member.
ART 500 EARLY MEDIEVAL ART 3 hours
Examination of topics and problems in Early Christian, Byzantine, Migration, Carolingian, and Ottonian art.
ART 501 ROMANESQUE/GOTHIC ART
3 hours
Directed individual research into the architecture, sculpture, and illuminated manuscripts of Western Europe during the eleventh to early sixteenth centuries.
ART 511 IND INVESTIGATION/ART ED 3 hours
Independent study in art curriculum and methodology, with emphasis on the literature, selected art history, and studio areas.

## ART 512 IND INVESTIGATION/ART ED 3 hours

Independent study in art curriculum and methodology (including art history and studio). Emphasizes the use of surveys, observations, and experimental techniques.
ART 520 CERAMIC ART 3 hours
Advanced levels of clay forming techniques and clay glaze composition. Research in various phases of the ceramic process.
ART 540 DRAWING 3 hours
Independent study utilizing traditional methods of drawing. Students are encouraged to investigate and utilize new directions.

## ART 550 PRINTMAKING 3 hours

Independent study utilizing traditional methods of printmaking. Encourages the exploration of new directions in personal expression.

## ART 560 PAINTING 3 hours

Advanced aspects of painting, with emphasis on experimentation in different styles and on individualized approaches.
ART 570 SCULPTURE 3 hours
Independent study and experimentation in sculpture.

## ART 580 WEAVING 3 hours

Individual study of weaving utilizing traditional and experimental techniques: the production of works that are highly individualistic and are of exhibition quality.
ART 590 WORKSHOP IN ARTS \& HUM EDUC 3 hours
Integrated arts and humanities curriculum development in P-12 settings. May be repeated once on a different theme for credit.
ART 591 INVESTIGATION/ART HIST 3 hours
Topics and approaches for special areas of interest. Emphasis on the traditional periods of art history.
ART 599 THESIS RESEARCH/WRITING $\mathbf{1 - 6}$ hours ( 6 total)
ART 600 MAINTAIN MATRICULATION 1-6 hours
ASTR 405G ASTRONOMY/TEACHERS 3 hours
Selected topics in astronomy for elementary and secondary teachers.
BA 500 MANAGEMENT DYNAMICS
3 hours
Crosslisted: MGT 513 An introduction to organizational analysis and to the understanding and management of behavior in organizations.
BA 501 SURVEY/ECONOMICS 3 hours
See ECON 501.
BA 503 INF SYS \& DECISION SCIE 3 hours
A survey of management information systems concepts and decision science theory. Emphasis on using information systems and decision support models to enhance managerial decision making.
BA 505 SURVEY ACCOUNTING PRINCIPLES 3 hours
Concepts and principles governing financial and managerial accounting. Emphasis on issues associated with the preparation and interpretation of information presented in external financial statements. Includes an introduction to management's use of internally generated accounting information.
BA 507 MANAGERIAL MARKETING 3 hours
Concepts, terms, and functions important to marketing, consumer behavior, product planning, pricing, and public policy implications of marketing strategies.
BA 509 MANAGERIAL FINANCE
3 hours
Nature and scope; topics in financial structure and the cost of capital.
BA 510 ORGANIZATION THEORY
3 hours
Prerequisite: BA 500 or the equivalent. Contemporary theory and research on organizational structure and design that has relevance for practical problems of designing and managing organizations.
BA 511 APPLIED MICRO ECONOMIC T 3 hours
See ECON 502.

## BA 512 PROBLEM SOLVING DATA MO 1.5 hours

An applications-oriented course designed to help students envision, design, conduct, interpret, and report statistically oriented analyses applicable to managerial decision making. Topics such as the design of data generation, modeling, regression, process control and evaluation, and survey errors will be covered.

## BA 513 INFO TECH \& STRATEGY

## 3 hours

Prerequisite: BA 503 or the equivalent. A critical examination of the strategic uses of information systems technology; the resources (computers, networks, software, data, and people); and alternative approaches to managing them effectively.

## BA 515 MANAGERIAL ACCOUNTING 3 hours

Prerequisite: BA 500 or the equivalent. A review of the managerial accounting concepts and techniques used by managers in planning, performance evaluation, and decision making. Emphasis on the application of concepts and techniques in the analysis of cases.
BA 517 ADVANCED MARKETING
3 hours
Prerequisite: BA 507 or the equivalent. Marketing principles, policies, and operations; quantitative and behavioral sciences as related to the theory, philosophy, and operation of integrated marketing systems.

## BA 519 ADV MANAGERIAL FINANCE 3 hours

Prerequisite: BA 509 or the equivalent. Financing policies of corporate entities with emphasis on planning the capital structure, measuring and controlling costs of alternate sources of funds, dividend policy, and capital budgeting.

## BA 533 MANAGING DATABASE APPLI 3 hours

Prerequisite: BA 503 or the equivalent. Theories and concepts employed in database management systems and the efficiencies and economics of such systems. Topics include the design and building of relational databases, information storage and retrieval, structured query language (SQL), and the development of database queries.

BA 534 ELECTRONIC COMMERCE
3 hours
Prerequisite: BA 503 or the equivalent. Focuses on the current issues of performing business electronically. Topics include web page development, the Internet as an infrastructure, electronic payments and funds transfer, on-line advertising, mobile computing and security issues.
BA 540 STATISTICAL/RESEARCH MET
3 hours
See ECON 506.
BA 541 SURVEY OF PUBLIC FINANCE 3 hours
See ECON 581.
BA 542 INTERNATIONAL ECONOMICS 3 hours
See ECON 591.
BA 543 FORECASTING 3 hours
See ECON 594.
BA 544 LABOR AND HUMAN RES ECON 3 hours
See ECON 595.
BA 550 BANK MANAGEMENT
3 hours
Prerequisite: Admission to the MBA Program and completion or waiver of BA 509.A comprehensive analysis of issues involving the financial management of financial institutions. Emphasis on financial decision making focusing on such issues as asset/liability management, balance sheet management, and the management of risk/return tradeoffs in financial intermediaries, especially commercial banks.

## BA 551 INVESTMENTS/PORTFOL MGT

3 hours
Prerequisite: Admission to the MBA program and a completion or waiver of BA 509. A comprehensive examination of investment opportunities with emphasis on the risk-return relationships, economic and market forces affecting financial markets, security valuation and analysis, and portfolio formation and management.

## BA 552 INTERNATIONAL FINANCE 3 hours

BA 560 HUMAN RESOURCES MGT
Prerequisite: Graduate standing. An advance course focusing on the current critical issues of human resource management. Includes discussions on recruitment and selection techniques, performance appraisals, training and development, compensation, labor relations, occupational safety, and employee rights.
BA 571 SERVICES MARKETING 3 hours
Prerequisite: BA 507 or the equivalent. Focuses on the marketing of intangible products by discussing strategic implications for marketing mixes (product, price, place, and promotion) and consumer perceptions and expectations.
BA 572 CONSUMER BEHAVIOR
3 hours

Prerequisite: BA 507 or the equivalent. Examines theories and concepts associated with consumer decision making for products and services. Emphasis placed on the development of marketing strategies which will satisfy consumer wants and needs.
BA 573 INTERNATIONAL BUSINESS
3 hours
Prerequisites: BA 507 and 509. Institutions, organizations, and procedures of international business. Emphasizes problems and decision-making techniques.
BA 579 SUPPLY CHAIN MANAGEMENT 3 hours
Pre-requisite: BA 503 and 506 or BA 540. Integrates an organization's operations planning and control with suppliers and distributors through sharing information, managerial and technical talents.

## BA 580 CONTEMPORARY ISSUES 1.5 hours

Emphasizes issues pertinent to an understanding of today's business environment. Topics embrace the cross-functional, global, and technical aspects of business. May be repeated for credit.

## BA 590 STR BUS CONCEPTS \& APPS <br> 1.5 hours

Concepts and business strategies focusing on viewing the organization as an integrated whole. Use of Integrated Management Exercises (IMEs) involving student teams working on a business simulation or actual business project aimed at challenges and opportunities facing a business.

| BA 592 | SPECIAL TOPICS IN BUS | 3 hours |
| :--- | :--- | :--- |
| BA 593 | ECON OF STREGY \& ORG MGT | 3 hours |
| BE 463G | INFORMATION RESRCES MGT | 3 hours |
| BE 471G | OFFICE INTERNSHIP | 3 hours |

BE 471G OFFICE INTERNSHIP 3 hours
Prerequisite: Permission of the coordinator. Office Internship is a business work experience program requiring employment in a business, government, or institutional office environment during the term in which the student is enrolled. This course requires periodic seminars and permission of the employer to declare the work experience as an internship experience.
BE 485G OFFICE EMPLOYEE TRAINING 3 hours
Theories of learning applied to the adult learner in training and development situations; developing, managing, and staffing training and development programs; training materials creation and evaluation; facilities and media; and applications for administrative, professional, support, and office systems employees.
BE 535 SURVEY OF DISTRIBUTION 3 hours
Business activities involved in moving goods from production to consumption, emphasis on the role of marketing in the American economy.
BE 540 CONSUMER FINANCIAL PROBS 3 hours
Basic elements of money management and the relationship of these elements to family units and corporate citizenship.
BE 544 IND PROBLEMS IN BUS EDUC 3 hours
Current problems and significant research. Also offered as independent study or workshop. (May be repeated by Business Education Majors.)
BE 545 PRINCIPLES OF BUS EDUC 3 hours
Principles, practices, problems, and philosophy includes standards, guidance, and curricula.
BE 560 OFFICE SYSTMS INSTITUTE 3 hours
Intensive institute in the content subject matter of undergraduate major in office systems.
BE 575 ADMIN/SUPERVIS BUS EDUC 3 hours

Roles and functions of administration and supervision at all educational levels. Includes vocational education laws and their relationship to business education.
BIOL 400G PLANT PHYSIOLOGY 3 hours
Prerequisites: BIOL 120, 121, and two semesters of chemistry. The functioning of plant systems. Lecture, two hours; laboratory, two hours.
BIOL 401G BIOLOGY OF ALGAE $\quad 1-4$ hours
BIOL 402G PLANT EVOLUTION 1-4 hours
Prerequisites: BIOL 222, 223. Examination of current understanding of evolutionary relationships of vascular plants. Emphasis will be placed upon how relationships effect our understanding of plant form and function. Lecture three hours; laboratory, two hours.

## BIOL 404G ELECTRON MICROSCOPY

4 hours
Prerequisites: BIOL 222-223, 224-225 or permission of instructor. A course in the fundamentals of electron microscopy including basic theory, techniques for specimen preparation and photography, and operation of the electron microscope. Lecture, two hours; laboratory, four hours

## BIOL 407G VIROLOGY

## 3 hours

Prerequisites: BIOL 220/201 and a microbiology course. Study of bacterial, animal and plant viruses. Emphasis on the molecular aspects of replication, expression, regulation and pathogenesis. Lecture, three hours.
BIOL 408G INVERTEBRATE ZOOLOGY
4 hours
Prerequisites: BIOL 224, 225. Phyla of invertebrate animals, including their taxonomy, morphology, physiology, development, and evolution. Lecture, two hours; laboratory, four hours.
BIOL 411G CELL BIOLOGY 3 hours

Prerequisites: BIOL 220/221 or consent of instructor. See Department of Biology.
BIOL 412G LAB CELL BIOLOGY 1 hour
See Department of Biology.
BIOL 415G ECOLOGICAL METHODS 3 hours
Prerequisite: BIOL 315, or permission of instructor. A course emphasizing the collection, manipulation and analysis of ecological data using a variety of techniques in aquatic and terrestrial habits. Lecture, one hour; laboratory, four hours.

## BIOL 430G EVOLUTION:THEORY \& PROCE <br> 3 hours

Prerequisite: BIOL 327 or permission of instructor. Corequisite: BIOL 327.
Study of the genetic, behavioral and ecological mechanisms leading to evolutionary change, and the role of evolutionary theory as a unifying framework in biology.

## BIOL 446G BIOCHEMISTRY I 3 hours

Prerequisite: CHEM 314 or 340. Biochemical compounds and their role in metabolism.

## BIOL 447G LAB BIOCHEMISTRY I 2 hours

Prerequisite or corequisite: BIOL/CHEM 446. Selected experiments which illustrate biochemical principles. Five hours per week.
BIOL 450G RECOMBINANT GENE TECH
3 hours
Prerequisite: BIOL 350 and 446. Discovery-based laboratory emphasizing application of basic techniques to solve student-defined problems. Problems in characterization and expression of genetic material are explored. Laboratory, six hours.

## BIOL 456G ICHTHYOLOGY 4 hours

Prerequisites: BIOL 224, 225, 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, two hours; laboratory, four hours.

## BIOL 458G FISHERY BIOLOGY 1-3 hours

BIOL 459G MAMMALOGY 3 hours
Prerequisites: BIOL 120, 121. Taxonomy, life history and ecology of the mammals. Laboratory work includes field studies and collection and study of specimens in the laboratory. Lecture two hours; laboratory two hours. (Fall, even years)
BIOL 460G PARASITOLOGY 4 hours
Prerequisites: BIOL 224, 225. The morphology, physiology, life histories, control and economic significance of representative species. Lecture, two hours; laboratory, four hours.

## BIOL 464G ENDOCRINOLOGY 3 hours

Prerequisites: BIOL 220; BIOL 446-447 strongly recommended. A study of the structure and function of the endocrine glands and their role in physiological communication and regulation. Lecture.

## BIOL 467G BIOCHEMISTRY II 3 hours

Prerequisite: BIOL/CHEM 446. The reactions of living systems and an introduction to the mechanisms and energetics of metabolism. Lecture.
BIOL 470G PATHOGENIC MICROBIOLOGY 4 hours
Prerequisites: BIOL 309, 310, or permission of instructor. A study of the organisms causing disease with emphasis on bacteria. Includes
pathogenic bacteria, viruses, rickettsiae, fungi and protozoa. Lecture, two hours; laboratory, four hours.
BIOL 472G APPLIED \& ENVIRON MICRO
4 hours
Prerequisites: BIOL 309, 310, or consent of instructor. The study of the roles of microorganisms in food preservation, fermentation, spoilage, and food intoxication. Production of microbial products of industrial interest; application of modern microbiological techniques to industrial processes; interrelationships between micro-organisms and their environment. Lecture, three hours; laboratory, two hours.

## BIOL 473G CAVE \& KARST ENVIRONMENT

3 hours
Prerequisites: BIOL 120, 121 or equivalent. Discussion of biological diversity, groundwater and humanity's role in utilizing and conserving the unique features of karst areas and use of these areas in teaching. Course does not count toward the M.S. Options.

## BIOL 475G IND TOPICS/BIOLOGY <br> 1-3 hours

Significant problems and developments of current interest in biology.

## BIOL 483G MULTIVARIATE METH/BIOL

4 hours
Prerequisites: Junior standing and a course in statistics, or permission of instructor. Application of multivariate statistical analysis techniques to problems in the biological sciences. Principal component and factor analysis, canonical discriminant analysis, correspondence analysis, distance metrics and clustering, canonical correlation, repetitive sampling, randomization. Not a course in mathematical statistics; rather, emphasis is on experimental design, selection of appropriate methods for testing particular hypotheses, and the analysis of real data. Lecture, three hours;
laboratory, two hours.
BIOL 485G LAB FIELD BIOLOGY
3 hours
An intensive field experience on a specific biological topic, preceded and followed by introductory and evaluative sessions.

## BIOL 495G MOLECULAR GENETICS 3 hours

Prerequisite BIOL 450G. A study of the molecular basis of genetics and heredity of prokaryotic and eukaryotic organisms. Lecture, three hours.

## BIOL 496G PLANT BIOTECHNOLOGY

4 hours
A course designed to illustrate the current advances in plant biotechnology and their potential application in agriculture, health and environment. BIOL 497G LIMNOLOGY

4 hours
Prerequisites: BIOL 222/223; 224/225; CHEM 222/223. Physical, chemical and biological aspects of bodies of fresh water with emphasis upon water as a biological environment. Lecture, two hours; laboratory, four hours.

## BIOL 500 INTRO TO GRAD STUDY AND RES 3 hours

Introduction to research techniques and experimental design, with an emphasis on on-going research at WKU. Also includes an introduction to research-related resources at WKU.
BIOL 501 BIOLOGICAL PERSPECTIVES 1-4 hours
Designed to acquaint graduate students with advances in the biological sciences and practical applications of biological principles. Lecture, three hours; or lecture, three hours, laboratory, two hours.

BIOL 503 CONTEMP RESEARCH/BIOLOGY
1 hours
Prerequisite: Admission to biology graduate program. Participants will present a research article on a topic of their choice to the class. A critical appraisal of the research approach, methods, results and interpretation of results will be stressed. Requires participation in critical discussions of all presentations. The course may be taken as often as wished but only once for credit toward a degree program.
BIOL 506 ENVIRONMENTAL SEMINAR 1 hour
Designed for future environmental practitioners, this course will provide real world examples of environmental jobs and research projects. The course will impart a broad understanding of environmental science from a multi-disciplinary perspective. Required for the MS Environmental Science emphasis degrees.
BIOL 515 ADV ECOLOGY 3 hours
Prerequisite: BIOL 315 or consent of instructor. Essential dynamic features of plant and animal populations. Covers the theoretical and empirical aspects of single populations, or pairs of interacting populations, and of whole communities. Lecture, three hours.

## BIOL 516 INVESTIGATIONS/BIOLOGY 1-3 hours

Prerequisite: Permission of research project director. Research project completed under faculty supervision. Not applicable to MS thesis option. BIOL 522 SYSTEM/EVOL 1-4 hours
Prerequisites: BIOL 430 or consent of instructor. Study of systematic theory and practice with a focus on current controversies. Taxonomic methods will be evaluated with an emphasis upon the use of taxonomic tools to reconstruct evolutionary relationships. Lecture, three hours; laboratory, two hours. (Fall, even years)

## BIOL 524 EVOL/ECOL GENE 1-3 hours

Prerequisites: BIOL 327 and 430 or consent of instructor. Advanced treatment of natural selection as a mechanism of evolution. Interaction of ecological, behavioral and genetic systems in driving evolutionary change at various levels of organization is emphasized. Lecture, 3 hours; laboratory, 2 hours.
BIOL 526 PHYSIOL ECOL 3 hours
Prerequisites: BIOL 330 or consent of instructor. Study of the physiological adaptations of animals that enhance their survival and/or permit them to exploit extreme environments. Lecture, three hours.

## BIOL 530 ANIMAL BEHAVIOR 1-4 hours

BIOL 531 INTL WILDLIFE MGMT \& CONSERV 3 hours
Basic principles of wildlife management and conservation, including comparative international management models, analysis of population growth of wildlife and of humans, human-wildlife conflicts, harvesting models, and the economic and cultural roles of wildlife in human societies. Designed for grades 8-12 instructors. This course is taught online during the summers based on demand. Students should have completed a course in zoology or the equivalent.
BIOL 543 ENVIRONMENTAL SCI CONCEPTS 3 hours
Explores the inter-relationship among the science and technical disciplines that contribute to our understanding of the environment as a whole. Introduces research methods and core environmental science concepts. Prepares students to examine environmental science questions with an interdisciplinary outlook.
BIOL 560 ADVANCED CELL BIOLOGY 3 hours
Prerequisite: BIOL 411 or equivalent. Lecture-discussion course designed to understand structure and function of differentiated cells of multicellular organisms. Textbook readings, review articles and current research papers will be incorporated into lectures and discussions.
BIOL 562 ADV BIOCHEMISTRY
4 hours
Prerequisites: BIOL/CHEM 446. Survey of metabolic processes relevant to biochemistry and the biological sciences. Topics include bioenergetics, nucleic acid metabolism, protein synthesis and metabolic regulation. Lecture and lab.

## BIOL 566 ADV MOL GENET 3 hours

Prerequisites: BIOL 495 or consent of instructor. Consideration of the molecular mechanisms for replication, gene expression and regulation of development.

## BIOL 568 ADV MICRO BIOLOGY 3 hours

Study of microbial metabolic and genetic diversity, phylogeny and evolution, and ecology, including a consideration of research methodologies applicable to microorganisms. Lecture, three hours; laboratory, two hours.

## BIOL 569 PROF WORK/BIOLOGY 3 hours

Practical experience in a supervised work situation with a cooperative business, industry, or governmental agency, emphasizing application of advanced knowledge and skills in specified areas of biology.
BIOL 570 ADVANCED IMMUNOLOGY 3 hours
Prerequisites: BIOL 328 or consent of instructor. Cellular, biochemical, and molecular mechanisms of the immune response of multicellular organisms. Emphasis is on current scientific literature in the field.

## BIOL 587 ENVIRONMENTAL LAW 3 hours

An introduction to major environmental legislation for air, water, toxic and hazardous pollutants, and related legislative, administrative, and judicial developments. A broad overview of legal practices focused on specific regulatory programs.

## BIOL 589 INTERNSHIP/BIOLOGY 3 hours

Practical experience in a supervised work situation with a cooperative business, industry, or governmental agency, emphasizing application of advanced knowledge and skills in specified areas of biology.

## BIOL 598 GRADUATE SEMINAR

2 hours
Oral presentation on selected topics in biology.
BIOL 599 THESIS RESEARCH/WRITING 1-6 hours (6 total)
BIOL 600 MAINTAIN MATRICULATION 1-6 hours
BIOL 601 INTERNSHIP/COLLEGE INSTR 1 hour
Designed for prospective teachers of biology. Staff direction in preparing and giving lectures. Includes analyses of presentation and techniques. May be repeated.
BIOL 675 IND ADV TOPICS/BIOLOGY
1-3 hours
Selected topics in Biology.
BIOL 799 DOCTORAL RESEARCH
1-6 hours
CD 405G PHONETICS
3 hours
Prerequisites: CD 280, 290. Study of distinctive feature systems that classify consonants and vowels, the definitions of phonological process terminology, and practice in broad and narrow transcription of words and connected speech.
CD 477G AUGMENTATIVE COMMUNICATION
3 hours

## CD 481G SPEECH \& LANGUAGE DEVELOPMENT

3 hours
Introduction to comprehensive child development (Birth 5 -yrs). Topics include development of play, cognition, socialization, and emerging literacy as well as language. Language topics include development of phonology, pragmatics, semantics, syntax, and metalinguistics. Provides a foundation in understanding total child development emphasizing language acquisition.

## CD 482G AUDIOLOGY 3 hours

Prerequisites: CD 280, 290, 330, 381, 485, Sr. status or instructor's permission.
Review basic speech science, ear anatomy, physiology and pathology. Training in auditory testing by speech, pure tone, and bone conduction. Testing techniques for pediatric populations.

## CD 483G ARTICULATION DISORDERS 3 hours

Prerequisites: CD 280, 290, 405, Jr. status. Study of the etiology, evaluation, and management of phonological process proficiency in children. Includes dialectal and bilingual differences. Stresses proficiency in administering protocols and planning therapy using several approaches.

## CD 484G SPEECH ANATOMY/PHYSIOLOGY

## 3 hours

Designed to help students identify the structures and functions which comprise the speech and hearing mechanism. The relation of this mechanism to the production and development of speech and language will be addressed.

## CD 485G DIAG PROCEDURES COMM DIS <br> 3 hours

Prerequisites: CD 280, 290, 347, 381, 405, 481, 484, Sr. status. Focus on assessment using standardized and nonstandardized screening and diagnostic instruments. Development of formal and informal evaluation techniques common to speech pathology/audiology. Overview of data gathering and interpretation regarding communication functions in persons of all ages. Includes multicultural assessment tools and methods.

## CD 486G LANGUAGE DISORDERS

1-3 hours
Identification, diagnosis, and treatment approaches used with language delayed children. Covers current state and federal legislation as related to service delivery models. Evaluation strategies include language sampling and report writing. Treatment approaches based on medical and educational models with emphasis on functional language therapy.

## CD 487G AURAL REHABILITATION 3 hours

Prerequisites: CD 280, 290, 347, 387, Jr. status. Includes terminology, diagnostic procedures (with emphasis on early identification) and habilitation/rehabilitation programs such as manual and total communication for pediatric through geriatric populations.

## CD 488G AUGMENTATIVE COMMUNICATION <br> 3 hours

Focus on terminology and issues in alternative/augmentative communication. Teaches about various nonelectrical and electrical communication aids and techniques with special emphasis on rationale for device selection based on client needs.

## CD 489G GERIATRIC COMM DISORDERS 1-3 hours

Teaches about symptoms, causes, and treatment of speech, language, and hearing disorders in the geriatric population.

## CD 500 RESEARCH METHODOLOGY IN CSD 3 hours

Interpretation of empirical research designs used in the field of speech-language pathology and audiology. Includes understanding the various statistical analysis used to determine research outcomes and their relevance to clinical practice.

## CD 502 MOTOR SPEECH DISORDERS 3 hours

The etiologies, communication characteristics, appraisal and treatment of motor speech disorders in children and adults.

## CD 503 ADV DIAGNOSTIC PROC 3 hours

Teaches in depth assessment, interpretation of results and clinical report writing skills. Focus on identification of pediatric to geriatric persons with communication disabilities in various clinical settings. Addresses assessment in multicultural populations. Elaboration and extension of basic diagnostic skills and techniques.

## CD 504 LANG DISORDERS/CHILDHOOD

3 hours
Topics cover pediatric and adult populations. Discussion focuses on the use of an integrated model of language, reading, writing and aphasia intervention. Discussion of multicultural and bilingual issues.
CD 505 OROFACIAL ANOMALIES 3 hours
Etiology, diagnosis, and management of speech/language dysfunctions associated with cleft palate and other syndromes resulting from neuropathologies.

## CD 506 DYSFLUENCY 3 hours

Literature review of cluttering and stuttering with emphasis on assessment and clinical management of fluency disorders in children and adults.
CD 507 DYSPHASIA 3 hours

Symptomatology, etiology, differential diagnosis, and remediation of adult dysphasia.
CD 508 VOICE DISORDERS 3 hours
Diagnosis and remediation techniques for voice disorders in children and adults. Rehabilitation of the laryngectomee including use of electrolarynx, esophageal speech, and other voice substitutes.

## CD 509 SPEECH SCIENCE 3 hours

Study and review of current research in acoustics, speech production, and speech perception. Emphasis on physiological, acoustical and biomedical recording, measurement and interpretation of speech signals. Includes lab activities with various equipment.

## CD 510 SEMINAR SPEECH PATH

3 hours
Current local, regional, and national issues that impact service delivery by the speech pathologist and audiologist. Includes ethics and requirements for state and American Speech-Language Hearing Association certification and licensure.

## CD 511 NEUROLOGY SPEECH LANG

## 3 hours

Neuroanatomical and physiological development with emphasis on normal reflexes affecting motor and perceptual speech and language patterns. Stresses assessment and treatment procedures in neurologically impaired children and adults.
CD 512 SEMINAR PHONOLOGY
3 hours
Study of phonological process theory and therapy approaches for persons, preschool age through adult, with communication disabilities.
CD 513 ADV NEUROGENICS
3 hours
Designed to develop a working knowledge of neural based communicative disorders, with an emphasis on traumatic brain injury. Students will gain knowledge in identification, assessment and therapeutic strategies of neuroanatomical bases and classification of neurogenic communication disorders following traumatic brain injury.
CD 514 DYSPHAGIA
3 hours

Characteristics, intervention protocols and treatment techniques for individuals with a diagnosis of dysphagia. Case studies and clinical observations of patients with dysphagia will prepare students for clinical placement.

## CD 515 PEDIATRIC AUDIOLOGY 3 hours

Developmental study of hearing function from embryology through early life. Emphasis on audiological testing and techniques from infancy through preschool years. Focus on intervention including amplification and (re)habilitation.
CD 580 CLI DIAGNOSTIC PROC
2 hours
Intensive, advanced, supervised clinical training in non-school settings. Experience provided in assessment and treatment.

CD 589 SPEC TPCS COMM DIS 1-3 hours
Independent but guided inquiry of pre-approved topics in the field of Speech Pathology-Audiology. Not substituted for course offered same term. CD 590 CLINICAL INTERNSHIP 1 hour
Advanced, supervised, clinical practicum that provides varied on campus experiences with clients having more acute communication disorders. Repeat for total of 3 hours; maximum of two allowed in one semester.

## CD 591 CLIN EXTERNSHIP 2 hours

Prerequisite: CD 590, course pass from instructor. Advanced, supervised on-site clinical experience in a variety of settings including schools, private practices, hospitals, rehabilitation facilities, nursing homes and home health agencies. Clinical hours meet ASHA certification requirements. Maximum of two hours per semester.
CFS 520 SEMINAR IN CFS 1-3 hours
Survey of recent developments and present trends conducted in a particular area of the Department of CFS or deemed appropriate by faculty and student demand.
CFS 521 INTERIOR ERGONOMICS I 3 hours
Sociological and psychological factors in interior design-separately, in relationship to each other, and in relationship to other disciplines.

## CFS 522 INTERIOR ERGONOMICS 3 hours

Cultural and anthropometric literature related to interior design; interrelationships between culture and anthropometrics.

## CFS 531 CULTURAL PATTERNS-DRESS $\mathbf{3}$ hours

In-depth analysis of literature and research related to cultural aspects of clothing. Specific cultural emphasis will vary.
CFS 533 FASHION MERCHANDISING 3 hours
Principles, problems, and practices of curriculum, field experiences, and extended classroom activities related to fashion merchandising.

## CFS 535 TEXTILE ANALYSIS 3 hours

Prerequisite: Chemistry. Qualitative and quantitative techniques for physical and chemical analysis of textiles. Planning and conducting textiles analyses and evaluating resulting data.
CFS 536 SEM/INST/HOME ENVIRON 3 hours
Technological, cultural, and educational developments in institutional and home environment. Opportunity to pursue individual interest in specialized areas, e.g., textiles, clothing, merchandising, interior design, housing, foods, home economic education, etc.

## CFS 537 CRIT/DES INVSTG CFS 3 hours

Opportunity to pursue individual interest in specialized areas, e.g., textiles, clothing, merchandising, interior design, housing, foods, nutrition, textiles, home economics education, etc. Critical evaluation of theses and published research.

## CFS 571 SEM IN FCS ED 3 hours

CFS 572 CURR DEV FCS ED 3 hours
Curriculum trends in family and consumer sciences education and curriculum development in specialized fields of family and consumer sciences.
CFS 573 EVAL FCS ED 3 hours
Theory and techniques of evaluation in family and consumer sciences education at different levels. Analysis and refinement of instruments; interpretation of results of self-evaluation; and effective administration of programs.

## CFS 574 SUPERVISION FCS ED 3 hours

Prerequisite: Teaching experience, advanced courses, and consent of instructor. Theory, principles, and techniques of preservice and inservice training of teachers in family and consumer sciences. Emphasis on preparation of supervisory materials and evaluation.

## CFS 575 IND STUDY CFS

3 hours
Evaluation of family and consumer sciences investigations. Includes planning and completing an individual study of limited scope.

## CFS 577 CHILD DEVELOP RESEARCH 3 hours

Analysis of current theories and research relevant to the development of social perceptual-cognitive, and physical-physiological processes in children.
CFS 580 INTERNSHIP 3 hours
Prerequisite: Approval of instructor. A field practicum in foods and nutrition, textiles and clothing, interior design, or home economics education. Assignments are made to approved private and public agencies/facilities.
CFS 582 SENSORY QUALITIES/FOOD 3 hours
Principles and methodologies in sensory evaluations of foods; collection, analysis and presentation of sensory data; focuses on determinants of quality in foods.
CFS 583 HUMAN RESOURCES/FOOD SYS 3 hours
Identification of personnel needs by skill levels; planning and evaluation of personnel programs in food systems; training applicants for optimum utilization of human resources.

## CFS 584 COMMUNITY NUTRITION 3 hours

Prerequisite: CFS 111, 261, or consent of instructor. Analysis of literature and research related to nutritional problems facing patients returning to home and community; analysis of community resources that assist with specific problems. (Lecture, field trips and lab)

## CFS 585 NUTRITION/ELDERLY 3 hours

Analysis of literature and research related to nutritional problems of the elderly; analysis of resources that assist them with their specific
problems. (Lecture, field trips, and lab)
CFS 598 SP TOPICS CFS 1-6 hours
Prerequisite: Consent of instructor.
CFS 599 THESIS RESEARCH/WRITING 1-6 hours (6 total)
CFS 600 MAINTAIN MATRICULATION $\quad \mathbf{1 - 6}$ hours
CHEM 412G INTRO PHYSICAL CHEMISTRY 1-5 hours
Prerequisites: CHEM 330, MATH 118.Chemical principles involved in thermodynamics, kinetics, molecular structure, and other topics using biological examples. Specifically for secondary education students and those students not qualifying for the CHEM 450-452 sequence. Lecture, 3 hours; lab, 2 hours. Lab meets 4 + hours per week. (Not applicable to MS degree.)
CHEM 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.
CHEM 425G POLYMER CHEMISTRY 4 hours
Prerequisites: CHEM 342-343 and CHEM 330 with grade of C or better. The principles of polymer chemistry. Lecture topics include molecular weights, morphology, mechanisms, kinetics, characterization, and uses of polymers by free radical and ionic methods in their characterization by thermal analysis, spectroscopy, viscometry, and chromatography.

CHEM 430G FORENSIC CHEMISTRY
3 hours
Methods and instrumentation used in the crime laboratory and in the medical technology laboratory. Topics include drugs, blood enzymes, organic and inorganic analysis, etc.

## CHEM 435G ANALYTICAL CHEMISTRY 1-4 hours

Prerequisites: CHEM 452-453. Modern instrumental methods of analysis including spectroscopic, electroanalytical and chromatographic techniques.

## CHEM 440G INTRO TO SYN ORG METHODS 3 hours

Pre-requisites: CHEM 342 with grades of C or better and graduate standing. An advanced course designed to address a broad spectrum of topics including an overview of the year-long organic chemistry sequence and a systematic treatment of modern synthetic organic chemistry focusing on basic reactions and methodologies.
CHEM 441G ADVANCED ORGANIC CHEMISTRY 3 hours
Pre-requisites: CHEM 342 with grades of C or better and graduate standing. An advanced course in physical organic chemistry including advanced spectroscopic methods, molecular orbital theory, and methods of mechanistic elucidation.
CHEM 446G BIOCHEMISTRY
3 hours
See Biochemistry.
CHEM 447G LAB BIOCHEMISTRY 2 hours
See Biochemistry.
CHEM 450G PHYSICAL CHEMISTRY I 3 hours
A study of theoretical chemistry, including such as gaseous state, solid state, liquid state, thermodynamics, thermochemistry and phase and chemical equilibria.
CHEM 451G LAB PHYSICAL CHEMISTRY I 2 hours
A laboratory to accompany CHEM 450G and includes experiments on state of matter, surface phenomena, macromoleules, thermochemistry, thermodynamics and equilibria. Pre-lab lecture and laboratory meets four and one-half hours per week.

## CHEM 452G PHYSICAL CHEMISTRY II 3 hours

A continuation of CHEM 450G including studies of kinetics, atomic and molecular structure, theory of chemical bonding, electromotive force and selected topics.

## CHEM 453G LAB PHYSICAL CHEM II 2 hours

A laboratory to accompany CHEM 452G and includes experiments on chemical kinetics, spectroscopy, molecular structure, electrochemistry and mass spectroscopy. Pre-lab lecture and laboratory meets four and one-half hours per week.
CHEM 462G BIOINORGANIC CHEMISTRY 3 hours
See Biochemistry.
CHEM 467G BIOCHEMISTRY 3 hours
See Biochemistry.
CHEM 470G CHEMISTRY/MIDDLE SCHOOL 4 hours
Prerequisite: CHEM 108, or CHEM 123, or permission of instructor. Chemical theories and principles in the middle school science curricula. (Elective credit only)
CHEM 475G SELECTED TOPICS CHEM 1-3 hours
Topics in analytical, biochemical, coal, inorganic, organic, physical and polymer chemistry. May be repeated with different topic.

## CHEM 476G LAB ADV INVEST CHEMISTRY 2 hours

Prerequisite: CHEM 314, or 343. A course for advanced students involving assigned laboratory work in the field of inorganic chemistry. Typical procedures and experiments are those involving the synthesis, characterization, and identification of various chemical compounds, using a variety of handling techniques, and the application of various physical methods.

## CHEM 490G MATERIALS CHEMISTRY

3 hours
Prerequisites: CHEM 412 or CHEM 452 or CHEM 330.
A study of the three major classes of materials, metals, polymers, and ceramics. Topics discussed will include chemical composition, bonding, common chemical and physical properties, microstructures, and how processing and uses are affected by chemical and physical properties.

## CHEM 491G MATERIALS CHEMISTRY LABORATORY 3 hours

Prerequisite: CHEM 412 or CHEM 452 and CHEM 330
A laboratory course in materials that includes experiments on liquid flow, solid deformation, thermal properties, electrical conductivity of materials, microscopy, diffraction techniques, processing and testing of shaped articles.
CHEM 500 FUND/CHEMISTRY 3 hours

Prerequisite: Undergraduate minor in chemistry. Fundamental principles, theories, and laws of chemistry. (Not applicable to the MS degree)

## CHEM 502 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)

## CHEM 506 CHEMICAL ENVIRONMENTAL SEMINAR 3 hours

Designed for future environmental practitioners. This course will provide real world examples of environmental science jobs and research projects. The course will impart a broad understanding of environmental science from a multi-disciplinary perspective. Required for the MS environmental Science emphasis degrees.
CHEM 516 LAB INVESTIGATIONS CHEM 1-3 hours
Review of chemical literature on topics of individual interest. Includes reports and proposals for further research.
CHEM 520 ADV INORGANIC CHEMISTRY 3 hours
Prerequisites: CHEM 420, 452, or equivalent. Various aspects of coordination chemistry.
CHEM 521 ADV INORGANIC CHEM II 3 hours
Prerequisite: CHEM 520, or permission of instructor. Current theories of inorganic reaction mechanisms.
CHEM 531 ADV ANALYTICAL CHEMISTRY 3 hours
Prerequisite: CHEM 435, or permission of instructor. Survey of selected topics in modern instrumental methods of chemical analysis. Includes instrumental techniques not covered in CHEM 435.
CHEM 540 ORGANIC REACTIONS 3 hours
Prerequisite: Permission of instructor. Modern synthetic methods used in organic chemistry.
CHEM 541 ADV ORGANIC CHEMISTRY 3 hours
Prerequisites: Org CHEM 342, and Phys CHEM 452. Modern physical-organic chemistry including bonding, stereochemistry, reaction mechanisms, concerted reactions, photo-chemistry, and free-radical reactions.

## CHEM 543 ENVIRONMENTAL SCIENCE CONCEPTS 3 hours

Prepare students to enter into the study of environmental sciences at a graduate level. Research methods and core environmental science concepts. Students examine science questions with an interdisciplinary outlook and work in research teams.

## CHEM 550 ADV PHYSICAL CHEMISTRY 3 hours

Prerequisite: CHEM 452, MATH 227, or equivalents. Covers thermodynamics, kinetics and molecular structure in preparation for graduate study or research.
CHEM 551 ADV PHYSICAL CHEM II 3 hours
Prerequisite: CHEM 550 or equivalent. Continuation of basic physical chemistry concepts. Further study in the areas of thermodynamics, kinetics, and molecular structure at the graduate research level.

## CHEM 562 ADVANCED BIOCHEMISTRY 4 hours

See Biochemistry.
CHEM 569 INTERNSHIP/CHEMISTRY 3 hours
Practical experience in a supervised work situation with a cooperating business, industry, or governmental agency. Emphasizes application of knowledge and skills in chemistry.
CHEM 570 LAB LECTURE/DEM TECH 3 hours
Prerequisite: CHEM 452 or permission of instructor. The design and operation of meaningful lecture demonstrations in chemistry.
CHEM 580 LAB CHEMICAL 3 hours
Skills in the use of the library, glass working, and the laboratory. May be used to satisfy the research tool requirement.

## CHEM 581 SPECTROSCOPY 3 hours

Prerequisites: CHEM 342 and 452 or CHEM 550. Application of nuclear magnetic resonance, ultraviolet, infrared and mass spectrometry to solving chemical structures.
CHEM 586 ADVANCED MATERIALS CHEMISTRY 3 hours
Prerequisites: CHEM 412 OR CHEM 452 OR CHEM 330 or equivalent or CHEM 490G/491G. Lecture and laboratory activities designed to highlight the role of chemistry in the design, preparation and processing of advanced materials. Through characterization of advanced materials students learn advanced methods and technologies in development of functional materials for different applications.

## CHEM 587 ENVIRONMENTAL LAW 3 hours

CHEM 589 INTERNSHIP/CHEMISTRY II 3 hours
Practical experience in a supervised work situation with a cooperating business, industry, or governmental agency. Emphasizes application of knowledge and skills in chemistry.
CHEM 590 COAL CHEMISTRY 3 hours
Prerequisites: CHEM 342, 452, or equivalent. Extensive survey of coal science topics including the geological and chemical aspects of coal formation, as well as coal resources, handling, conversion, and utilization. The organic chemistry and reactivity of coal in combustion and conversion processes will be emphasized.

## CHEM 591 LAB COAL CHEMISTRY 3 hours

Prerequisite: CHEM 330, or equivalent. Analytical chemistry of coal including coal sample preparation, characterization, and analysis will be studied. Analyses as specified by the American Society for Testing and Materials (ASTM) will be emphasized. Recent developments in methods and instrumentation used in coal analysis will be studied.

## CHEM 596 COOPERATIVE RESEARCH 11 hours

Prerequisite: Student must have completed one academic year of course work in Chemistry. Research at a cooperating laboratory leading to a thesis in chemistry.

## CHEM 597 COOPERATIVE RESEARCH 11 hours

Prerequisite: Student must have completed one academic year of the course work in Chemistry. Research at a cooperating laboratory leading to a thesis in coal chemistry.
CHEM 598 GRADUATE SEMINAR 0.5 hours
Required each semester for all MS Chemistry students. Attendance is required of all full-time graduate students.
CHEM 599 THESIS RESEARCH/WRITING $\mathbf{1 - 6}$ hours ( 6 total)
CHEM 600 MAINT MATRIC 1-6 hours
CHEM 799 DOCTORAL RESEARCH/CHEM 1-6 hours
CIS 516 BUSINESS COMPUTER APPL 3 hours
CNS 550 INTRO TO COUNSELING 3 hours
The history and overview of the counseling profession, current trends and settings for counselors. Professional roles and functions, including school counselors, professional counselors, and marriage and family therapists. Introduction to professional organizations, legal and ethical issues, and certification and licensure issues.
CNS 551 CLASSROOM GUIDANCE 3 hours
Basic guidance concepts such as encouragement, communication, self concept, discipline, and understanding students within the classroom setting will be presented with practical approaches in working with students.

## CNS 552 TESTING \& ASSESSMENT 3 hours

Methods, techniques, statistics, and instruments used in assessing and evaluating individuals, couples, families, and groups; administering, scoring and interpreting both objective and subjective instruments used in counseling. Survey of research design and statistics. Computer utilization in counseling and use of data in decision making.
CNS 553 COMM RESOURCES IN CNS
3 hours
Surveys social agencies, both public and private, with which counselors and those in the helping field should be familiar. An analysis of the referral process and the utilization of these resources with the clientele with which one works.

## CNS 554 GROUP COUNSELING 3 hours

Dynamics of group development. Group counseling theories, leadership styles, group counseling methods and skills. Interpersonal and relationships in the family system and other small group settings. (limited class size)
CNS 555 SOCIAL AND CULTURAL DIVERSITY 3 hours
Philosophical, sociological, developmental, and emotional understanding of multicultural education and counseling as they relate to working with individuals in schools, universities, and other human service settings.

## CNS 556 DEVELOPMENTAL CAREER CNS 3 hours

Integrates the career counseling process into the life span from early childhood through older adulthood. Career development theories; career assessment instruments; educational resources; placement; follow up and evaluation. Interrelationships among work, martial, family, and other life roles including multicultural and gender issues.

CNS 557 HUMAN \& FAMILY DEVELOPMT
3 hours
Understanding of the nature and needs of normal and abnormal individuals in the family system at all developmental levels emphasizing moral, intellectual and ethical development. Counseling strategies in the complex developmental relationships among individuals in the family system. Counseling in the life cycle of the family.
CNS 558 COUNSELING THEORY/PRAC 3 hours
Philosophic bases of the helping processes; major contemporary counseling theories and their application in individual and group counseling and in family systems counseling.
CNS 559 TECHNIQUES/COUNSELING 3 hours
Prerequisite: CNS 558. Focus on the development of basic and advanced counseling skills and procedures. Refinement of the skills needed in providing counseling intervention.
CNS 560 PROF ST/CNS/MARRIAGE/FAM 3 hours
Historical, philosophical, and societal dimensions of professional counseling and marriage and family therapists in relationship to life style diversity. Legal and ethical issues in professional counseling and marriage and family therapy.
CNS 561 COUNSELING CHILDREN
3 hours
Theories and techniques of developmental counseling with children.
CNS 562 COUNSELING ADOLESCENTS 3 hours
Theories and techniques of developmental counseling with the teenage population.
CNS 563 COUNSELING ADULTS 3 hours
Developmental issues of adulthood. An integration of personal, social, and career counseling with the adult population.

## CNS 564 COUNSELING THE ELDERLY 3 hours

Major problems individuals experience relative to or as a consequence of growing older. Basic communication and counseling skills needed to work with the elderly.
CNS 565 ELEMENTARY GUIDANCE SYS 3 hours
The organization, administration, and delivery of guidance and career services in the elementary school.

## CNS 566 SECONDARY GUIDANCE SYS $\mathbf{3}$ hours

The organization, administration, and delivery of guidance and career services in the secondary school.
CNS 567 MENTAL HEALTH DIAG \& TREAT
3 hours
Prerequisite: CNS 558. The identification, treatment plans and referral procedures for emotional concerns across the life span in the mental health counseling field. Principles of etiology, diagnosis, treatment planning and prevention of mental and emotional disorders and dysfunctional behavior.
CNS 568 COUNSELING CHILDREN/ADOLES 3 hours
Theories and techniques of developmental counseling with children and adolescents. Topics include: self-concept, social skills, values, moral development, multicultural awareness, child abuse, drug abuse, wellness, and sexual development.

## CNS 570 WORKSHOP IN COUNSELING 1-6 hours

Workshop dealing with special problems of current topics in counseling. (May be repeated with a different topic for a maximum of 6 hours.)

## CNS 571 INTRO/STUDENT AFFAIRS 3 hours

History, philosophy, and development of student services. Includes testing and counseling, financial aids, housing, admissions and records, placement, etc.

## CNS 572 AMERICAN COLLEGE STUDENT 3 hours

CNS 573 LEADERSHIP/STUDENT AFFRS 3 hours
Prerequisite: Completion of CNS 571 or concurrent enrollment in CNS 571. The essentials of effective leadership in Student Affairs will be examined. Major topics will include organizational and leadership theory, planning and decision making strategies, conflict resolution, managing change, and the use of groups and group dynamics within a Student Affairs context.

## CNS 574 STDT DEVELOP/HIGHER ED 3 hours

Prerequisite: Completion of CNS 571 or concurrent enrollment in CNS 571. This course will examine the developmental processes that impact college students. Major topics will include a discussion of various theoretical models, sociocultural foundations, developmental program designs, and assessment techniques and implications.
CNS 575 ADMIN/STUDENT AFFAIRS 3 hours
Prerequisite: 6 hours in Student Affairs including CNS 571. The essentials of sound administrative management in Student Affairs will be discussed. Major topics will include policy development, legal considerations, personnel selection, supervision, training and evaluation, collective bargaining, budgeting and financial concerns, governmental policy implications, and information management systems.

## CNS 576 TECHNOLOGY/STUDENT AFFRS 3 hours

The uses of technology for forecasting, budgeting, program planning, communication, policy analysis and resources allocation in Student Affairs will be explored. Automated information systems will be discussed extensively in terms of student affairs applications.

## CNS 577 COUNSELING FOR S.A. PROFESSION 3 hours

Basic counseling concepts and applications essential for effective student affairs practice. Restricted to Student Affairs majors.

## CNS 578 SP TOPICS/STDT AFFAIRS 3 hours

CNS 579 SEMINAR/STUDENT AFFAIRS 3 hours
This research oriented, discussion course is designed to focus on current issues and practices in Student Affairs.
CNS 580 FAMILY LIFE STUDIES 3hours
General philosophy and broad principles of family life education of the counselor and teacher. Issues of gender, ethnicity, sexism and gender role stereotyping and their impact on the individual family member as well as the family system.

## CNS 581 INTERNATIONAL STUDENT SERVICES

3 hours
Explores international students needs and interests and global issues confronting higher education. Focuses on increasing student intercultural awareness as a foundation for student services (domestic and abroad) and study abroad.

## CNS 582 SEX THERAPY 3 hours

Counseling skills and intervention techniques for counselors in training who will be working with couples and individuals with a broad range of sexual concerns.
CNS 583 MARRIAGE THERAPY 3 hours
Prerequisite: 12 hours of counseling courses including CNS 580. Knowledge, skills, and techniques of couples therapy including pre-marriage, marriage and divorce.

## CNS 584 CNS IN VIOLENT \& DIS FAM 3 hours

Analysis of incidence and patterns of violence against children, adolescents, adults, and elders; motivational factors regarding perpetrator and victims. Counseling and helping strategies for working with family members and the abused victim in counseling and school setting.

CNS 586 PARENTING ISSUES 3 hours
Changing roles and responsibilities of parents, child-rearing practices, diverse parenting situations and decision making about parenthood. Changing family system and effects of family system on parenting. Provide skills in working with parents and parenting issues for both educators and counselors.

## CNS 588 FAMILY SYSTEMS CNS 3 hours

The historical development of systems theory will orient the student to theoretical content of human interactions. Students will be helped to think systemically about human issues by focusing on the systems paradigm. Skill development in family system counseling will be developed.

## CNS 590 PRACTICUM

## 3 hours

Prerequisite: 15 hours in counseling courses including the following courses: CNS 550, 554 and 558 . Supervised experiences in a setting related to area in which individual plans to seek certification/employment.

## CNS 591 MHC/MFT PRACTICUM <br> 3 hours

Prerequisites: CNS 554 and CNS 558 and CNS 559. Description: Supervised experiences in a setting related to the area in which the individual plans to seek licensure, certification or employment. Course is graded Pass/Fail/IP. There is a $\$ 5.00$ fee.

## CNS 595 INTERNSHIP 3-6 hours

Prerequisite: CNS 590. Supervised experience in school, community, and agency settings.
CNS 596 MHC/MFT INTERNSHIP 3-9 hours
Prerequisites: CNS 591. Supervised experiences in a setting related to the area in which the individual plans to seek licensure, certification or employment. Course is graded Pass/Fail/IP. There is a $\$ 5.00$ fee.

## CNS 599 THESIS RESEARCH/WRITING 3-6 hours ( 6 total) <br> CNS 637 THEORIES OF ADDICTIONS 3 hours

Prerequisites: Admission to or completion of approved graduate program in helping profession, and instructor's permission. This course involves introduction to theoretical, philosophical and historical premises of addictions. Topics include professional ethics, diversity, family roles and relationships, and dual diagnosis.
CNS 647 ADDICTIONS ASSESS \& DIAGNOSE 3 hours
Prerequisites: Admission to or completion of approved graduate program in a helping profession, and instructor permission. This course involves the selection, administration, and interpretation of assessment methods and techniques used to diagnose addiction disorders, as well as the development of appropriate treatment plans and issues involved in treatment planning.
CNS 651 READINGS CONTEMP CNS 3 total

Significant books and research articles related to counseling theory, theory application, and innovative techniques.
CNS 652 IND RESEARCH/COUNSELING
1-3 hours
Research problems relating to the organization and administration of counseling programs. May be repeated once with a different topic.
CNS 653 BRIEF COUNSELING 3 hours
Prerequisites: Admission to or completion of approved graduate program in a helping profession and instructor permission. Introduction to theoretical, philosophical, and historical premises of brief counseling. Topics include professional ethics, diversity, application to various clinical populations, and utilizations of best practices that meet the changing state of mental health care.

## CNS 654 EDUC INTELLECT ANALYIS 3 hours

Administration and interpretation of standard mental and aptitude tests as tools of educational and occupational guidance.

## CNS 655 ADV APPRAISAL/CHILDREN 3 hours

Prerequisites: CNS 552 and 654, or equivalents. Continuation of CNS 654 designed to increase administration-interpretation skills in individual appraisal process.
CNS 658 SEM GUIDANCE/COUNSELING 3 hours
Presentation and discussion of research in guidance and counseling. Emphasizes theoretical and practical criticism of relevant studies in the field.
(May be repeated with a different topic for a maximum of 6 hours.)

## CNS 660 ORG ADM GUID SERVICES 3 hours

Administration of human services in counseling including justification of services, staffing, facilities, budget, etc.

## CNS 661 INTRO TO REHAB COUNSELIN $\mathbf{3}$ hours

Basic counseling procedures appropriate to rehabilitation; history, settings and functions of the counselor.
CNS 662 SEM DISABILITY/REHAB CNS 3 hours
Topics include contemporary issues such as supported employment, independent living, client rights, ethical issues and future trends.
CNS 666 LEGAL ETHICAL ISS IN CNS
3 hours
Course provides opportunities for mental health providers to make decisions of an ethical nature about people and deal with possible legal actions that result.
CNS 667 CNS SUBSTNCE ABUSE 3 hours
Counseling issues related to substance abuse diagnosis, treatment and aftercare program.
CNS 669 SP TOPICS CNS/GUID
1-3 hours
May be repeated with a different topic for a maximum of 6 hours.

## CNS 670 PARAMETERS OF LAW/STUDENT AFF $\mathbf{3}$ hours

Survey of legal issues, cases and concepts; the responsibilities of student affairs administrators to act within the law; and the rights of faculty, staff and students in higher education.

| CNS 699 | IND SPECIALIST PROJECT | 1-6 hours ( $\mathbf{6}$ total) |
| :--- | :--- | :--- |
| CNS 700 | MAINTAIN MATRICULATION | $\mathbf{1 - 6}$ hours |
| COMM 443G | PERSUASION IN CONTEM SOC | 3 hours |

COMM 443G PERSUASION IN CONTEM SOC 3 hours
Contemporary persuasion in areas such as business, law, politics, religion, and social movements; types of persuasion ranging from speeches to entertainment forms such as music and cinema.
COMM 447G STUDIES IN PUBLIC COMM

## 3 hours

A study of effective examples of public communication in American history.

## COMM 460G INTERVIEWING

3 hours
This course is designed to provide the student with a comprehensive overview of principles and methods suited to oral, one-on-one information gathering in an organizational setting. Practice both in and out of the classroom will be stressed.

## COMM 461G ORGANIZATIONAL COMM 3 hours

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

## COMM 463G INTERCULTURAL COMM 3 hours

This course is designed to create an understanding of dimensions of communication theory that apply across cultural boundaries. Emphasis is placed on both theoretical and practical awareness of communication in and between cultures.

## COMM 474G GENDER COMM

3 hours
Examination of communication behaviors as affected by gender, including assessment of communication differences reflected in organizational, interpersonal, and mass communication modes.

## COMM 495G IND STUDY/COMMUNICATION

3 hours
Directed research in communication. Students are to submit written petitions for faculty approval of the study during the previous semester.

## COMM 500 SPEECH COMM INTERNSHIP 3 hours

COMM 501 QUAL MTH COMM RES
3 hours
Study of traditional and contemporary non-quantitative methods of examining communication events and phenomena. (Required)
COMM 502 SURVEY RES MTH COMM 3 hours
Study of survey research design and implementation as typically used in organizational communication research. Includes general overview of the scientific method and the relationship of survey research to other research methodologies along with statistical procedures and software for analyzing survey data. (Required)
COMM 503 FOUNDATIONS OF COMM
Major concepts and issues which characterize the discipline. (Required)
COMM 504 ETHNO METHODS COMM RES
3 hours

3 hours
COMM 510 STRAT FOR TCH SPEECH COM 3 hours
Designed to improve the teaching performance of COMM graduate assistants in teaching the basic public speaking courses.
COMM 521 EVALUATION OF MASS COMM 3 hours
COMM 522 SEM IN MASS MEDIA ETHICS 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.
COMM 525 INTERPERS SUPPORT/WORKPLACE 3 hours
Study of interpersonal communication theories and processes specific to promoting a supportive work environment. Special attention is given to exploring how interactional dynamics may shift when communicating with individuals with distinctive life circumstances (e.g., experience of loss and cultural differences) and physical conditions (e.g., health problems and disabilities.)

## COMM 540 SEM IN RHET \& PUB ADDRES 3 hours

COMM 542 PRA IN COMM CONSULTING 3 hours
Practical off-campus experience in the actual development, implementation, and evaluation of communication programs in organizations.
COMM 543 CONTEM METH OF RHET CRIT 3 hours
COMM 544 PERSUASIVE COMM 3 hours
How persuasion works across the dimensions of the communication process: one-to-one, small group, public, and mass communication.
COMM 546 SEMINAR IN FORENSICS 3 hours
COMM 549 RHETORIC THEORY \& CRIT 3 hours
COMM 551 EMPLOYEE COMMUNICATON 3 hours
Prerequisite: Graduate Standing. Study of employee communication in the modern organization. Covers topics such as measurements of organizational communication effectiveness and the relationship among factors such as communication, moral and productivity.
COMM 560 SEM IN ORANIZA COMM 3 hours
COMM 561 MULTINAT. BUSINESS COMM 3 hours
This course provides an in-depth study of internal and external communication behaviors in business organizations operating in multinational environments.

## COMM 562 SPL TOPICS INTC COMMUNIC 3 hours

Provides graduate students an opportunity for an in-depth study of special topics in intercultural communication. One or two topics will be chosen for study during the course. These topics will be selected by the instructor based on special availability of resources, appropriateness for current intercultural conditions, and interest of students.
COMM 563 ISSUES MANAGEMENT
A study of issue identification, issue analysis, issue change strategy options, and issue action programming with particular emphasis upon the role of communication in issue management.
COMM 564 CRISIS COMMUNICATION 3 hours
Role of communication in crisis prevention, crisis readiness and crisis resolution.
COMM 565 COMM \& CONFLICT 3 hours
Study of communication as it relates to conflict in interpersonal, group, organizational, and intercultural settings.
COMM 566 CORPORATE \& ORG ADVOCACY 3 hours
Historical overview of corporate and organizational advocacy in the 20th century focusing on the communication process used in corporate advocacy.
COMM 569 VAL \& LDRSHP IN ORG COM 3 hours
Study of communication as it relates values, leadership, and uses of power in such organizational contexts as business, professional, social, educational and political groups.

## COMM 570 SEMINAR IN COMM 3 hours

COMM 571 COMPUTER MEDIATED COMMUNICATIO 3 hours
Introduces students to communication technologies (specifically electronic mail, groupware, decision support systems, and intranet technologies) within organizations. Stresses the social and communicative impact of these technologies on organizational shareholders such as employees and customers.
COMM 572 NONVERBAL COMMUNICATION 3 hours
Theory and research in nonverbal communication. Topics will include body language, vocalics, and use of space, time, touch, and artifacts in communication.
COMM 576 PRIN OF SMALL GRP COMM 3 hours
The dynamics of communication and interaction occurring in small groups.
COMM 578 SEM INTERPERSON COMM
3 hours
Examination of professional literature and basic research in interpersonal communication.
COMM 581 APPLIED ORG COMMUNICATION 3 hours
Provides opportunities for students to apply theoretical concepts to various functions of organizational communication in industry and corporate contexts.
COMM 586 PROCESSES OF GROUP COMM 3 hours
Practice in the group communication processes that lead toward successful team work in organizational contexts.

## COMM 587 COMM IN IC NEGOT/MEDIAT 3 hours

Role of communication in intercultural negotiation and mediation processes. Addresses cultural factors and negotiation techniques in crosscultural conflict situations.

## COMM 595 IND STUDY IN COMM 3 hours

Permits students to conduct individualized communication research in an area of their interest.
COMM 599 THESIS RESEARCH/WRITING 1-6 hours (6 total)
COMM 600 MAINTAIN MATRICULATION 1-6 hours
CS 405G NUMERICAL ANALYSIS I 3 hours
Prerequisites: MATH 307or 310 or 327; and CS 230 or CS 240 or permission of instructor. Crosslisted with Math 405G.

## CS 406G NUMERICAL ANALYSIS II 3 hours

Prerequisites: MATH 307, 327 and 331; and either MATH 405 or CS 405. Crosslisted with Math 406G.
CS 442G DATA STRUCTURES
3 hours
Prerequisite: CS 338.Arrays, lists, trees, storage and file structures, sorting and searching techniques, dynamic storage allocation and garbage collection algorithms, structures, pointers, bit and character strings, list processing, recursive programming for tree processing.

## CS 443G DATA BASE MGT SYSTEMS

3 hours
Prerequisites: CS 338 and CS 360 or equivalent. Design and implementation of data base management systems; data organization and management; survey of several systems; assigned projects will require use of several established systems. Credit will not be given for CS 443 or CS 443G once credit has been received for CS 543.

## CS 444G PROGRAMMING LANGUAGES 3 hours

Prerequisite: CS 242, and permission of instructor. Survey of procedure-oriented and special-purpose languages. Emphasis on the syntactic and semantic structures present in these languages.
CS 445G OPERATING SYSTEMS II 3 hours
Prerequisite: CS 425. Examination of how an operating system sits on a computer architecture. Student will use the privileged instruction set of a specific architecture to write their own simple operating systems or operating system modules. Also, theory of bootstrap loading, memory protection and management, etc.

## CS 446G INTERACTIVE COM GRAPHICS 3 hours

Prerequisites: CS 338, MA 307. Elementary topics in interactive computer graphics. Includes both input and display devices and techniques for 2 D and 3-D transformations, as well as difficulties encountered in these areas. Computing assignments will emphasize interaction, data structures, and applications to various disciplines.

## CS 450G COMPUTER NETWORKS 3 hours

Prerequisite: CS 340 or equivalent. Basic networking concepts, network life cycle, transmission media/control, design models and issues, Internet working, hardware/software, applications. Credit will not be given for CS 450 or CS 450 G once credit has been received for CS 550 .

## CS 456G ARTIFICIAL INTELLIGENCE 3 hours

Prerequisites: CS 338, 360. Problems having no plausible algorithmic solution, their computer representations and solutions which usually involve heuristics.

## CS 460G SOFTWARE ENGINEERING II 3 hours

Prerequisite: CS 360 or equivalent. Examination of critical theoretical problems underlying software engineering, including the rigorous treatment of software metrics, cost-estimating, object-oriented design, real time systems, etc.

## CS 475G TOPICS/COMPUTER SCIENCE 1-3 hours

Prerequisite: Permission of instructor. Significant problems and developments in computer science. May be repeated for 6 hours.
CS 476G RESEARCH METH/COMP SCI 3 hours
Prerequisite: CS 360.Analysis and design of computer based systems. Design techniques are applied in one or more large-scale programs requiring attention to documentation, communications, and interfacing of modules in a team project. May be repeated for 6 hours.

## CS 541 MATH FOUND/COMP SCI <br> 3 hours

Topics of fundamental importance to computer science, including languages, finite automata, grammars, and Turing machines. CS 543 COMP INFO SYS DESIGN

## 3 hours

Prerequisite: CS 443 or equivalent. Systems organization, design, and implementation. Physical and logical file organization methods and access techniques. Alternatives in system design and implementation. Group projects include design and implementation of a data base system. Credit will not be given for CS 443 or CS 443G if taken after CS 543.

## CS 544 COMPILER THEORY/DESIGN 3 hours

Prerequisite: CS 444. Formal properties of programming languages and the techniques used to construct compilers for these languages. Topics include parsing techniques, symbol table construction, code generation, etc. Class will complete a programming project.

## CS 545 ADV OPER SYSTEM PRIN 3 hours

Prerequisite: CS 445. Theoretical and practical material on operating systems. Examines system optimization, resource protection, multiprocessing, performance evaluation, and existing operating systems. The student develops a small operating system.

## CS 549 ANALYSIS OF ALGORITHMS 3 hours

Prerequisite: CS 338. Methods (algorithms) for solving a variety of problems on computers and the relative efficiency of these algorithms.

## CS 550 ADV COMPUTER NETWORKS 3 hours

Prerequisites: CS 450 or equivalent. Advanced study of network protocols and algorithms, high speed networks, design models, design issues, distributed network systems, real time networks, and applications. Credit will not be given for CS 450 or CS 450G once credit has been received for CS 550 .
CS 562 PARALLEL AND DISTRIBUTED COMP 3 hours
An introduction to parallel and distributed computing. The development, implementation, and analysis of parallel algorithms will be studied.
CS 567 MICROCOMPUTER OPER SYS
3 hours
Prerequisite: CS 425. System-level study of the most popular micro-computer operating systems including memory and disk space management; interrupts; and system services. System utility programs will be developed.
CS 595 ADV TOPICS/COMP SCI
1-3 hours
Prerequisite: 9 hours of CS and permission of instructor. Significant problems and current developments in computer science. May be repeated with a different topic for a maximum of 6 hours.

| CS 599 | THESIS RESEARCH/WRITING | $\mathbf{1 - 6}$ hours ( $\mathbf{6}$ total) |
| :--- | :--- | :--- |
| CS 600 | MAINT MATRICULATION | $\mathbf{1 - 6}$ hours |
| ECON 400 G | ISSUES/CAPITAL MKT ECON | $\mathbf{3}$ hours |

## ECON 400G ISSUES/CAPITAL MKT ECON 3 hours

Exposure to current economic theory and evidence related to capital markets with emphasis on public policy, the interplay with the macroeconomy, stock price variability, internationalization, and other related topics.

## ECON 410G SEMINAR/ECONOMICS <br> 1-3 hours

Special topics in economics of current interest.
ECON 420G PUBLIC FINANCE
3 hours
A study of the economic effects of taxation and government spending. Topics include types and incidence of various taxes, policy objectives of taxes and spending, and related issues.

## ECON 430G ENV \& RESOURCE ECONOMICS

3 hours
Study of environmental issues and natural resource problems and solutions. Topics include measurements of environmental benefits, property rights, externalities, environmental quality, pollution control, and solid waste management.

## ECON 434G ECON OF POVERTY \& DISCR 3 hours

Study of the economic nature, origins, and public policy aimed at addressing poverty and discrimination in the economy. Topics include social security, food stamps, and equal employment opportunity.

## ECON 440G AM INDUS/STRUC/PERFORM 3 hours

Applications of microeconomics to the structure, behavior, and performance of American industry in view of public and private social goals. Coverage includes public policy toward monopoly.

## ECON 460G BUS/ECONOMIC FLUCTUATION 3 hours

Prerequisites: ECON 206 and 303. A study of the causes, patterns of development and consequences of economic fluctuations in a modern industrialized economy. Emphasis is placed on macroeconomic techniques of cycle analysis to determine the dynamic time path of income, output and employment.

## ECON 464G MATHEMATICAL ECONOMICS 3 hours

The application of mathematics to economic analysis covering functions, optimization techniques, differential and difference matrix algebra, and game theory.
ECON 465G REGRESSION \& ECONOMETRIC 3 hours
Presents the use of statistical methods in measuring and testing economic relationships. Emphasizes the use of ordinary least squares in estimating single equation models. Topics included are dummy variables, lagged variables, and classic regression problems.

## ECON 475G URBAN/REGIONAL ECONOMICS 3 hours

Considers the economic relationships within a between economic and political units in the U.S. Emphasis is on applied analysis dealing with characteristics of a region, the urban center, and employment.
ECON 491G ECONOMIC THOUGHT 3 hours

The origin and development of economic thought with emphasis on the contribution of political economy to the behavioral sciences.
ECON 496G INTERNAT MONETARY ECON
3 hours
A systematic analysis of monetary aspects of international trade and finance.
ECON 501 SURVEY/ECONOMICS

Crosslisted BA 501. An overview of basic concepts in micro and macroeconomics. Topics include price and output decisions, cost concepts, aggregate income, the price level, and related areas.
ECON 502 APPLIED MICROECON THEORY 3 hours
Crosslisted BA 511.Prerequisite: BA 501 or the equivalent. Fundamental concepts useful for analysis of firm, public policy, and individual decisions. Topics include demand and supply, revenue and costs, pricing, and information and uncertainty.

## ECON 503 APPLIED MACROECON THEORY 3 hours

Fundamental concepts dealing aggregate economic activity in the U.S. Topics include measurement, consumption, saving and investment, long term growth, business cycles, monetary and fiscal policy, and basic forecasting ideas.

## ECON 505 WKS ECON FOR TEACHERS 3 hours

Basic concepts and topics dealing with the functioning of a market oriented economic system and the U.S. economy.
ECON 506 APPLIED STAT METHODS 3 hours
Crosslisted BA 540. Introduction to applied statistics for decision making and research including analysis of variance, process control, experimental design, regression, and forecasting, as well as useful software and data sources.

## ECON 508 PROB SOLVING DATA MODEL 1.5 hours

ECON 571 PUBLIC POLICY ECON 3 hours
Equivalent Courses: BA 571. Prerequisites: ECON 502 AND ECON 506. Application of economic concepts and methods to the study of public policy. Topics include externalities, regulation, cost-benefit analysis, political markets, and macroeconomic influences on voting.
ECON 581 SURVEY/PUBLIC FINANCE
3 hours
Crosslisted BA 541. An overview of topics including a study of the economic properties of various taxes and their effects, government budgeting, fiscal federalism, public provision, regulation, privatization, benefit-cost analysis, and other related issues.

## ECON 582 SEM/ECONOMIC HISTORY 3 hours

Emphasis on research and evidence on U.S. economic history with some discussion of non-U.S. economic history.

## ECON 583 ADVANCED MICRO THEORY 3 hours

Prerequisites: ECON 502, 506, or equivalent. Systematic and rigorous coverage of theory of consumer behavior, prices, markets, production, distribution, and welfare.

## ECON 585 TOPICS/MACROECONOMICS 3 hours

Prerequisites: ECON 503, 506, or equivalent. Discussion of current areas of research in macroeconomic/monetary fields. Specific content will vary by semester and instructor.
ECON 591 INTERNATIONAL ECONOMICS 3 hours
Crosslisted BA 542. Survey of trade theory and evidence, status and effects of tariffs and other trade restrictions, and balance of payment issues. ECON 594 FORECASTING 3 hours
Crosslisted BA 543. Prerequisites: BA 540 or ECON 506. Methods of forecasting changes in the U.S. economy and other economic units. Emphasis on application and evaluation of different techniques.

## ECON 595 LABOR/HUMAN RESOURCE ECO 3 hours

Crosslisted BA 544. Study of static and dynamic models of labor demand, supply, and human capital investment.
ECON 596 APPLIED ECON PROJECT
3 hours

Prerequisite: Completion of at least 24 hours of program hours. An end of program course in which students select a topic, apply appropriate economic literature, concepts, and methods and report their findings in writing and in an oral presentation.

## ECON 597 PRACTICUM IN ECONOMICS

3 hours
Prerequisite: Permission of instructor. A directed, supervised practicum or internship with a business or government agency utilizing the skills developed in the program.
ECON 598 IND STUDY ECONOMICS
3 hours
Selected topics in economics.

## ECON 599 THESIS RESEARCH/WRITING 1-6 hours (6 total)

## ECON 600 MAINT MATRICULATION 1-6 hour

## EDAD 581 ORG/ADM OF OCCUP EDUC 3 hours

Organization, administration, and implementation of occupational education programs as an integral part of the educational system.
EDAD 583 ACCT 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.

## EDAD 585 FUNDAMENTALS/SCHOOL ADM 3 hours

Organization and administration of American schools. Principles of effective leadership and the roles and responsibilities of administrative supervisory positions.

## EDAD 586 CREATING HIGH PERF CULTURE 3 hours

Prerequisites: Permission of Instructor. Description: Role of culture in the classroom, school, and school district. Topics include the effect of culture on staff and student performance; how to assess and transform culture; and the roles of leadership in creating and supporting a high performance learning culture. Field experiences will be required.

## EDAD 588 SCHOOL BUSINESS MGT 3 hours

Effective operation of the fiscal and business aspects of school administration in the educational program.

## EDAD 590 ADM OF SCHOOL PERSONNEL 3 hours

Allocation of human resources to accomplish the purposes of the school organization.

## EDAD 594 SEM LDR: AUX PROG 3 hours

Principles and practices of leadership in the development and operation of auxiliary educational programs including special education, counseling, extracurricular programs and vocational education.
EDAD 596 READINGS IN EDUC ADM 1-3 hours

Prerequisite: Permission of major professor. Reading and research in an area of individual interest. Supervised by the major professor.
EDAD 597 PROBLEMS ED ADM
3 hours
Prerequisite: Permission of instructor. Individual problems and self-assessments in educational administration and supervision. To be taken concurrently with EDAD 585.

## EDAD 598 FIELD EXP EDAD 3-6 hours

Clinical experiences with practitioners in the field to acquaint the prospective administrator/supervisor with the realities of educational organizations.

## EDAD 611 LEADING CHANGE 3 hours

Prerequisites: Permission of Instructor. Description: Leading change for school improvement. Topics include: effects of leadership on school improvement, change theory, leading first and second order change, engaging school and community support for change. Field experiences will be required.
EDAD 620 SEM ADM OF SPECIAL ED 3 hours
Current trends and issues in the administration and supervision of special education programs, including personnel issues, student identification issues, program assimilation and human relationships.

## EDAD 625 PRAC ADM OF SPECIAL ED 3 hours

Supervised practice in educational organizations for persons preparing to become a Director of Special Education.
EDAD 630 SPECIAL ED LAW \& FINANCE 3 hours
Clinical study of federal and state cases, statues, regulations, and administrative decisions reviewing the Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (ADA) of 1990.

## EDAD 639 THE SUPERINTENDENCY

## 3 hours

Prerequisites: Permission of instructor and two years of school administrative experience. Function, role, and responsibilities of the school superintendent. Topics include politics and education; superintendent's relationships with the school board, central office staff, and with the state department of education; the budget process; strategic planning; and curriculum leadership.

## EDAD 649 SCHOOL SYS ADMIN <br> 3 hours

Prerequisite: Instructor permission required. School system operations including finances, auxiliary services, human resources, federal and state programs, facilities, and curriculum and instruction.
EDAD 659 STRAT PLAN IN EDU 3 hours
Prerequisite: Instructor permission required. Examination of planning processes used by leaders to direct educational change and improvement. Includes strategic planning approaches designed to address macro and micro organizational goals.

## EDAD 677 SCHOOL LAW 3 hours

Clinical study of U.S. Constitutional, federal and state case, statutory and regulatory law, and their effects on social and political systems on the state and national level.

## EDAD 680 REMOVING BARRIERS TO LEARNING $\mathbf{3}$ hours

Prerequisites: Permission of Instructor. Planning, providing and coordinating support programs and services to prevent and remove barriers to learning for all students. Topics include: the array of school-based services; community-based services and inter-agency collaboration; and school-community relations skills and strategies for informing and developing community support and collaboration to meet the needs of all children. Field experiences will be required.

## EDAD 682 SCHOOL-COMM RELATIONS 3 hours

Background, need, and techniques for establishing a wholesome working relationship with school-community stakeholders, with an emphasis on their involvement in school programs.

## EDAD 683 SEMINAR/CURR DEVELOPMENT

## 3 hours

Application of educational curriculum foundations for school administration.

## EDAD 684 INSTRUCTIONAL LEADERSHIP $\mathbf{3}$ hours

Identification of practices and characteristics of supervisors and administrators, relative to curriculum and instruction, that have been shown to significantly improve student achievement.
EDAD 686 PRINCIPLES/SUPERVISION 3 hours
The instructional aspect of school administration; organization, problems, principles, and techniques of improving in-service training for teachers. EDAD 688 PLANNING FOR SCH IMPROVEMENT $\mathbf{3}$ hours
Prerequisites: Permission of Instructor. Methods and materials of comprehensive school improvement planning and professional development activities tied to the comprehensive school improvement plan. Supervision and evaluation of school staff as it relates to student learning. Field experiences will be required.

## EDAD 690 PRINCIPALSHIP 3 hours

Prerequisites: EDAD 594 and EDAD 585. Identification and development of essential leadership practices associated with the role of principal in the contemporary school system.

## EDAD 694 SEMINAR IN EDUC ADM 3-6 hours

Examination of current leadership practices with emphasis on the changing role of the educational administrator.

## EDAD 696 ADV ORG THEORY 3 hours

Prerequisite: Permission of instructor. A study of historical and contemporary theory in educational administration and leadership.
EDAD 697 IND-RESEARCH/EDUC AD/SUP 3 hours
Special projects in administration and supervision.
EDAD 698 PRACI/EDUC ADM/SUP 3 hours
EDAD 699 IND SPECIALIST PROJECT 1-6 hours ( 6 total)
EDAD 700 MAINTAIN MATRICULATION 1-6 hours
EDAD 798 INT/ADMN \& SUPERVISION 1-6 hours
Prerequisite: Permission of advisor. Internship or other directed field experiences in administration or supervision.

## EDAD 799 DISSERTATION RESEARCH 1-8 hours

Prerequisites: Admission to candidacy in Cooperative Doctoral Program in Educational Administration. Research undertaken to complete requirements for Doctor of Education in Educational Administration.

## EDFN 500 RESEARCH METHODS

3 hours
Introduction to research methods in education, information retrieval systems, basic types of research, research procedures, research designs, and discussion of methods of data analysis to facilitate the understanding of research journals in the student's field of study.

## EDFN 501 EDUCATIONAL STATISTICS 3 hours <br> Statistical methods including descriptive statistics, sampling, probability, and correlation. <br> EDFN 548 RESEARCH/CURR/INST-IND 1-3 hours

Research in elementary instructional problems in reading, mathematics, science, social studies, English, and in elementary and secondary curriculum.

## EDFN 570 WORKSHOP/EDUCATION 3 hours

Special short courses on educational problems.
EDFN 576 ISS \& TRNDS EDUC 3 hours
Selected issues and problems in contemporary society, their impact upon the educational system, and the possible role of the educational system in resolving such problems.
EDFN 601 APPL STATS \& DSGN 3 hours
Parametric and non-parametric statistical techniques applied to experimental and quasi-experimental research designs in education.
EDFN 603 QUALITATIVE RESEARCH IN ED 3 hours
Pre-requisite: EDFN 500. Qualitative research for graduate students within the educational setting. Includes the foundational theory of qualitative research, methodological designs and techniques of data collecting, analysis, and reporting.

## EDFN 612 SEMINAR IN COMM COLL TEA 3 hours

Prerequisite: ADED 611 or permission of instructor. Study of issues and topics critical to the teaching success of potential community college faculty.

## EDFN 675 HIGHER EDUC IN AMERICA 3 hours

History, purpose, philosophy, organization, curriculum, student personnel services, financial services, and trends of the American system of higher education.
EDFN 685 ACADEMIC PROB/HIGHER ED 3 hours
Prerequisite: EDFN 675, or permission of instructor. Major problem areas of academic administration with emphasis on issues and procedures of college and university level curricular development.

## EDFN 700 RES DESIGN AND DISSERTATION 3 hours

Prerequisites: EDFN 601 and EDFN 603 and Instructor Approval. Includes research proposal process, parts of a dissertation, steps in the dissertation process, use of APA style, library searches, avoiding plagiarism, and scholarly writing process.
EDFN 703 FIELD METHODS FOR QUAL RES
3 hours
Prerequisites: EDFN 603. Developing and conducting qualitative research.
EDFN 720 FOUND/RURAL ED POLICY
3 hours
Prerequisite: Admission to cooperative doctoral program in Educational Leadership or permission of department. An analysis of educational policy development and implementation in rural social systems from philosophical, historical, psychological, and political perspectives.

## EDLD 700 DOCTORAL ORIENTATION 6 hours

This course provides an introduction to doctoral studies with emphasis on processes and requirements of the program, leadership assessment, career development, and an introduction to inquiry.

## EDLD 710 LEADERSHIP THEORIES AND ETHICS $\mathbf{3}$ hours

Theory and research on leadership, ethics and managerial effectiveness. Topics include: leadership and management, power and influence, trait theories, current and seminal leadership theories, delegation and shared decision making, as well as morality and ethics for leaders, and current trends in leadership research.

## EDLD 711 METHODS/LEADERSHIP RESEARCH I 3 hours

Quantitative and qualitative research methods; analysis of research reports. Student will critically read research in educational leadership and critique the applications of the findings.

## EDLD 720 IND/GRP ISSUES IN LEAD

3 hours
Theory and application of leadership issues in organizational behavior, including motivation, attitudes, group process, problem solving, decision making, conflict management, and interpersonal communication.
EDLD 721 MEASUREMENT/VALIDITY IN RESRCH 3 hours
Prerequisite: EDLD 711. Students will examine critical issues relating to validity, reliability, generalizability, usefulness or leadership research, and key requirements in the design of research. This will include examining internal and external threats to validity, alternative assessment procedures, limitations to generalizability, and identifying approaches that will lead to useful findings.

## EDLD 730 LEADING THE ORGANIZATION 3 hours

Leadership for organizational improvement. Theory and application of systems, communication, culture, change and organizational design, and organizational development.
EDLD 731 ADVANCED STATISTICAL TOOLS 3 hours
Prerequisite: EDLD 721. Statistical tools, statistical software and databases used in leadership research and problem-solving settings. Software to organize and manage qualitative data will be introduced.

## EDU 501 PROF DEV PLAN MAE/RK II 1 hour <br> EDU 507 GEOG FOR TEACHERS 3 hours

Equivalent Course: GEOG 507. Designed for experienced social studies, earth science, and geoscience teachers. Provides up to date geographic content, information, and related geographic skills associated with geography core content for the P-12 classroom.

## EDU 520 PLANNING FOR INSTRUCTION 3 hours

Corequisite: EDU 521. Special Requirement: Restricted to students admitted to the Alternative Route to Teacher Certification program or permission of the Department Head. Survey of instructional planning, focused on pre-instruction. Topics include classroom management, determining outcomes and criteria for success, and differentiating instruction.

## EDU 521 IMPLEMENT INSTRUCTIONAL PLAN 3 hours

Corequisite: EDU 520. Special Requirement: Restricted to students admitted to the Alternative Route to Teacher Certification program or permission of the Department Head. Survey of implementation and management of instruction. Topics include classroom management, determining outcomes and criteria for success, and differentiating instruction. One-third of the course is content-specific instruction.
EDU 522 FUND OF DIFFERENTIATED INSTR 3 hours
Designing a qualitatively different instruction for students with varying abilities, interests, learning profiles, and affect within the regular classroom experience.
EDU 524 EDUCATIONAL ASSESSMENT 3 hours
A study of assessment and evaluative techniques used by P-12 teachers, including norm-referenced and criterion-based data analysis, that are utilized throughout the teaching and learning process.

## EDU 544 CLASSROOM TEACH STRATEGY 3 hours

EDU 590 TEACHING INTERNSHIP 3 hours
Supervised internship in an academic setting for development of advanced instructional skills and experience. Site assigned will depend on student background and will require advisor approval. Students are responsible for arranging their own transportation to designated or assigned sites. Pass-fail grading.
EDU 595 DIRECTED STUDY EDUC BEHAV SCI 3 hours
Prerequisite: Completion of at least 21 hours in the program including all other core requirements and permission of faculty supervisor. Restricted to students admitted to the MAE - Education and Behavioral Science Studies. Directed study related to best practices in education or behavioral sciences. Requires completion of research project on approved topic.

| EDU 596 | SEM PORT DEV PROF GROWTH | 2 hours |
| :--- | :--- | :--- |
| EDU 597 | ORG/SUP OF STUDENT TEACH | 3 hours |
| EDU 598 | SEM EVAL PROF PLAN RKII | 1 hours |
| EDU 601 | ADVANCED PROF DEVELOPMENT PLAN | 1 hour |
| EDU 604 | MGT LEARNING ENVIRON | 3 hours |
| EDU 698 | SEM ADV PORTFOLIO PROJECT | 2 hours |

Prerequisites: EDU 598 or EDU 596 and EDU 601. An exit seminar requiring presentation of a professional portfolio project including evidence of professional development.

## EHS 580 SOLID AND HAZARDOUS WASTES 3 hours

Management of solid and hazardous wastes in the environment. Emphasis on regulatory compliance, control and remediation technologies, and environmental pathways.

## ELED 445G INTRO EDUC TECHNOLOGY 3 hours

Instruction and laboratory experiences in the basic theory and application of educational technology to the design, production, evaluation, and utilization of various media. Cross-listed with LME 445G.

## ELED 503 ORG ELEM CURRICULUM 3 hours

Principles and practices in elementary school curriculum construction. Emphasis on forces affecting curriculum, current innovations, and trends.
ELED 505 MAT/METH/MATH/EL TEACH 3 hours
ELED 506 ELEM SCH SCIENCE 3 hours

Advanced methods and materials for teaching science in the elementary school.
ELED 507 MAT/METH SOCIAL STUDIES 3 hours
Concepts and objectives, classroom organization for instruction, current strategies in teaching content, and materials available.
Emphasizes the importance of appropriate early learning experiences including philosophical, theoretical, and empirical bases of instruction.
ELED 509 ADD METH/MAT ECE 3 hours

Examination of alternative instructional strategies and support materials appropriate for early learners in language arts-reading, mathematics, social studies, and science.

| ELED 543 | INTERACTIVE TEACH SKILLS | $\mathbf{3}$ hours |
| :--- | :--- | :--- |
| ELED 545 | IND INVESTIG CLASSRM TCH | $\mathbf{1 - 3}$ hours |
| Opportunity for elementary teachers to engage in the concentrated study of specific problems and/or the development of specific skills related to |  |  |
| effective classroom instruction. |  |  |
| ELED 570 | WORKSHOP/SELECTED TOPICS |  |
| ELED 599 | THESIS RESEARCH/WRITING | $\mathbf{1 - 3}$ hours |
| ELED 600 | MAINTAIN MATRICULATION | $\mathbf{1 - 6}$ hours ( $\mathbf{6}$ total) |
| ELED 603 | SEM ELEM CURRICULUM | $\mathbf{1 - 6}$ hours |
| Strategies and models to assist the elementary classroom teacher in assuming an active role in total elementary school curriculum development. |  |  |
| ELED 699 | IND SPECIALIST PROJECT | $\mathbf{1 - 6}$ hours ( $\mathbf{6}$ total) |
| ELED 700 | MAINTAIN MATRICULATION | $\mathbf{1 - 6}$ hours |
| ENG $401 G$ | ADVANCED COMPOSITION | $\mathbf{3}$ hours |

Study and practice in various forms of writing and rhetorical principles.
ENG 402G EDITING/PUBLISHING
3 hours
Editing collections of student works in several types including experience in computer text editing; lectures by visiting publishers and editors of books, journals, and newspapers.
ENG 403G WRITING MEM \& AUTOBIOGRA 3 hours
A course in the techniques of writing autobiography; readings will be chosen primarily from contemporary American examples of the genre. ENG 404G HIST/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 effects.

ENG 407G LINGUISTIC ANALYSIS
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.

## ENG 408G PSYCHO/SOCIOLINGUISTICS <br> 3 hours

Prerequisite: Introductory linguistics course. How sociology and psychology contribute to the study of linguistics. Emphasis on social and regional dialects, first and second language acquisition, and speech perception and production.
ENG 410G THEORIES/RHETORIC/COMP
3 hours
Classical and contemporary theories of rhetoric and composition with emphasis on application of the theories to writing and to the teaching of writing.
ENG 412G HISTORY OF RHETORIC 3 hours
Survey of classical, traditional, and contemporary rhetoric as applied to written discourse. Emphasis on invention, arrangement, and style. Readings include the work of classical and modern rhetoricians. Consideration of rhetorically oriented methods of teaching written discourse.

## ENG 415G TECHNOLOGY \& WRITING 3 hours

Prerequisite: ENG 300. Study of issues surrounding interrelations of technology and writing; effects of technologies (e.g., printing press, computers) on writing processes and on types of writing; institutional changes wrought by computers.
ENG 455G AMERICAN DRAMA
3 hours
See Department of Theatre and Dance.
ENG 457G MODERN BRITISH LITERATURE 3 hours
A study of twentieth-century British literature with emphasis on modernism, including fiction, poetry, and drama; focus on innovations in literary form and cultural context.

## ENG 459G MODERN DRAMA <br> 3 hours <br> See Department of Theatre and Dance.

ENG 460G LITERARY CRITICISM
3 hours
Historical introduction to literary theory, with readings in Western criticism from Plato through the modern period. Focus on historical foundations of contemporary theory, including interpretation, evaluation, and the function of literature.
ENG 462G LIT THEORY TOPICS
3 hours
Prerequisite: ENG 300 and 3 hours upper-level literature or permission of instructor. Focusing on developments in literary theory since the middle of the twentieth century, this course devotes special attention to a particular area in post-structuralism (e.g., theory and practice of deconstruction, post-Freudian, feminist, new historical, or cultural criticism).

## ENG 465G FILM GENRES 3 hours

Prerequisites: ENG 100 and 200 and either BCOM 271 or ENG 365, or instructor's permission. Study of the historical development, thematic and stylistic conventions, and cultural significance of film genre(s). Surveys representative films from one or two genres, e.g. film noir and the Western; romantic comedy and family melodrama; horror and science fiction; the musical; the war film; the epic.

## ENG 466G FILM THEORY 1-3 hours

Prerequisites: ENG 366, ENG 365; BCOM 271, or permission of instructor. Study of major theories of narrative film and related media; specific theories examined will include formalist, auteurist, historical, structuralist, psychoanalytical, and political. Will include viewing of selected films.

## ENG 481G CHAUCER 3 hours

Representative works of Chaucer, with emphasis on The Canterbury Tales; backgrounds; outside readings and reports.
ENG 482G SHAKESPEARE 3 hours
Major plays from each stage of Shakespeare's career studied in the light of current Shakespearean criticism and writings from the time.

## ENG 483G ENGLISH RENAISSANCE 3 hours

Nondramatic literature of the Renaissance, with emphasis on Spenser.

## ENG 484G ROMANTIC MOVEMENT 3 hours

Background and phases of romanticism; representative exponents of the Romantic Movement.
ENG 485G THE SEVENTEENTH CENTURY 3 hours
Seventeenth-century literature, forms, and developments.
ENG 486G THE EIGHTEENTH CENTURY
3 hours
Eighteenth-century literature, forms, and developments.
ENG 487G DANTE-THE DIVINE COMEDY 3 hours
An intensive study of The Divine Comedy, in English translation, with attention to the medieval background.
ENG 488G VICTORIAN LITERATURE 3 hours
Selected works by major poets, essayists, and novelists of Victorian England as a reflection of the culture of the age.
ENG 489G ENGLISH NOVEL 3 hours
Technique and history of the novel. Several representative novels studied.

## ENG 490G AMERICAN NOVEL

3 hours
A chronological examination of the American novel and its development from the 18th century to the present. Major literary techniques and movements will be analyzed in the context of several representative American novels.

## ENG 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.
ENG 494G KENTUCKY LITERATURE
3 hours
Survey of literary people and places in Kentucky, including detailed study of several works of Kentucky writers.

## ENG 495G SOUTHERN LITERATURE $\mathbf{3}$ hours

Intensive study of distinctively Southern characteristics as reflected in the works of major writers with strong cultural and psychological ties to the American South. The development of these characteristics will be examined in historical and social contexts.

## ENG 496G WOMEN'S POETRY 3 hours

Emphasis is on the themes, aesthetic importance, and historical context of poems predominantly by American women from 1650 to today.

## ENG 497G WOMEN'S FICTION 3 hours

An examination of the themes, aesthetic importance, and historical context of canonical and non-canonical fiction by women, with emphasis on twentieth century American and British women writers.

## ENG 498G ROBERT PENN WARREN SEM 3 hours

An intensive study of the fiction, poetry, and non-fiction of Robert Penn Warren, American poet laureate, novelist, and critic. Warren's ties to south-central Kentucky will receive particular emphasis.

## ENG 499G DIR STUDY/ENGLISH-IND 3 hours

Prerequisites: 3.0 grade point average; senior standing. A study of a specific literary or linguistic topic directed by a faculty member.

ENG 501 WRITING WORKSHOP
3 hours
Provides a Master's level workshop for students with varied writing interests.
ENG 502 GRAD DIRECTED WRITING 3 hours
Provides a graduate-level directed writing course for students with varied writing interests.
ENG 508 TESL FIELD EXPERIENCE
3 hours
Prerequisites: Eng 469 and one linguistics course. Observation and teaching under professional supervision.
ENG 509 PRACTICUM WRITING INSTRUCTION 3 hours
Prerequisites: ENG 100 and ENG 200 and ENG 300. Participants will study the theory and practice of writing conferences and tutorials. Course will prepare participants to work individually with students, both as part of classroom instruction and in tutorial settings.

## ENG 510 RHETORIC \& WRITING

3 hours
Rhetorical theories and the practical considerations of college writing instruction. Open to all students but required of teaching assistants prior to their first teaching assignment.
ENG 520 INTRO TO GRAD STUDIES $\mathbf{3}$ hours
Basic bibliography and bibliographical problems; research methods requisite for the MA thesis and scholarly publications; methodologies of recent critical essays.
ENG 553 RESTORATION \& 18TH CENT LIT 3 hours
Special topics of significance in Restoration and Eighteenth-century British literature.
ENG 560 LITERARY CRITICISM 3 hours
ENG 565 INTEGRATED TESL 3 hours
Prerequisite: One course in linguistics or permission of instructor. Field experiences in public schools or other appropriate settings away from campus are required. Students are responsible for arranging their own transportation to designated or assigned sites.
ENG 566 TEACHING \& TESTING ESL GRAMMAR 3 hours
Prerequisite: One course in linguistics or permission of instructor. Field experiences in public schools or other appropriate settings away from campus are required. Students are responsible for arranging their own transportation to designated or assigned sites.

## ENG 571 BRITISH MASTERS/CLASSRM

3 hours
Masterpieces of British literature suitable for teenage students. Works suggested by those taking the course and a designated core of selections will be studied to aid teachers in making these masterpieces understandable, interesting, and enjoyable to secondary school students.

## ENG 572 AMERICAN MASTERS/CLASSRM 3 hours

Major American literary works appropriate for instruction in high school and junior high school. Works suggested by those taking the course and a designated core of selections will be studied to aid teachers in making these masterpieces understandable, interesting, and enjoyable to secondary school students.
ENG 579 STUDIES/VICTORIAN LIT 3 hours
Selected Victorian works or writers or special topics of significance in Victorian literature.
ENG 583 SHAKESPEARE 3 hours

All genres--comedy, history, tragedies and sonnets--studied in light of Shakespeare's cultural background and current criticism.
ENG 585 MILTON 3 hours
The writings of John Milton, with emphasis on his poetic works.
ENG 586 SEMINAR BRITISH WRITERS 3 hours
Content varies. Selected works or writers. May be repeated once with a different topic.

## ENG 587 WORDSWORTH \& KEATS 3 hours

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

## ENG 591 AMERICAN ROMANTICISM $\mathbf{3}$ hours

Study of the romantic movement in American literature as reflected in a representative selection of works by major writers.
ENG 592 REALISM \& NATURALISM IN AM LIT

## 3 hours

Realism and naturalism in American literature. Emphasis on Twain, James, their contemporaries, and their successors. ENG 593 POE, HAWTHORNE, MELVILE

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

## ENG 594 CONTEMPORARY FICTION

3 hours
Selected major figures and their works. Consideration of movements, influences, developments since 1945.
ENG 595 POSTCOLONIAL LITERATURE
3 hours
Contemporary literature from throughout the English-speaking world, focusing on the postcolonial experience and including literature drawn from Africa, the Caribbean, Great Britain, South Asia, and the Pacific Rim, from the mid-twentieth to the present with attention to how the texts explore issues such as nationalism, war and violence, sexuality, gender, race, identity and language. Discussions of the literary texts will include attention to how they explore issues such as nationalism, war and violence, sexuality, gender, race, identity, and language.

## ENG 596 SEMINAR AMERICAN WRITERS 3 hours

Topics will vary. Selected works or writers. May be repeated once with a different topic.
ENG 597 SPECIAL TOPICS 3 hours

Seminar on topics in literature, language, or composition. Course may be repeated with different content.
ENG 598 ADVANCED DIRECTED STUDY 3-6 hours
Supervised student research on literary or linguistic topics.
ENG 599 THESIS RESEARCH/WRITING 1-6 hours (6 total)
ENG 600 MAINTAIN MATRICULATION 1-6 hours
ENV 410G WTR TREATMENT PROCESSES 3 hours
Prerequisite: ENV 280. Design and operational characteristics of unit processes in water and waste-water treatment; fundamentals of water chemistry pertaining to chemical, biological, and physical treatment.

## ENV 415G LAB WATER TREATMENT PROC 1 hour

ENV 460G INDUST ENV MGT 3 hours
Prerequisites: ENV 280, ENV 360, ENV 410, ENV 480. This course will require frequent off-campus travel to a local industrial facility. Focuses on air, water and waste management issues in the industrial setting. Includes discussion of pertinent environmental legislation, mandated industrial environmental programs, and required air, water and waste permits. Course includes an in-depth field project with a local industry.

## ENV 480G HAZ \& SOLID WASTE 3 hours

Prerequisites: ENV 280. Includes the physical, chemical and biological stressors associated with both hazardous and solid waste. Emphasis on characterization and remediation efforts.

## ENV 495G ENV MEASUREMENT 3 hours

Prerequisites: ENV 280, ENV 360, ENV 410, ENV 480Includes environmental measurements methods for air, soils and water analysis. Devices covered include AA, GC/MS, XRF, PID, SEM, colorimetric tubes, and water quality instruments.

## ENVE 520 INTRO TO ENVIRONMENTAL EDUC 3 hours

This course will provide students with an introduction to the field of environmental education, including basic history and philosophy, methodologies, resources for educators, and current trends in the field.

## ENVE 580 INSTRUCT STRAT ENVIR EDUC 3 hours

Specific teaching strategies associated with the field of environmental education programs will be addressed, with an emphasis on active, experiential learning. Portions of the course are taught in field settings. Students are responsible for arranging their own transportation to designated or assigned sites.

## ENVE 585 SPECIAL TOPICS IN ENVIR ED - 1-3 hour

A consideration of special topics to acquaint the advanced student with significant problems and developments of current interest in environmental education.
EXED 417G ASSESS/CURR/FMD STUDTS I 3 hours
Corequisites: EXED 415, EXED 416, EXED 418 and EXED 431. Prerequisite: EXED 334. Characteristics, problems, and needs of individuals with moderate to severe disabilities. Curriculum and assessment models are evaluated: intervention strategies for both cognitive and social skills are designed. Field experiences in public schools and/or other appropriate settings are required in this course. Students are responsible for arranging their own transportation to designated sites.

## EXED 418G ASSESS/CURR/FMDSTDTS II 3 hours

Corequisites: EXED 415, EXED 416, EXED 417 and EXED 431. Prerequisite: EXED 334. This course builds upon EXED 417. Topics include routine/emergency medical procedures, physical management,/handling, postural/motor dysfunction, recreation, like skills, transition programming and modifications for individuals with language/vision/hearing impairments. Field experiences in public schools and/or other appropriate settings away from campus are required in this course. Students are responsible for arranging their own transportation to designated or assigned sites.

## EXED 419G ASSISTIVE TECH CLASS/COMMUNITY 3 hours

Prerequisite: EXED 516. This class is designed to provide an overview of assistive technology and augmentative/alternative communication devices and their application in the special education classroom. This class will enable participants to develop sound and inclusive technology plans that meet the needs of students with moderate to severe disabilities.

## EXED 421G SPEC ED \& THE LAW: INTER/APPL 3 hours

Prerequisite: EXED 516. Focus is on laws and regulations and the education of children and youth with disabilities. Laws and regulations, the developments that led to them, and their implications for schools, students, and parents are discussed, analyzed, and applied to practical situations.

## EXED 422G COLLAB INCLU SHCOOL/COMMUNITY 3 hours

Prerequisite: EXED 516. This course provides an overview of methods which facilitate collaboration across disciplines to support diverse learners in regular classrooms and community settings. Field experiences are required.

## EXED 430G DIAG INSTR PLAN MILD DISABILITY $\mathbf{3}$ hours

Prerequisite: An introductory course in exceptional education 3 hours. EXED 331 and EXED 3336 hours. (undergraduate prerequisites/graduate deficiencies).Administration, scoring, and educational utilization of various diagnostic instruments designed to assist the development of educational profiles for individuals with school-related problems. Field experiences in public schools and/or other appropriate settings away from campus are required in this course. Students are responsible for arranging their own transportation.
EXED 431G LANG INTERVENT: STRAT MATERIAL
3 hours
Prerequisites: EXED 516. An overview of language development is provided with emphasis placed on the educational remediation of the language disorders of individuals with disabilities. Focus is on the utilization of methods and materials which foster language development. Field experiences in public schools and/or other appropriate settings away from campus are required in this course. Students are responsible for arranging their own transportation to designated or assigned sites.

## EXED 432G APPLIED BEHAVIOR ANALYSIS 3 hours

Prerequisite: An introductory course in Exceptional Education 3 hours, EXED 331 and EXED 3336 hours (undergraduate prerequisites/graduate deficiencies). Setting realistic classroom performance objectives for individuals with disabilities. Terminology and methodology in managing a learning environment with appropriate record keeping systems. Field experiences in public schools and/or other appropriate settings away from campus are required in this course. Students are responsible for providing their own transportation.

## EXED 460G SPECIAL PROBLEMS <br> 1-3 hours

Investigation of a special problem from an area of individual interest. Course pass required.

## EXED 516 EXCEPT CHILD: PERSPECT/ ISSUE 3 hours

Focus is on the characteristics, priorities, resources and issues of children who are disabled, delayed or gifted and their families. Emphasis is on current results of research and perspectives on today's children, families, schools and communities. Descriptions, issues and techniques for each area of exceptionality including learning disabilities, emotional/behavioral disorders, mentally challenged, autism, giftedness, physically challenged, health concerns, communication disorders, hearing loss, blindness or low vision, and traumatic brain injury will be included.

## EXED 517 TRANS SRVCS INDIV DISABILITIES <br> 3 hours

Prerequisites: EXED 516 and EXED 530 and EXED 531
EXED 518 SEM: CONTEMP ISSUES SPEC ED 3 hours
Prerequisite: Minimum of 12 hours of graduate level course work in Exceptional Education, Instructor permission. Issues in special education. Classroom experiences to develop awareness and sensitivity to educational needs.

## EXED 523 CURR/METH EARLY CHILD SPEC ED 3 hours

Prerequisites: IECE 521, 522, 523. Selection/development of curricula materials for planning, implementation, and evaluation of intervention with children P-5 who have disabilities.

## EXED 530 ADV ASSESSMENT TECHNIQUES 3 hours

Experiences will be provided for students to enhance their knowledge of issues, techniques, and interpretations of various assessment procedures and instruments.

## EXED 531 ADV PRESCRIPTIVE TEACHING 3 hours

Adapting the learning environment to the learner. The identification and modification of various aspects of specialized learning environments are examined.
EXED 532 FAMILIES,PROF \& EXCEPTIONALI 3 hours
Interpreting programs for individuals with disabilities to maximize family involvement. Emphasizes the attitudes, skills, and knowledge taught in the educational program.

EXED 533 CURR FOR LEARN/BEHAV DISORDERS
3 hours
Prerequisites: EXED 516 and EXED 530 and EXED 531. Development, adaptation, and evaluation of curricula, methods, materials, and resources. Implementing and evaluating instructional programs for students with mild disabilities is stressed

## EXED 534 SEM: RESEARCH EXCEPT CHILD ED

## 3 hours

This course enables students to become more skillful in reading, interpreting, and conducting research with children with disabilities, parents, and teachers - an independent research project is required

## EXED 535 CURRIC MODERATE RETARDED 3 hours

EXED 590 ADV INTERNSHIP EXCEPTIONAL EDU
Supervised practice in an appropriate setting for development of advanced instructional skills and experience. These settings will vary according to student background and are made with advisor approval. Students are responsible for arranging their own transportation to designated or assigned sites. Grading for this course will be Pass/Fail.

## EXED 599 THESIS RESEARCH \& WRITING <br> 1-6 hours (6 total) <br> EXED 600 MAINTAINING MATRICULATION 1-6 hours <br> EXED 610 CHARACTERISTICS OF ASD 3 hours

Prerequisite: Masters. Comprehensive review of ASD from the perspectives of various disciplines. Theories of causation, developmental aspects, descriptive and diagnostic characteristics, and legal and social issues. Thirty field experience hours required.

## EXED 612 COLLABORATION FOR IND WITH ASD 3 hours

Prerequisites: EXED 610 and Masters. Preparation of teachers to work as consultants in a team model; exploration of local, state and regional agencies involved with individuals diagnosed with ASD. Supervised practicum required at designated sites.

## EXED 615 INSTR STRAT \& DESIGN ASD 3 hours

Prerequisites: EXED 615 and Masters. Development of competencies and philosophies of instructional design specific to teaching students with
ASD. Emphasis on research-based instructional strategies, plans and classroom structures.

## EXED 618 SOC SK INSTR \& BEH PRG ASD <br> 3 hours

Prerequisite: EXED 618 and Masters. Development of competencies in assessing, designing, and implementing social skills instruction and behavioral programming for students with Autism Spectrum Disorders.

## EXED 619 ASSIS TECHN \& COMMUN FOR ASD 3 hours

Prerequisite: EXED 610 and Masters. Investigation of assistive and instructional technology, as well as alternative and augmentative communication devices to implement with students with ASD and PDD.

## EXED 620 SEMINAR IN ADMIN OF SPEC EDUC 3 hours

Current trends and issues in the administration and supervision of special education programs. Cross-listed with EDAD 620.

## EXED 625 PRAC: ADMIIN OF SPECIAL EDUC 3 hours

Supervised practice in educational organizations for persons preparing to become a Director of Special Education. Cross-listed with EDAD 625. EXED 630 SPECIAL EDUC LAW \& FINANCE 3 hours
Comprehensive study of existing school law codes for special education; budgeting and financial accounting for local, state and federal monies; and, grant writing and reporting.

## FIN 437G CORPORATE ASSET MGT 3 hours

Prerequisite: Completion of FIN 330 with a grade of 'C' or better and completion of, or current enrollment in ECON 307. Advanced level exposure to valuation concepts, capital budgeting decisions, working capital management, and mergers and acquisitions. Deals with the current theory and practice of corporate finance in these areas.

## FIN 438G CORPORATE FUNDS MGT

3 hours
Prerequisite: Completion of FIN 330 with a grade of ' $C^{\prime}$ ' or better and completion of, or current enrollment in ECON 307. Advanced level exposure to financing and dividend policy, short-, intermediate-, and long-term financing, and financial statement analysis. Deals with the current theory and practice of corporate finance in these areas.

## FIN 439G SEC ANALYS/PORTFOLIO MGT

3 hours
Prerequisites: FIN 332. An advanced level exposure to fixed income and equity security valuation, and the theory and practice of portfolio management.

## FIN 449G PRACTICUM IN PORTFOLIO 3 hours

Prerequisites: FIN 332. Special Information: May be repeated for credit. Practical experience in managing an investment portfolio in a teamwork environment. Emphasis placed on Economics, Industry, and Company analysis, security selection, report preparation, daily decision making, record keeping and performance evaluation. Students will be responsible for making all material decisions in managing an actual investment portfolio of real funds.

## FLK 410G AFRICAN-AMERICAN MUSIC 3 hours

A survey of selected musical styles created and developed by African Americans from the 17th to the 20th century: spirituals, blues, popular music forms (e.g., soul, reggae, rap music). Emphasis will be placed on the historical factors and socio-cultural trends that influenced the development of African-American music.

## FLK 445G AMERICAN ARCHITECTURAL HISTORY 3 hours

An interdisciplinary survey of American architectural history, including trends and styles, architect designed and manufactured structures and elements, and the social history of American architecture.

## FLK 446G RESTORATION OF HIST INTERIORS

3 hours
Design and other aspects of interior historic restoration of both academic and vernacular structures. Attention focused on aesthetic issues of designing domestic and commercial historic interiors for restoration. Cross-listed with Consumer and Family Sciences 446G.
FLK 447G HIST ARCHITECTURE INTERIORS
3 hours
Analysis of styles in architectures and interiors from ca. 1900 to present time. Emphasis on interiors and furnishings of both academic and vernacular structures and the forces which affected their development. Cross-listed with Consumer and Family Sciences 447G.

## FLK 462G FOLKLORE AND MEDICINE

3 hours
Examines the role of traditional culture in shaping attitudes and behavior related to sickness, health, and healing. Institutional, alternative, and informal medical settings are discussed. Cross-listed with Public Health 462G.

## FLK 464G VERNACULAR ARCHITECTURE 3 hours

The forms, functions, and styles of buildings constructed according to custom from local materials to meet individual and cultural preferences.
FLK 470G MUSEUM PROC/PRESERVATION TECH 3 hours
Essential aspects of museums and of preservation, i.e., collecting, preserving, researching, exhibiting, and interpreting material culture.
FLK 478G FOLKLORE \& LITERATURE
3 hours
Readings in world literature from the Bible to the modern novel and examination of the degree to which oral literature has affected origins and development of written literature.

## FLK 480G WOMEN'S FOLKLIFE

3 hours
The various images and roles of women in the U.S. and selected world cultures as reflected in folklife materials such as narratives, beliefs, ballads, rhymes, games, customs, and folk arts.
FLK 560 CULTURAL CONSERVATION
3 hours
Survey of the history, organization, development, and major issues of cultural conservation, specifically as they relate to folklife and the built environment.

## FLK 561 FOLK ARTS AND TECHNOLOGY 3 hours

Examination of the study of material folk culture from various methodological and theoretical perspectives, including artifactual analysis, design theory and ethnoaesthetics.

## FLK 562 FOLKLORE AND EDUCATION 3 hours

FLK 566 ORAL HISTORY 3 hours

Methods and theories of oral history, legal and ethical considerations, uses and planning of local oral history projects.

## FLK 569 FOLKLORE GENRES 3 hours

An examination of the oral, customary, and material culture genres of folklore, and the theories and methods of genre studies.
FLK 570 APPALACHIAN FOLKLORE/LIFE 3 hours
Folklife and culture of southern Appalachia, with emphasis on verbal, customary, and material traditions.
FLK 571 FOLK NARRATIVE 3 hours
A survey of narrative genres of folklore and relevant scholarship.
FLK 572 PUBLIC FOLKLORE
3 hours
History, methods, and issues of public folklore.

## FLK 574 URBAN FOLKLORE 3 hours

Folkloric aspects of urban America, with special emphasis on legends, customs, beliefs, and other lore of today's regional, occupational, and ethnic groups.
FLK 575 FOLK BELIEF 3 hours

An examination of vernacular belief systems and practices, including folk religion, alternative and folk healing, divination, ritual, legend, and myth. Current historical, philosophical, anthropological, and folkloristic theories will be covered.

## FLK 576 AM TRADITIONAL MUSIC

3 hours
An examination of diverse forms of traditional American musical expression.
FLK 577 FOLKLORE THEORY 3 hours
Folklore scholarship, its historical development, and its principal bibliographical materials.
FLK 578 FOLKLORE FIELDWORK 3 hours
Examination of methodological issues and techniques in folklore fieldwork.
FLK 579 INDEPENDENT STUDY FOLKLORE 3 hours
Supervised individual study under the direction of a member of the folklore graduate faculty. (course pass required)
FLK 580 FOLKLORE CONVER/COMM 3 hours
Forms of folklore which occur within a conversational stream. Expressive culture as a particular culture-specific mode of communication.
FLK 585 TOPICS IN FOLKLORE 3 hours
Topics of current interest in the field. Content varies according to the instructor and needs of the students. May be repeated once.
FLK 589 INTERNSHIP 3 hours
Supervised work situation with cooperating business, industry, social or governmental agency, emphasizing application of advanced knowledge and skills in folk studies. (course pass required)
FLK 599 THESIS RESEARCH WRITING $\quad$ 1-6 hours ( 6 total)
FLK 600 MAINTAIN MATRICULATION 1-6 hours
FREN 420G FRENCH COMP STYLISTICS 3 hours
Prerequisite: FREN 320. Creative self-expression, refinement of grammatical understanding, the art of translation, and stylistic devices.

## FREN 421G ADV FRENCH CONVERSATION

3 hours
Prerequisite: FREN 321.Discussion on assigned topics and reports on current newspaper and magazine articles. Special emphasis on idiomatic expression.
FREN 425G 19TH CENTURY FRENCH LIT 3 hours
Prerequisite: FREN 326 or permission of instructor. Romantic, Realistic, and Naturalistic trends of the 19th century, as exemplified in the French novel.
FREN 426G 20TH CENT FRENCH LIT 3 hours
Prerequisite: One 300-level French literature course. A study of the works of major French writers of the 20th Century.
FREN 427G FRANCOPHONE CULTURE 3 hours
Prerequisites: FREN 323. Covers all Francophone countries (including France) and deals with various aspects of culture: oral literature (legends, customs, etc.), music, religion.

## FREN 440G EARLY FRENCH LITERATURE 3 hours

Prerequisite: FREN 314, 325 or equivalent. A study of French literature from its written origins to the sixteenth century in modern French or English translation. Brief look at the Old French language. Works representative of Arthurian romances, chansons de geste, fabliaux, lyric poetry and crusade chronicles will be included.
FREN 442G 17TH CENTURY FRENCH LIT
3 hours
Prerequisite: FREN 314, 325 or equivalent. Study of French literature of the seventeenth century with varying emphases on French verse, theatre, classicism, and prose in fiction and the moralist tradition, and featuring such authors as Descartes, Pascal, La Fontaine, Moliere, Corneille, Racine, La Rochefoucauld, and La Bruyere.
FREN 443G 18TH CENTURY FRENCH LIT 3 hours
Prerequisite: FREN 314. Study of French literature of the eighteenth century with varying emphases on the French Enlightenment, Encyclopedie, theatre, verse, and prose in treatises, (pseudo) memoirs, and epistolary novels. Works will be drawn from such authors as: Montesquieu, Voltaire, Diderot, Rousseau, and Beaumarchais.
FREN 445G FRENCH CANADIAN LIT 3 hours
Prerequisite: FREN 321, 314, 325, or 326, or instructor's permission. A survey of the Quebecois novel, theatre and poetry through a selection of 19th and 20th century writers.
FREN 450G TOPICS FRANCOPHONE CINEMA
3 hours
Course examines the way Francophone film directors and social scientists look at various aspects of the most recent cinema: general narrative structure, recurring patterns, relation form/content, ideology.

FREN 520 SEM FRENCH LIT/LANG 3 hours
A seminar involving the study of a single French author, school of literature, or particular emphasis in a literary genre; or an advanced level study of the French language, its use, development, and/or linguistic principles.

## GEOG 402G PHYSIOGRAPHY OF N AM

3 hours
Each of the physiographic regions or provinces is studied. Locations and names of chief subdivisions of each region are noted. Orogenies, erosional cycles, and cycle-end surfaces are emphasized.

## GEOG 404G COMPUTER MAPPING 3 hours

Geographic information systems and computer mapping programs. Introduction to the graphics terminal, plotter, hard copy unit, and digitizers. While knowledge of computer programming is not required, a course such as CS-240 would be extremely helpful.

## GEOG 410G ADVANCED CARTOGRAPHY

3 hours
Prerequisite: Cartography I (315). History of cartography, map compilation, lettering and typography; cartographic design, map reproduction, use of color, map projections, scribing techniques.
GEOG 416G REMOTE SENSING 3 hours
Prerequisites: GEOG 317, or instructor's permission. Remote-sensing techniques and their application in the study of the biophysical environment through use of satellite imagery, including visible, infrared, and radar data.

## GEOG 417G GIS ANALYSIS \& MODELING $\mathbf{3}$ hours

Prerequisites: GEOG 317 and GEOG 319, or instructor's permission. Develops expertise with a broad range of spatial analysis functions applied within a cartographic modeling framework.

## GEOG 419G GIS APPLICATION DEVELOPMENT 3 hours

Prerequisite: GEOG 417G and CS 230. Planning and implementing GIS within an organization. Designing and developing GIS applications to support spatial decision making.
GEOG 420G GEOMORPHOLOGY
The origin, history, and characteristics of landforms produced by fluvial, glacial, wind and wave erosion and by masswasting and ground-water.
GEOG 421G ADV 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; hillslope characteristics; drainage pattern evolution, etc.

## GEOG 422G CLIMATOLOGY

1-4 hours
This course presents the elements of climate and their world distribution with emphasis on climatic controls and processes; surveys the influences of climates on environment; introduces climatic classification systems and climatological regions of the world.

## GEOG 423G TRANSPORTATION PLANNING 3 hours

The problems of interaction, diffusion and information transfer as they appear in a spatial context.
GEOG 424G WEATHER ANAL/FORECASTING 3 hours
Analysis of the atmosphere using satellite and radar imagery. Weather forecasting techniques using surface and upper aid data are also examined. GEOG 425G POLITICAL GEOGRAPHY 3 hours
The political system as a spatial phenomenon. Examples from local, metropolitan-regional, national and international levels.
GEOG 426G METEOROLOGY/CLIMATOLOGY 3 hours
Prerequisite: GEOG 422 or permission of instructor. This course offers a practical insight into the influence of meteorology and climatology on everyday life. Environmental problems caused by changes in the atmosphere are also examined.

## GEOG 427G WATER RESOURCES 3 hours

Prerequisite: GEOG 310. Opportunities and constraints of natural hydrologic processes in maintaining or reclaiming environmental quality. Storm water runoff, floods, droughts and water resources planning, development and management.

## GEOG 428G APPL/GRNDWTR HYDROLOGY 4 hours

Prerequisites: GEOG/GEOL 310 and GEOL 440. Groundwater contamination and procedures used in groundwater investigations. Regulations, monitoring wells, groundwater flow, tracer studies, aquifer pumping tests, contaminant plumes, groundwater modeling, remediation and cleanup.
GEOG 430G CULTURAL GEOGRAPHY 3 hours
Prerequisites: 6 hours of cultural geography, or instructor's permission. Examines the concept of culture as it relates to the geographic landscape. Topics include the built environment, symbolic landscapes, representation of place in film, literature, photography, music, subaltern geographies, landscapes and cultures of work, and place-situated identity. Course provides an overview of research methods and themes in cultural geography. Field trip and field research required.

## GEOG 431G DYNAMIC METEOROLOGY 3 hours

Prerequisites: GEOG 121 and MATH 122 and PHYS 201/207, or permission of instructor. Topics related to atmospheric motions at various psatial-temporal scales, including thermodynamics, vorticity, and mesocale circulation.

## GEOG 434G HIST PRESERVE/PLANNING 3 hours

Historic preservation methodology and practice as related to urban, small town, and rural neighborhoods. Includes historic preservation law and impact statements. Field project required.

## GEOG 451G GEOGRAPHY OF KENTUCKY 3 hours

Regional study assessing the natural and human resources with special attention to current ecological, social, and economic problems. Field experience required.
GEOG 452G FIELD STUDIES/GEOGRAPHY 3 hours
Prerequisite: Permission of instructor. Field methods are emphasized in problems which are assigned. Field work is required.
GEOG 454G GEOGRAPHY/MIDDLE AMERICA $\mathbf{3}$ hours
A regional analysis of Mexico, Central America, and the West Indies.
GEOG 462G GEOGRAPHY/S AMERICA
3 hours
Physical and cultural bases of South America's geographic patterns with an emphasis on problems of urban and regional development.

## GEOG 464G EUROPE

3 hours
A geographical analysis of Europe.
GEOG 465G GEOGRAPHY/ASIA
3 hours
Regional differences with emphasis on the distribution and activities of the peoples relative to the natural and economic setting and to problems of development.
GEOG 466G AFRICA 3 hours
Geographic survey, assessing the relationships of the physical and cultural patterns to actual and potential economic development.
GEOG 467G GEOGRAPHY/MIDDLE EAST
3 hours
Various aspects of the sequent occupance of Southwestern Asia and surrounding regions mentioned in the Bible.

## GEOG 473G CAVE \& KARST ENVIRONMENT 3 hours

Prerequisites: BIOL 120, 121 or equivalent. Discussion of biological diversity, groundwater and humanity's role in utilizing and conserving the unique features of karst areas and use of these areas in teaching.

## GEOG 474G ENVIRONMENTAL PLANNING $\mathbf{3}$ hours

An advanced integrative course in environmental science and planning dealing with urban and rural areas. Emphasis on ecological planning strategies for improving climatic conditions, conserving water and optimizing vegetative and aquatic habitats while allowing for sustainable economic development at reduced cost.
GEOG 479G INDUSTRIAL \& COMM GEOG 3 hours
Prerequisite: GEOG 350 or permission of instructor. Manufacturing and commercial activities and facilities related to assembling of raw materials and distribution of products.
GEOG 484G PLANNING: THEORY/APPL 3 hours
Planning theory, practice, and organizational structure.
GEOG 485G POPULATION \& RESOURCES 3 hours
Prerequisite: Permission of instructor. The distribution of population and population characteristics are viewed against the background of the resources and cultures of the world.

## GEOG 487G ENVIRONMENTAL LAW 3 hours

Prerequisite: Senior level standing. An introduction to major environmental legislation for air, water, toxic, and hazardous pollutants; and related legislative, administrative, and judicial developments.

## GEOG 488G RURAL PLANNING 3 hours

Principles and practices of rural planning with emphasis on the relationships between planning and economic, social, and ecologic problems in the rural setting.

## GEOG 492G SPATIAL ANALYSIS 3 hours

Prerequisites: GEOG 300, 491 or equivalent. History and philosophy of spatial analysis. Applications of spatial analytical techniques in an interactive computer-based environment.

## GEOG 493G GEOGRAPHIC INFO SYSTEMS

3 hours
Prerequisite: Upper division or graduate standing, minimum of 18 hours in agriculture and related areas. Effect of diminishing resources, environmental pollution, and short-term economics on the sustainability of production agriculture. Emphasis on managing crops, livestock, and other farm resources in providing an ecological-economical balance in agricultural production.

## GEOG 497G SPATIAL DEC SUPP SYS 3 hours

Prerequisite: GEOG 350. Theory of locational decision making. Application of locational models in an interactive computer-based environment. The following graduate course, specially designed for teachers of natural and earth science, is offered in Geology.

## GEOG 500 GEOSCIENCE RESEARCH \& LITERACY 4 hours

Development of geographic research skills with emphasis on posing of research problems, documentation, organization, and presentation.
GEOG 501 GEOSCIENCE AND DEVELOPMENT 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.

## GEOG 502 GEOSCIENCE FIELD RESEARCH METH 4 hours

An introduction to field techniques and methodology. Surveying, sampling, and water testing are emphasized.
GEOG 505 BIOGEOGRAPHY 3 hours
Prerequisites: Introductory courses in geography and/or biology, and permission of the instructor. The evolutionary, geographical, ecological, pedological, and edaphic factors involved in the naturalization, acclimatization, and distribution of plant and animal life.

## GEOG 506 ENVIRONMENTAL SEMINAR

## 1 hour

Designed for future environmental practitioners, this course will provide real world examples of environmental science jobs and research projects. The course will impart a broad understanding of environmental science from a multi-disciplinary perspective. Required for the MS Environmental Science emphasis degree.
GEOG 507 GEOG FOR TEACHERS
3 hours
Equivalent courses: EDU 507. Designed for experienced social studies, earth science, and geoscience teachers. Provides up-to-date geographic content, information, and related geographic skills with geography core content for the P-12 classroom.
GEOG 510 GEOSCIENCE RESEARCH TOPICS
Supervised independent research in applied or basic geoscience topics.
GEOG 515 REMOTE SENSING APPLICATIONS
Prerequisite: GEOG 317 or permission of instructor. Applications of remote sensing, analysis of current systems in use globally, and use of data for research and policy. A research project that allows students to apply remote-sensing techniques to an area of investigation is required. Associated laboratory work includes RS techniques (course fee).

## GEOG 517 SPATIAL DATABASES

3 hours
Prerequisites: GEOG 417G AND GEOG 419G OR Instructor's Permission. Advanced topics in GIS database planning, design and implementation and administration. Covers a variety of GIS data models and their design and use in spatial database engines (SDG) used with database management systems software. (Course fee required.)
GEOG 520 GEOSCIENCE DATA MODELING
4 hours
Prerequisites: GEOG 491 or equivalent. Multivariate statistical methods for analyzing and modeling spatial data and processes. Regression methods, including spatial autoregressive and spatial varying parameter models. Principal components, cluster analysis and other multivariate methods. Applications in an interactive computer-based environment.

## GEOG 521 SEMINAR IN GEOMORPHOLOGY 3 hours

Prerequisites: GEOG 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.
GEOG 522 SEMINAR PHYSICAL CLIMATOLOGY 3 hours
Prerequisites: GEOG 422 and permission of instructor. The effects of climatic controls on micro climates and climatic anomalies. The application of climate to daily life. Detailed use of climatological characteristics.

## GEOG 524 METEOROLOGY/SCIENCE TCH $\mathbf{3}$ hours

Basic weather course with emphasis on new developments and applications in the classroom.

## GEOG 525 SEMINAR IN POLITICAL GEOGRAPHY 3 hours

GEOG 530 SEMINAR IN CULTURAL GEOGRAPHY 4 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.

## GEOG 534 HISTORIC PRESERVATION PL 3 hours

Prerequisite: GEOG 434G. Field application of historic preservation method and techniques.
GEOG 540 ADVANCED REGIONAL GEOG
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.

## GEOG 541 SEMINAR IN TROPICAL GEOG 3 hours

Prerequisites: GEOG 210, 422, 430, and permission of instructor. Specific problems of the man environment relationships of the American, African, and Asian Tropics.
GEOG 543 ENVIRONMENTAL SCIENCE CONCEPTS 3 hours
Provides students a fundamental understanding of the inter-relationship between the science and technical disciplines that contribute to our understanding of the environment as a whole. Students are exposed to the unique challenges facing environmental scientists, both from a practitioner and researcher perspective. Students learn to utilize their discipline-specific background in conjunction with an understanding of the roles and impacts of other disciplines to solve environmental problems.
GEOG 544 PRACTICAL ENVIRONMENTAL ETHICS 3 hours
Prerequisite: GEOG 280 or Equivalent Course. Examination of ethical theory as it relates to environmental issues such as resource allocation, population growth, and technology. Ethical theory is evaluated in terms of its practical contributions to effective environmental understanding, decision-making, and everyday life.

## GEOG 550 ADVANCED ECONOMIC GEOG 3 hours

Prerequisites: GEOG 350, 478 or 479, and permission of instructor. An examination of the major theories in economic geography.

## GEOG 555 GLOBAL ENVIRONMENTAL CHANGE 3 hours

Prerequisites: GEOG 280, or instructor's permission. Examines key themes in environmental change at the global scale, environmental policy formation, and relevance of environmental change for policy implementation and assessment.

## GEOG 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.

## GEOG 571 QUAL LIFE/ENVIRON PROB 3 hours

Seminar approach to developing critical ecological sensitivity through analysis of past and present environmental problems, implemented and alternative solutions.
GEOG 577 SPECIAL TOPICS IN GIS 3 hours
Prerequisites: GEOG 417G and GEOG 419G. Applications of Geographic Information Systems (GIS) technologies to applied research in urban and regional planning, geology, environmental modeling, transportation, locational analysis, criminology, public health, and internet GIS (course fee).
GEOG 580 PROB/URBAN GEOGRAPHY 3 hours
Analysis of problems of American cities.

## GEOG 584 ADV PLANNING 3 hours

Prerequisite: GEOG 484.Analysis of advanced topics and results of recent research in city and regional planning.
GEOG 585 AD POPULATION GEOG 3 hours
Prerequisite: Permission of instructor. Seminar approach to regional and world problems in human population.
GEOG 587 ENVIRONMENTAL LAW

## 3 hours

An introduction to major environmental legislation for air, water, toxic and hazardous pollutants; and related legislative, administrative, and judicial developments. The course provides a broad overview of legal practices and focuses on specific regulatory programs.
GEOG 590 EXPERIMENTAL DESIGN
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.
GEOG 595 GEOSCIENCE PRACTICUM 3-6 hours
Prerequisites: GEOG 500, 502 and 520. Supervised geoscience practicum experience in a cooperating government or private agency, business, or community.

| GEOG 599 | THESIS RESEARCH/WRITING | $\mathbf{1 - 6}$ hours ( $\mathbf{6}$ total) |
| :--- | :--- | :--- |
| GEOG 600 | MAINTAIN MATRICULATION | $\mathbf{1 - 6}$ hours |
| GEOL 405G | PALEONTOLOGY | $\mathbf{1 - 4}$ hours |

Prerequisites: GEOL 112 and 114 and BIOL 120-121 or permission of instructor. A basic course in palobiology including the nature of the fossil record, preservation, basic factors and theories relating to the origin and development of living systems and the process of evolution, the species concept, systematics, and paleoecology. Major invertebrate taxa with a significant fossil record are also studied. Laboratory work includes the examination, description, and classification of fossil specimens.

## GEOL 415G ENVIRONMENTAL GEOLOGY 3 hours

Prerequisite: GEOL 111-113 or 102 or GEOG 100 or permission of instructor. The interrelationships of geologic processes, earth materials, and human activities. Assessment of geologic factors with respect to site selection, energy production, land use, waste disposal, planning, water resources, engineering practices, and the recognition and control of geologic hazards. Class exercises stress the application of geologic
knowledge to specific environmental situations.

## GEOL 420G GEOMORPHOLOGY

1-4 hours
(Cross-listed with geography.) Prerequisite: GEOG 100 or GEOL 111. The study of the origin, history, and characteristics of landforms produced by fluvial, glacial, wind, and wave erosion and mass-wasting and ground water or by combination of these, acting upon the major types of earth materials and structures. Laboratory work includes the interpretation of topographic and geologic maps, air photos, and stereopairs. A field trip may be required.
GEOL 440G HYDROGEOLOGY 3 hours
Prerequisite: GEOL 310 or permission of instructor. Origin, occurrence, and movement of ground water; water wells and aquifer evaluations; exploratory investigations; quality of ground water supplies; legal aspects.
GEOL 445G AQUEOUS GEOCHEMISTRY 3 hours
Prerequisites: CHEM 120 and 121. An introduction to geochemical processes of surface and ground water including concentrations of ions and organic compounds, chemical equilibria, and analytical techniques. Carbonate and clay minerals will be studied in detail.

## GEOL 460G SEDIMENTATION AND STRATIGRAPHY 1-3 hours

Prerequisite: GEOL 380. Introduces sedimentary processes, including sediment origins, erosion, transportation, deposition, and diagenesis. Sedimentation patterns and stratigraphic architecture are studied in the context of depositional and tectonic settings.

GEOL 465G GEOPHYSICS 3 hours
Prerequisites: GEOL 111 and one year of college physics or permission of instructor. The fundamentals of general and exploration geophysics. Topics include the origin of the earth and solar system, the earth's interior, geochronology, gravity and isostasy, seismology, the earth's heat, geomagnetism, upper atmosphere, continents and ocean basins, ridges and island arcs, and plate tectonics. The theory and applications of exploration geophysics are also covered, especially gravity, magnetic, and seismic methods.

## GEOL 470G TECTONICS 3 hours

Prerequisite: Geology 308. Deformational structure and style of various crustal regions. Regional tectonics of North America is emphasized. GEOL 475G IND TOPICS/GEOLOGY

1-3 hours
Prerequisite: Permission of instructor. A lecture-discussion course in which advanced or special topics in geology are considered in detail. GEOL 480G COAL GEOLOGY

1-4 hours
Prerequisite: GEOL 370 or equivalent. Origins, characteristics, and occurrences of coal and coal-bearing strata. Relations between depositional environment and coal characteristics, techniques in coal exploration and the evaluation of coal prospects are emphasized. Field trip required. Petrographic description and classification are studied in the lab.
GEOL 485G GEOLOGY OF FOSSIL FUELS 3 hours
Prerequisite: GEOL 308 or Permission of Instructor. Formation of coal, petroleum, and natural gas including depositional setting, source materials, and processes of thermal maturation. Stratigraphic and structural relations, modes of occurrence, exploration techniques, and resource evaluation are emphasized. Field trip required.
GEOL 490G PETROLEUM GEOLOGY 3 hours
Prerequisite: GEOL 370 or equivalent. Concepts of oil formation, source-rock evaluation, thermal maturation, and petroleum migration are reviewed. Emphasis is placed on characterization of petroleum reservoirs and traps and on the techniques employed by geologists in exploration for oil and gas accumulations. Field trip required.
GEOL 492G SPATIAL ANALYSIS 3 hours
(cross-listed with geography) Prerequisites: GEOG 300, GEOG 391. History and philosophy of spatial analysis. Applications of spatial analytical techniques in an interactive computer-based environment.

## GEOL 511 THE DYNAMIC EARTH <br> 3 hours

GERM 430G GERMAN COMP AND CONVERS 3 hours
Intensive practice in written and spoken German, enabling the student to write letters, reports, essays, and descriptions and to discuss literary, cultural, and political topics.
GERM 432G HISTORY OF GERMAN LANGUAGE 3 hours
GERM 435G GERMAN LIT 19/20TH CENTURY 3 hours
Major German, Austrian, and Swiss writers of the 19th and 20th centuries, with emphasis on prose and drama.
GERM 436G GERMAN LIT OF CLASSIC PERIOD 3 hours
Prerequisite: GERM 314. The outstanding works of Goethe, Schiller, and other authors of the late 18th and early 19th centuries.
GERM 437G GERMAN LITERATURE AND FILM 3 hours
A study of German film and film adaptations of German literature. Emphasis on textual analysis, special film terminology, theoretical approaches to film, writing about film.
GERM 438G GERMAN LYRIC 3 hours
GERM 555 TOPICS IN GERMAN LIT \& CULTURE 3 hours
Prerequisite: Graduate Status. This course will examine different topics of interest in German literary and cultural studies.

## GRST 597 CONT ORGANIZATIONAL ADMIN

## 3 hours

Course is designed for individual student analysis of a topic of interest relative to contemporary organizations. Project will be comprehensive and multidisciplinary in approach, thereby requiring integration of concepts from various disciplines included in the program.

## GTE 536 NEEDS GIFTED/STUDENTS 3 hours

Terminology, theories, issues and general approaches in educating gifted, creative, and talented young people.

## GTE 537 CURRIC/GIFTED STUDENTS 3 hours

The curriculum and the learning environment in meeting the unique and advanced needs of gifted students. Strategies particularly suitable for the gifted.
GTE 538 PRACTICUM/TEACH/GIFTED 3 hours
Prerequisites: GTE 536, 537, and PSY 432G. Supervised experiences to integrate the knowledge and skills needed to plan, implement, and evaluate effective learning experiences for gifted, creative, and talented students.

## HCA 401G FUND HEALTH FINANCIAL MGT $\mathbf{3}$ hours

Basic principles of financial management for health care organizations. Financial ratios applicable to health providers and insurance companies; issues in the healthcare revenue cycle and value chain; recognizing sources of risk in reimbursement; and addressing risk in financial plans.
HCA 520 STATISTICAL APP IN HLTH CARE 1 hour
Co-requisite: PH 520. This course covers basic statistical applications in SPSS and MS Excel. Familiarity with personal computers is assumed. HCA 530 INDEPENDENT INVEST IN HCA 1-6 hours
Research problems or projects in the area of health care administration.
HCA 540 HEALTH CARE ORG \& MGT
3 hours
Organization and management principles, theories and practices in the health care environment. The U.S. health care system, the role of the administrator, facilities operations and evaluation, and health administration research.
HCA 541 STRATEGIC MGT \& MKT HLTH SVCS
3 hours
Marketing principles, theories, and practices in the health care environment. Structured opportunities to study health care marketing literature and to develop skills in marketing plan development.
HCA 542 HLTH CARE HUMAN RSRS ADM
3 hours
Principles and practices of human resources administration in the health care field. The unique characteristics of professional, technical, skilled and unskilled health care workers explored and emphasized.

## HCA 543 HC QUALITY AND ACCOUNTABILITY <br> 3 hours

Prerequisite: HCA 540. Critical knowledge of health care quality and required accountability within the health care industry. The major topics of quality assurance, risk management, utilization management, JCAHO and NCQA standards, Six Sigma, and continuous quality improvement will be discussed.
HCA 544 HC SYS DESIGN \& BEHAVIOR 3 hours
Systems approach to effective and efficient management of health services delivery. Application, analysis and evaluation of organizational design and behavior principles to the health care delivery components. Factors such as structure, work design, operations, and performance that affect decision-making are explored.

HCA 545 MANAGERIAL FIN ANCE IN HS
3 hours
Prerequisites: HCA 540 and BA 505. Methods of financing the delivery of health services in the U.S. Includes budgetary mechanisms and managerial finance techniques for measuring, monitoring, analyzing, and controlling costs for both the providers and consumers of healthcare services.
HCA 546 GRADUATE INTERNSHIP 1-6 hours
Supervised, full-time experience in a facility or in an agency approved by the Department of Public Health. A maximum of six hours may be earned.
HCA 551 HEALTH CARE JURISPRUDENCE 3 hours
Provides an overview of the American legal system as it relates to the health care industry. Topics include duty owed (patients and organizations), ethics, malpractice, risk management, quality, accountability, rights without obligations (of patients, practitioners, and management), and current trends in health care law.
HCA 555 H/C PREPAREDNESS \& LEADEDRSHIP 3 hours
Prerequisite: HCA 540. Disaster planning, Bioterrorism, other weapons of mass destruction, events, emergency response systems management, federal, state, and local coordinating activities, leadership principles, leadership complexities regarding healthcare professionals, and ethical dilemmas in critical leadership scenarios will be discussed.

## HCA 556 AMB CARE OF RURAL HEALTH 3 hours

Prerequisite: HCA 540. Explores operational management techniques related to ambulatory care settings identifying dynamics unique to outpatient settings. Special focus is on rural areas and their diverse management challenges.

## HCA 564 HEALTH SYSTEMS INFORMATICS 3 hours

Corequisite: HCA 565. A survey of information use and management in a health care context. Course content includes Health Information Systems, Informatics, database design, e-health, and patient privacy.

## HCA 565 INFORMATION SYSTEMS LAB 1 hour

Management of health care data using MS Excel and MS Access. Basic familiarity with personal computers is assumed.
HCA 571 MANAGED CARE 3 hours
Prerequisite: HCA 540. Overview of managed care and organized delivery systems, including history, organizational structures, financing, cost containment strategies, and policy issues.
HCA 572 TOPICS IN HLTH SERVICES 3 hours
Survey of current topics within the field of health care administration. This course varies in content from term to term and may require field trips to area organizations.
HCA 574 DECISION MAKING IN HEALTH CARE 3 hours
Prerequisite: HCA 540. Basic decision models and decision making tools useful for managing uncertainty and solving health care management problems. The course is concerned with a wide variety of applied and theoretical archetypes, as well as modeling and quantitative techniques currently used in health care management.

## HCA 584 HEALTH POLICY \& PLANNING <br> 3 hours

An overview of health policy and health planning methodologies.

## HCA 586 HEALTH ECONOMICS \& POLICY 3 hours

Economic principles applied to the study of health care facilities, health services and manpower.

## HIST 404G HISTORY OF ANCIENT EGYPT $\mathbf{3}$ hours

A study of ancient Egyptian civilization with attention to the rediscovery of ancient Egypt by modern scholars and the development of the disciplines of Egyptology.
HIST 407G CRUSADES 3 hours
A study of the idea of holy war and political, social, and cultural interaction in the Mediterranean World from 1000 to 1300.
HIST 419G TUDOR-STUART ENGLAND 3 hours
A study of the principal political, economic, social, religious, and cultural developments in British history from the beginning of the Tudor dynasty in 1485 to the end of the Stuart dynasty in 1714.

## HIST 422G FRENCH REV/NAPOLEON 3 hours

A survey of the period 1789 to 1815 with special emphasis on the political, economic, and social events leading to the birth of modern France. HIST 425G MODERN GERMANY

3 hours
A survey of German history from the early nineteenth century to the present.
HIST 426G HITLER \& NAZI GERMANY 3 hours
A detailed study of German history between 1933 and 1945, emphasizing the political, economic, social, diplomatic, and military aspects.
HIST 428G ENGLAND SINCE 19143 hours
A detailed study of the political, intellectual, cultural, and socioeconomic developments that transformed England into a welfare state and her empire into a commonwealth of nations.

## HIST 440G COL HIST/AMER TO $1776 \quad 3$ hours

The founding and development of the colonies, emphasizing political, social, cultural, and economic institutions.
HIST 441G AMER REV/EARLY REPUB 3 hours
A study of the Confederation, the making of the Constitution, and the development of the nation through the War of 1812.
HIST 442G AGE OF JACKSON 1815-1850 3 hours
A detailed study of social, political, and economic events from the War of 1812 through the War with Mexico.
HIST 443G CIVIL WAR/RECONSTRUCTION 3 hours
A study of the origins of the war, including an analysis of the military, social, cultural, and diplomatic events, as well as the significant developments of Reconstruction. Occasional field trips to Civil War sites.

## HIST 444G GILDED AGE AMERICA 3 hours

A study of American history and culture from the end of Reconstruction to the early twentieth century, emphasizing social, political, cultural, and regional development.

## HIST 445G AM LEGAL HISTORY TO 1865 <br> 3 hours

A survey of the development of American law and its relationship to political, economic, and social trends in antebellum American society. HIST 446G AM LEGAL HISTORY SINCE $1865 \quad 3$ hours
A survey of the development of American law and its relationship to political, economic, and social trends in modern American society.
HIST 447G HISTORY OF AMER POP CULTURE 3 hours
Prerequisite: Graduate student status. Introduction to the central role popular culture has played in the United States history and consciousness from the nineteenth century to the present.

## HIST 448G AMERICAN BIOGRAPHIES

3 hours
The lives of famous Americans, the times in which they lived, and the skills of their biographers.

HIST 449G KOREA \& VIETNAM 3 hours
A detailed study of both the Korean and Vietnam conflicts and how they related to the overall foreign policy of the U.S.
HIST 450G DIPLOM HISTORY/US TO $1898 \quad 3$ hours
An analysis of American diplomacy from the colonial period through the Spanish-American War.
HIST 451G DIPLOM HISTORY/U S SN $1898 \quad 3$ hours
An analysis of American diplomacy from the Spanish-American War to the present.
HIST 452G AMERICAN URBAN HISTORY
3 hours
The rise of the city from colonial times to the present, focusing on the economic base of urban expansion, the social and cultural scene, the pattern of urban politics, urban services, municipal administration, and the image of the city in popular thought.

## HIST 453G AMERICAN WOMEN'S HISTORY

3 hours
Social, cultural, and political history of American women from pre-colonial times to the present.
HIST 454G HIST/RELGN IN AMERICA
3 hours
Survey of the development of religion in America. Among topics: separation of church and state and American civil religion.
HIST 456G KENTUCKY HISTORY 3 hours
A study of the political, economic, social, and cultural development of the state from pioneer days. Local development is also stressed.
HIST 457G OLD SOUTH 3 hours
This course analyzes intellectual, cultural, political, economic, and racial ideologies of the American south, focusing on the period between 1800 and 1860.
HIST 458G NEW SOUTH 3 hours
This course analyzes intellectual, cultural, political, economic, and racial ideologies of the American south from the civil war until the end of the twentieth century.
HIST 459G IMMIGRANTS IN AMER HISTORY 3 hours
The role of immigrant groups in the building of the American nation from the colonial period to the present.
HIST 460G TRADITIONAL EAST ASIA 3 hours
A study of the political, socioeconomic, intellectual, and cultural history of China and Japan to 1600.
HIST 462G HISTORY OF MIDDLE EAST 3 hours
A study of the history, religion, and culture of the Middle East from the rise of Islam until the present.
HIST 464G LATIN AMERICA \& U S 3 hours
An intensive study of the relations between Latin America and the United States.
HIST 465G MEXICAN REPUBLIC 3 hours
A study of Mexico from 1824 to the present.
HIST 471G MODERN CHINA 3 hours
Detailed study of rise of modern China since the 17th century.
HIST 472G MODERN JAPAN 3 hours
Analysis of modern Japanese history since 1600 with special emphasis on Japan's transformation from a feudal to a modern state.
HIST 479G TOPICS/THIRD WORLD 3 hours
Intensive study of a selected Third World topic.

## HIST 480G HISTORY OF SCIENCE 3 hours

A study of the cultural and intellectual impact that science has had on the West with an emphasis on the period since the seventeenth century.
HIST 490G TOPICS IN HISTORY I 3 hours
Detailed study of selected topics in history.
HIST 491G TOPICS IN HISTORY II 3 hours
Detailed study of selected topics in history.
HIST 492G HISTORY OF CANADA 3 hours
A survey of Canada's history and heritage, with special emphasis on Canadian-American relations and interdependency.
HIST 501 EUR HIST/SEC TEACHERS 3 hours
Emphasis on bibliography, documents, historical interpretations and materials useful for secondary teachers of history.
HIST 502 US HIST/SEC TEACHERS 3 hours
Emphasis on bibliography, documents, historical interpretations and materials for secondary teachers of history.
HIST 505 CULTURAL DIV AMER HISTORY 3 hours
A topical study of cultural diversity in American history and its influence on the society's social, political, and economic institutions. Designed to assist teachers in incorporating into their classes knowledge about cultural diversity.

## HIST 515 19TH CENTURY BRITAIN 3 hours

An intensive study of the political, economic, social, and intellectual developments within Britain and her empire from 1815 to 1914.
HIST 521 US 1900-1945 3 hours
A study of American social, political, economic, and cultural developments in the period that included two world wars and the Great Depression.

## HIST 525 SOC/INTELLECTUAL 19TH C US 3 hours

A study of nineteenth century American thought and its relation to our social, economic, and political institutions.
HIST 526 SOC/INTELLECTUAL 20TH C US 3 hours
A study of twentieth century American thought and its relation to our social, economic, and political institutions.
HIST 527 SOC/INTEL 19C EUROPE 3 hours
An examination of political, social, economic, and religious thought of nineteenth century Europe and its relation to the society of the period.
HIST 535 HISTORIOGRAPHY 3 hours
A survey of historical writing from ancient times to the present, with emphasis on European and American historians of the nineteenth and twentieth centuries.
HIST 554 LOCAL HISTORY 3 hours
Materials, methodology and techniques employed in local history research and its integration with other fields.
HIST 569 COOP ED IN HISTORY 3 hours
Practical experience in a supervised work situation with a cooperating library, museum, archives, or other appropriate historical organization.
HIST 590 IND ADV INDIV STUDY 3 hours
Prerequisite: 3.0 average in at least 9 hours at the graduate level. A research problem or intensive readings directed by a faculty member. May be repeated once with a different topic.
HIST 599 THESIS RESEARCH/WRITING $\quad$ 1-6 hours ( 6 total)
HIST 600 MAINTAIN MATRICULATION 1-6 hours

HIST 605 SEM IN ANCIENT HISTORY
3 hours
A seminar that focuses on the historical developments in and cultural achievements of Ancient Greece or Ancient Rome. May be repeated once with a different topic.

## HIST 606 SEM IN EUROPEAN HISTORY 3 hours

Graduate seminar in such diverse areas as the Middle Ages, Renaissance, Reformation, and Nazi Germany. May be repeated once with a different topic.
HIST 615 SEM IN NON-WESTERN HISTORY 3 hours
Seminar on a selected topic or area of the non-Western world, including China, Japan, Middle East, Africa and Latin America. May be repeated once with a different topic.
HIST 619 SEM IN US DIPLOMATIC RELATIONS 3 hours
A study of issues, problems, and accomplishments in American foreign relations during the twentieth century. May be repeated once with a different topic.
HIST 622 SEM AMER BORDERLANDS/WEST 3 hours
A study of American borderlands and/or the regional West with a concentration on social, cultural, and political developments. May be repeated once with a different topic.
HIST 630 SEM IN U S HISTORY 3 hours
Graduate seminar in such diverse areas as Colonial America, the Federalist era, the Slavery Controversy, the U.S. since 1945. May be repeated once with a different topic.

## HIST 631 SEM IN KY HISTORY 3 hours

A study of political, economic, social, and cultural developments in Kentucky from pioneer days to the present.

## HORT 401G LANDSCAPE PLANTS II 2 hours

Corequisite: HORT 402G. Prerequisite: HORT 301 or permission of instructor. Identification, recognition and use of landscape plants; with emphasis on evergreens, annuals, perennials and bulbs, winter effect and flowering sequence of deciduous trees and shrubs will be included. Lecture 2 hours.
HORT 402G LANDSCAPE PLANTS II LAB 1 hour
Corequisite: HORT 401G. Prerequisite: HORT 301 or permission of instructor. A laboratory course correlated with HORT 401G. Laboratory, 2 hours.

## HORT 403G LANDSCAPE DESIGN/CONSTR 2 hours

Corequisite: HORT 404G. Prerequisite: HORT 402 and GC 105 or permission of instructor. Design of residential and commercial landscapes; techniques and materials for construction of landscape features such as decks, patio covers, walls, patios, pools and irrigation are presented. Lecture 2 hours.
HORT 404G LANDSCAPE DES/CONST LAB 1 hour
Corequisite: HORT 403GA laboratory course correlated with HORT 403G.
HORT 405G NURSERY MANAGEMENT
2 hours
Corequisite: AGRO 406G Prerequisite: AGRO 110Developing, planning, planting, and maintaining a modern plant nursery of container and field grown stocks of trees, shrubs, and ground covers. An introduction to the organization and management of a landscape plant nursery for container and field grown stock. Students will design and plan a working nursery for south central Kentucky.

## HORT 406G NURSERY MANAGEMENT LAB 1 hour <br> Corequisite: AGRO 405GA laboratory course correlated with HORT 405G.

HORT 407G PLANT PROPAGATION
2 hours
Corequisite: AGRO 408G. Prerequisite: AGRO 110. Plant propagation is studied and practiced as an art and a science. Sexual and asexual techniques include propagation by seed, cuttings, grafting, layering, division and tissue culture. Lecture, two hours.
HORT 408G PLANT PROPAGATION LAB 1 hour
Corequisite: AGRO 407GA laboratory course correlated with HORT 407G.
HORT 412G MODERN FRUIT PRODUCTION 3 hours
HORT 419G VEGETABLE PRODUCTION 3 hours
Prerequisite: AGRO 110 or permission of instructor. Production of vegetables that are particularly suited for Kentucky, considering variety selection, culture, harvesting, processing, and marketing. Lecture, three hours.

## HORT 475G SELECTED TOPICS HORT 1-3 hours

Prerequisite: Consent of instructor. Special topics acquaint advanced undergraduate students with scientific developments of current interest in agriculture. Appropriate topic titles are assigned. Lecture and assignments vary with credit. May be repeated with change in content.

## HORT 675 ADV TOPICS IN HORT $\quad 1-3$ hours <br> IECE 520 ORGANIZING PGMS/IECE 3 hours

Prerequisites: Admission to IECE Master of Arts in Education or Planned Sixth Year programs; or instructor's permission. Rationale for IECE (B-5), service delivery options, teaming issues, and atypical development specific to sensory, physical and cognitive disabilities. Thirty clock hours field experiences required.
IECE 521 ASSESSMENT/IECE 3 hours
Prerequisites: IECE 522. Assessment process specific to children B-5, both with and without disabilities, and their families. Thirty clock hours field experiences required.
IECE 522 FAMILY BASED SVCS 3 hours
Prerequisites: CFS 577 and IECE 520. Students apply family systems theory to family assessment, the development of family plans, and the implementation-evaluation of family-centered services. Thirty hours of field experiences are required.

## IECE 523 PLANNING CURR INSTR IECE

## 3 hours

Prerequisites: IECE 521 AND IECE 522. Planning, designing, and selecting curricula, including learning environments and instruction, for children birth through kindergarten, both with and without disabilities, and their families. Field experience is required; students are responsible for their own transportation. A course fee will be assessed.
IECE 524 INTERNSHIP/IECE 3 hours
Repeatable for a total of 6 semester hours credit. Prerequisites: ELED 509, CD 486G, EXC 523. With the advisor's permission ELED 509, EXC 488G or EXC 523 may be taken concurrently. Supervised work with children B-5, both with and without disabilities, and their families.
IECE 525 SPEC TOPICS IN IECE
1-3 hours
Prerequisites: IECE 520 and IECE 521 and IECE 522 or Instructor permission. In-depth reading, investigation, and discussion of current research, issues, and/or trends in Interdisciplinary Early Childhood Education.

## INED 530 ADVANCED DRAFTING 3 hours

An exploration of Computer Aided Drafting, including Coordinate Systems, 3D Entities, Meshes, Attributes, Shapes, Scripts, Import and Export files suffixes, and simple AutoLisp Programming.

## INED 532 INDUSTRIAL DESIGN 3 hours

INED 542 IND ELECTRICTY \& ELECTR 3 hours
Students will study electrical circuit design, integrated circuits, digital technology, PLC programming, robotics programming, and motor controls. A working model of an automated electro-mechanical device will serve as a capstone activity for the course.

## INED 544 WOOD TECHNOLOGY 3 hours

Students will explore wood as a basic industrial material. Basic properties of wood, and basic processes for separating, forming and combining wood will be explored. A presentation suitable for use as an instructional unit in wood technology will serve as a capstone for the course.

## INED 548 GRAPHIC ARTS

## 3 hours

An exploration of digital imaging, desk-top pre-press operations, and preparation of computer ready graphic files. Students will be required to scan photographic images, edit images from different sources, and produce a publication that demonstrates proficiency in graphic design.

## INED 552 ADVANCED MACHINE SHOP

## 3 hours

Students will explore metals machining processes as currently used in industry. Basic working properties of ferrous and non-ferrous metals, will be explored, and basic machine processes for separating, and forming metals will be examined. A presentation suitable for use as an instructional unit in metal processing technology will serve as a capstone for the course.

## INED 560 METALS TECHNOLOGY 3 hours

An exploration of metals as basic industrial materials. Properties of metals, required process allowances, cutting speeds, and finishing methods will be explored. Students will use computer simulations and engage in the development of a computer aided teaching resource for metals technology.
INED 568 CERAMICS AND PLASTICS 3 hours
Students will explore composite materials, thermosetting and thermoplastic processing, and ceramic oxides, nitrides, carbides and borides. Applications of synthetic materials in manufacturing and construction will be re-searched and a final presentation suitable for secondary school instruction will be developed.

## INED 600 MAINTAIN MATRICULATION 1-6 hours

IT 465G IND TECH FOR ELEM TCHERS 3 hours
Prerequisite: Graduate standing. Philosophy, purposes, organization and correlation of industrial arts activities as they apply to the elementary school program.

## IT 510 INVESTIGATN IN IND TECH <br> 3 hours

Individual research under the direction of a graduate faculty member.
IT 520 PHILOSOPHY OF IND TECH
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.
IT 525 PLAN \& ORG TECH ACT 3 hours

Curriculum practices, concepts, and trends in curriculum development and improvement of programs.

## IT 599 THESIS RESEARCH/WRITING 1-6 hours

Students will develop a proposal for a technology education research project under the direction of a graduate faculty member. After the proposal is accepted the student will engage in appropriate research and will produce a thesis report suitable for publication in a related technology journal.
JOUR 427G SCHOOL JOURNALISM 3 hours
A course designed to meet the state requirements for secondary certification in journalism. Explores resources available to journalism teachers and the responsibility of publication advisors.
JOUR 481G PROB/MASS COMMUNICATION 3 hours
Study of contrived and real problems involving research, planning and implementation.

## LEAD 500 EFFECTIVE LEADERSHIP STUDIES

3 hours
Prerequisites: Graduate standing or graduate application and completion of the admission process for Graduate Certificate in Leadership Studies. An in-depth investigation of the basics of effective leadership including current and historical leadership theories. Assessment of leadership styles will be a key component.

## LEAD 575 LEADERSHIP SPECIAL TOPICS 3 hours

Prerequisite: LEAD 500. Applications of leadership theories and methodologies in selected fields, including the sciences, engineering, urban planning, the arts, public health, education, and business, and for study abroad programs. Repeatable once for credit.

## LEAD 600 CAPSTONE LEADERSHIP EXPERIENCE 2 hours

Prerequisite: After completion of all other courses approved for the Graduate Certificate in Leadership Studies or concurrent with the last course needed for fulfillment of the certificate. An opportunity to synthesize applied leadership principles at the graduate level and apply them in a reallife setting. In consultation with the student's leadership studies advisor and a faculty member of one of her/his leadership studies courses, the student will demonstrate leadership abilities in area businesses, campus, non-profit, or public sector organizations or other related situations.

## LME 407G LITERATURE/YOUNG ADULTS 3 hours

Selection and evaluation of materials, reading guidance, and programming for young people, adolescence through young adult.

## LME 409G SELECTED TOPICS 1-3 hours

Prerequisites: Permission of supervising faculty member. Problematic study of a selected topic under the direction of a faculty member. A formal research paper or annotated bibliography is required.

## LME 410G STORYTELLING 3 hours

Storytelling literature, story selection and sources. Practice in oral communication.
LME 411G CRTVE MEDIA EXP CHILDREN 3 hours
Methods and procedures for developing creativity in children. The design and evaluation of materials and activities in a variety of media formats for school and library settings. Includes program development.
LME 445G INTRO EDUCATIONAL TECH 3 hours
Instruction and laboratory experiences in the basic theory and application of educational technology to the design, production, evaluation, and utilization of various communication media formats.
LME 448G TECHNOLOGY APPS IN EDUCATION 3 hours
Uses of technology in education for instruction and instructional management. Emphasis on evaluation and utilization of appropriate software and hardware.
LME 475G WORKSHOP 3 hours
Workshop classes of variable content focused on library media practice and integration of educational technology.

## LME 501 PROGRAM ORGANIZATION \& ADMIN 3 hours

Development and administration of the library media program to support the educational goals of the school. Includes school/community needs assessment, program design, implementation of evaluation, budget, and other management areas.

LME 502 COLLECTION MANAGEMENT 3 hours
Principles of collection management to meet the needs of the school library media program. Evaluation, selection and acquisition of print, nonprint and electronic resources. Examination and development of collection policies and procedures, including acceptable use policies and copyright.
LME 506 CLASS AND CATALOGING 3 hours
Classification, descriptive and subject cataloging for print and other media forms. Compliance with national standards including MARC record format.
LME 508 INFORMATION SOURCES \& SERVICES 3 hours
Information sources and services in school library media centers. Evaluation and use of print and electronic general reference sources, including search techniques. Emphasis on reference interview process, information literacy, and development of pathfinders.
LME 509 INVEST IN EDUC TECHNOLOGY
1-3 hours

The completion of a formal research study in educational technology or the creation of an educational technology prototype under the supervision of a faculty member.
LME 512 ISSUES IN LME 3 hours
Types of information centers and their history, state and national accreditation standards, the development of communication and information technologies, the impact of technology on education, and career opportunities. Attention to legal issues like intellectual freedom, censorship, and information access.
LME 518 ADV CHILDREN'S LIT
Materials available to meet the needs of children including outstanding authors, illustrators, topical issues, and the reviewing of children's books.
LME 519 SPECIAL TOPICS IN ED TECH 3 hours
Special topics in the field of educational technology. May be repeated once with a different topic.
LME 527 THEMATIC YOUNG ADULT LIT 3 hours
Thematic examination of literary genres and non-print media appropriate for young adults, ages 12-18. Includes management and service components for effective young adult literature programs

## LME 535 SURVEY OF ED TECH PRACTICES 3 hours

Focus on instructional design and communication models appropriate to effective utilization of multimedia for instruction and training. Application of various multimedia to design, produce, and evaluate instructional/training projects.

## LME 537 PRIN OF ED TECH APPLICATIONS 3 hours

Uses of technology for instruction and instructional management. Emphasis on instructional techniques, evaluation and utilization of appropriate instructional software, productivity tools, and the Internet for various subjects, grade levels, and needs of diverse learners.

## LME 545 EDUC TECHNOLOGY PRODUCTION 3 hours

Product design and production techniques for education and training. Utilization of various software and hardware configurations to produce electronic prototypes.
LME 547 INTEGRATION OF EDUC TECHNOLOGY 3 hours
Application of principles of instructional design to the integration of technology into education and training programs.
LME 590 PRACTICUM
1-3 hours
Field based experience in an appropriate setting under a certified library media specialist or a qualified technology coordinator. Prerequisites: LME 501 and in last term of enrollment.

## LME 599 THESIS RESEARCH/WRITING 1-6 hours (6 total) <br> LME 600 MAINTAIN MATRICULATION 1-6 hours <br> LTCY 421G READING IN MIDDLE SCHOOL 3 hours

A course in reading designed to offer a detailed view of the principles, materials and methods of instruction for middle grade students. Field experiences in public schools and/or other appropriate settings away from campus are required in this course. Students are responsible for arranging their own transportation to designated or assigned sites.

## LTCY 444G READ MIDDLE/SECONDARY GRADES $\mathbf{3}$ hours

The principles, psychology, and methodologies, for teaching the general and the specialized reading skills in the middle and secondary grades. This course required for secondary English.

## LTCY 518 LTCY LEARNING AND TECHNOLOGY 3 hours

Prerequisite: Admission to the MAE in Literacy Education program or permission of instructor. Survey of use of technology to promote the development of reading, writing, and teaching and learning via electronic formats. Topics include integration of technology into literacy instruction that supports diverse literacy learners and designing appropriate reading and language arts technology-based projects for literacy learners.

## LTCY 519 FOUNDATIONS READ INSTRUCTION 3 hours

Analysis of the reading process with emphasis on the psychological and physiological foundations of the reading act.

## LTCY 520 CLIN DIAG READ ABILITIES 3 hours

Prerequisite: LTCY 519 and admission to the MAE/Literacy Program, or instructor permission. 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.
LTCY 521 READING INTERVENTION
3 hours
Prerequisite: Admission to the MAE/Literacy Program. Instructional techniques for use with individuals or groups involved in remedial reading instruction; materials and procedures; clinical experiences with remedial students.

## LTCY 522 INVESTIGATIONS IN READING $\mathbf{1 - 3}$ hours

Prerequisites: LTCY 528 and admission to the MAE/Literacy Program. Maximum total credit allowed: 3 hours. Individual investigation of the research and descriptive literature in the field of reading.
LTCY 523 DIAGNOSTIC READING PROCEDURES 3 hours
Prerequisite: LTCY 519 or instructor permission. Emphasizes practical methods of reading appraisal, diagnostic procedures, and materials essential for developing teaching strategies in reading instruction.

## LTCY 524 CONTENT AREA LITERACY 3 hours

Prerequisite: LTCY 519 or instructor permission. Reading and study skills strategies and techniques to increase student achievement in contentarea classes.
LTCY 527 LTCY LEARNING CULTURE DIFF 3 hours
Prerequisite: LTCY 519 or instructor permission. Introduction to social factors, cultural factors, and aspects of language that affect teaching and learning of literacy, particularly in reading, writing, and the language arts; application of multicultural perspectives to curriculum development and classroom literacy practices.

LTCY 528 LITERACY RESCRH METH \& EVAL 3 hours
Prerequisites: LTCY 519 and Admission to the MAE/Literacy Program. Investigation and critical analysis of literacy research and theory, and completion of literacy related-research project.

## LTCY 599 THESIS RESEARCH \& WRITING 1-6 hours (6 total)

LTCY 624 SEMINAR IN LITERACY ISSUES 3 hours
Prerequisite: LTCY 519 or instructor permission. Covers research and descriptive literature related to specific reading problems.
LTCY 695 INTERNSHIP/LTCY SUPERVISION $\mathbf{3}$ hours
Prerequisites: LTCY 521 and instructor permission. In-depth practice of the process for supervising reading professionals in assessing and researching reading problems (first semester) and developing clinical interventions (second semester). Course may be repeated once on a different focus for a total of 6 hours.

## MATH 403G GEOM EL/MID TCHRS 3 hours

Prerequisites: MATH 211 and MATH 212, or equivalent. (For students enrolled in elementary or middle grades graduate programs.) Both formal and informal methods are used to explain the basic concepts of Euclidean geometry. Emphasis is given to the investigative approach, organizational skills, and problem solving. (Not applicable for the M.S. degree in Mathematics or the M.A.E. degree in Secondary Education.) MATH 405G NUMERICAL ANALY I 3 hours
Prerequisites: MATH 307 or 310 or 327 ; and CS 230 or CS 240 or permission of instructor. Computer arithmetic, roots of equations, polynomial approximation and interpolation, numerical differentiation and integration. Computer solutions of problems will be required.

## MATH 406G NUMERICAL ANALY II 3 hours

Prerequisites: MATH 307, 327 and 331; and either MATH 405 or CS 405 . The solution of linear systems by direct and iterative methods, matrix inversion, the calculation of eigenvalues and eigenvectors of matrices. Initial and boundary value problems in ordinary differential equations. Computer solution of problems will be required.
MATH 409G HISTORY OF MATHEMATICS 3 hours
Prerequisite: Graduate standing with at least 6 hours of undergraduate mathematics or permission of instructor. History of mathematics from ancient times through the development of calculus with emphasis on famous problems. Provides knowledge and appreciation useful in the classroom. Term papers will be required. (Not applicable to the M.S. degree in Mathematics).

## MATH 411G PROB SOLV EL/MG TCH $\mathbf{3}$ hours

Prerequisites: MATH 403 or MATH 323 or permission of instructor. Integrates concepts developed in algebra, geometry, logic, statistics, probability, and elementary number theory. Students are encouraged to use problem-solving strategies, models, and technologies, and to create problems of their own. (Not applicable to the M.S. degree in Mathematics or the M.A.E. in Secondary Education.)

## MATH 413G ALG/TECH FOR MID GRADES TCHRS 3 hours

Prerequisite: MATH 212 or equivalent and graduate standing. The use of graphing calculators and computer software to explore algebraic ideas including patterns, functions, equations, inequalities, linear programming, curve fitting, and practical applications of algebra and technology. (Not applicable to the M.S. degree in Mathematics or the M.A.E. degree in Secondary Education.)

## MATH 415G ALG/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.
MATH 417G ALGEBRAIC SYSTEMS 3 hours
Prerequisite: MATH 317.Theory of groups.
MATH 421G PROB SOLV SEC TCH 3 hours
Prerequisites: MATH 307 and MATH 310; MATH 329 and MATH 323, or permission of instructor. Utilizes various techniques and technology to solve mathematical problems. Integrates concepts from algebra, goemetry, trigonometry, probability, statistics, number theory, discrete mathematics, linear algebra, and calculus. (Not applicable to the M.S. degree in mathematics).

## MATH 423G GEOMETRY II

3 hours
Prerequisite: MATH 323. An axiomatic development of plane hyperbolic geometry which presupposes a development of absolute geometry.
MATH 429G PROBAB/STATS II 3 hours
Prerequisite: MATH 327, 329. Multivariate probability distributions; sampling distributions, statistical inference; point and interval estimation, properties of estimators; hypothesis testing; regression and correlation; analysis of variance; non-parametric methods.

## MATH 431G INTER ANALYSIS I 3hours

Prerequisite: MATH 317. Topics chosen from cardinality, limits, continuity, elementary topological concepts, sequences and series, differentiation and integration, elementary functional analysis.
MATH 432G INTER ANALYSIS II 3 hours
Prerequisite: MATH 431. Continuation of MATH 431.
MATH 435G PARTIAL DIFF EQNS 3 hours
Prerequisites: MATH 307, 327, and 331. Equations of first and second order; elliptic, hyperbolic and parabolic equations of mathematical physics using separation of variables and Fourier series.

## MATH 439G TOPOLOGY I 3 hours

Prerequisite: MATH 317 or permission of instructor. Topological spaces, mappings, separation axioms, compactness, connectedness, arcwise connectedness, metric spaces.

## MATH 450G COMPLEX VARIABLES 3 hours

Prerequisite: MATH 327. Complex number plane, analytic functions of a complex variable, integration, power series, calculus of residues, conformal representation, applications of analytic function theory.

## MATH 470G INTRO TO OPERAT RES 3 hours

Prerequisite: MATH 307 and 327 or permission of instructor. Principles and techniques of operations research including linear programming, integer programming, quality theory, sensitivity analysis, and dynamic programming.

## MATH 475G SEL TOPICS MATH 1-3 hours

Prerequisite: Permission of instructor. Significant problems and developments of current interest.

## MATH 500 READINGS IN MATH $\mathbf{1 - 3}$ 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.

## MATH 501 INTRO PROB/STAT I 3 hours

Prerequisite: Permission of instructor. Interpreting and analyzing univariate and bivariate data; data collection; planning and conducting experiments; probability and sampling distributions; statistical inference. (Not applicable to the M.S. degree in Mathematics.)
MATH 502 INTRO PROB/STAT II 3 hours
Prerequisite: MATH 203 or 329 or 501; or permission of instructor. Review of linear algebra, Markov chains, decision theory, linear programming and game theory.

MATH 503 INTRO 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.

## MATH 504 COMP APP PROB MAT 3 hours

Computer techniques and solutions of problems in mathematics including calculus, applied statistics, simulation, linear programming, game theory and linear algebra.
MATH 507 MATH CONCEPTS FOR ELEM TEACHER 3 hours
Prerequisites: MATH 211 and MATH 212. Course in intended for graduate students in Elementary Education only. Focuses on mathematics and strategies to effectively teach Kentucky Mathematics Core Content in grades K-5.

## MATH 508 NUMBER CONCEPTS ELEM/MID TEACH 3 hours

Prerequisites: Math 211 and Math 212 or permission of instructor. Mathematical structures of integers and rational numbers; numeration systems; elementary number theory; special sequences and numerical of relationships; applications of fractions, decimals, percents, ratio, proportion, exponents, and scientific notation. (Not applicable to M.S. degree in Mathematics or M.A.E. degree in Secondary Education.)
MATH 509 HIST MODERN MATH
3 hours
Prerequisite: MATH 227 or permission of the instructor. History and development of mathematics since the 18th century with an emphasis on important problems and famous mathematicians. (Not applicable to the M.S. degree in mathematics).

## MATH 511 SEC MATH ADV PERSPECTIVE I 3 hours

Intended for teachers wishing to develop a deeper understanding of high school algebra and calculus. Examines links among different fields of mathematics and connections among high school, mathematics, college mathematics and higher mathematics. (Not applicable to the M.S. degree in Mathematics, general option.)

## MATH 512 SEC MATH ADV PERSPECTIVE II 3 hours

Prerequisites: Mathematics major, mathematics minor or permission of instructor. Intended for teachers wishing to develop a deeper understanding of underlying concepts of geometry. Examines relationships among different fields of mathematics and connections among high school mathematics, college mathematics and higher mathematics. (Not applicable to the M.S. degree in Mathematics).

## MATH 514 APP MODELING SEC TCHR

3 hours
Prerequisites: Mathematics major, mathematics minor, or permission of the instructor. Utilizes concepts from many fields of mathematics to explore how high school and college mathematics are used in real world settings. Intended for secondary teachers. (Not applicable to the M.S. degree in Mathematics.)
MATH 517 TOPICS FROM ALG 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.
MATH 523 TOPICS FROM GEOM 3 hours
Prerequisite: Undergraduate geometry and permission of instructor. Geometry of special lines and points, isometrics, similarities, inversion, applications.
MATH 529 APPLIED PROBABILITY 3 hours
Prerequisites: MATH 431 or MATH 327 and permission of instructor. Axiomatic development of the theory of probability. Introduction to Markov chains, random variables, distributions, transformations. Limit theorems and various modes of convergence.

## MATH 530 MATH STATISTICS 3 hours

Prerequisite: MATH 529. Statistical inference. Point estimates and their properties; Bayes estimates, Cramer-Rao inequality, interval estimates, hypothesis testing, linear models, analysis of variance, non-parametric inference.

## MATH 531 ADV DIFF EQNS 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.

## MATH 532 REAL ANALYSIS 3 hours

Prerequisite: MATH 432. Function spaces, additive set functions, outer measure; measurable functions, integration.

## MATH 535 ADV APPL MATH I 3 hours

Prerequisites: MATH 331, 431. Eigenvalue and boundary value problems, orthogonal expansions in function spaces, classical polynomials, Sturm-Liouville theory, Fourier and Laplace transforms.
MATH 536 ADV APPL MATH II 3 hours
Prerequisite: MATH 535. Integral equations, calculus of variations, maximation of linear functionals, maximum gradient method.
MATH 539 TOPOLOGY II 3 hours
Prerequisite: MATH 439. Homotopy, homology theory.

## MATH 540 STOCHASTIC PROCESSES 3 hours

Theory and application of stochastic processes; random walks; Markov chains; Poisson processes; birth and death processes; queues; renewal and branching processes; computer simulations.

## MATH 541 GRAPH THEORY 3 hours

Prerequisite: Undergraduate major in mathematics or permission of instructor. Introduction to the basic concepts of graph theory. Topics include Eulerian circuits, Hamiltonian cycles, coloring problems and planar graphs.

## MATH 550 COMPLEX ANALYSIS 3 hours

Prerequisites: MATH 432, 450. Analytic continuation, conformal mapping, Riemann surfaces, and univalent functions.

## MATH 560 FUNCT ANALYSIS $\mathbf{3}$ 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.
MATH 570 TOP OPERATION RES 3 hours
Prerequisites: MATH 432, 470, or consent of instructor. Specific area(s) of operations research.
MATH 590 SPEC TOPICS IN MATHEMATICS 3 hours
Prerequisite: Permission of instructor.
MATH 599 THESIS/RESEARCH 1-6 hours (6 total)
MATH 600 MAINTAINING MATRIC $\quad$ 1-6 hours
MGE 530 SEM IN ENGLISH EDUCATION 3 hours
Prerequisite: Permission of instructor. Current methods and materials for junior and senior high school English courses, research and professional trends. Crosslisted with SEC 530.
MGE 534 MATH EDUCATION 3 hours
Prerequisite: Permission of instructor. Covers newer concepts in curriculum and methods of instruction, current research and problems in mathematics education. Crosslisted with SEC 534.

MGE 537 SCIENCE EDUCATION
3 hour
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 organization, and research in science education. Crosslisted with SEC 537.

MGE 538 SOCIAL STUDIES EDUCATION 3 hour
Prerequisite: Permission of instructor. Covers newer concepts in curriculum and methods of instruction as well as current research in social studies education. Crosslisted with SEC 538.
MGE 545 IND INVESTIG/MGE 1-3 hours
Opportunity for middle school teachers to engage in concentrated study of specific problems and/or development of specific skills related to effective classroom instruction.
MGE 570 WORKSHOP/MGE 1-3 hours
Activity-centered on a relevant area of study.
MGE 571 ORG MDL GR CURR 3 hours
Examination of programs designed for the young adolescent. Functions, organizations, planning, and evaluation of the curriculum. Includes special curricular areas.
MGT 570 BUSINESS GOVT LAW 3 hours
Development, implementation, and impact of major public policies toward business. Includes antitrust, consumer protection, conservation and environmental control, etc.

## MKT 529 IND STUDY/MARKETING 1-3 hours

Supervised independent study of a topic or problem culminating in a scholarly paper or problem solving report.
MLNG 410G SECOND LANGUAGE

## 3 hours

Introduction to principal theories of the acquisition of a second or foreign language. Explores how language learning styles and strategies relate to language acquisiton and implications for the classroom.

## MLNG 420G MULTIMEDIA TECH TCHG FOR LNG hours

Special Requirements: For graduate enrollment: teacher certification in French, German, or Spanish or permission of instructor. Pedagogical and hands-on training for in-service teachers. Students may gain permission of instructor to enroll in a section for a language other than French, German, or Spanish.
MLNG 474G TEACHING FOREIGN LANGUAGE 3 hours
Corequisites: SEC 453. Prerequisites: EDU 250 and EXED 330 and EDUC 403 or SEC 351, PSY 310. Develops skills, procedures and strategies for teaching foreign language in middle and secondary schools. Field experiences in public schools and/or appropriate settings away from campus are required for this course. Students are responsible for arranging their own transportation to designated or assigned sites.

## MLNG 480G TOPICS CULTURE PEDAG 1-3 hours

Topics in Modern Language cultures and societies, including literature and the arts, social issues, and current events, as well as aspects of language pedagogy. Students enroll in course sections for the language of their major. May be repeated with different topics for a maximum of 6 hours of credit.
MUS 440G CHORAL UNION 1 hour
Performing ensembles are open to the entire campus community. Most ensembles require an audition prior to membership, and there are varying levels of performance difficulty. Some of these ensembles are required for music degrees.

## MUS 441G UNIVERSITY CHOIR 1hour

Performing ensembles are open to the entire campus community. Most ensembles require an audition prior to membership, and there are varying levels of performance difficulty. Some of these ensembles are required for music degrees.

## MUS 444G UNIVERSITY ORCHESTRA 1 hour

Performing ensembles are open to the entire campus community. Most ensembles require an audition prior to membership, and there are varying levels of performance difficulty. Some of these ensembles are required for music degrees.

## MUS 445G CHAMBER SINGERS 1 hour

Performing ensembles are open to the entire campus community. Most ensembles require an audition prior to membership, and there are varying levels of performance difficulty. Some of these ensembles are required for music degrees.
MUS 448G BAND 1 hour
Performing ensembles are open to the entire campus community. Most ensembles require an audition prior to membership, and there are varying levels of performance difficulty. Some of these ensembles are required for music degrees.

## MUS 449G CHAMBER MUSIC 1 hour

MUS 450G APPLIED MUSIC SECONDARY 1 hour
Applied study intended for beginners and requires no audition.
MUS 453G APPLIED MUSIC PRINCIPAL 2 hours
Applied study assumes graduate-level proficiency.

## MUS 471G JAZZ ENSEMBLE 1 hour

Performing ensembles are open to the entire campus community. Most ensembles require an audition prior to membership, and there are varying levels of performance difficulty. Some of these ensembles are required for music degrees.

## MUS 500 THEORY SEMINAR 3 hours <br> MUS 509 GEN MUS ELEM/MIDDLE SCH 3 hours

Includes advanced study of contemporary elementary music education trends, methodologies, instructional techniques, and materials. Expands contemporary instructional methods.

## MUS 511 INVESTIG/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.
MUS 512 MUSIC EDUCATION WORKSHOP 3 hours
A variable topic workshop that may be repeated for a total of six hours.
MUS 513 IND DIR STUDY/MUSIC ED
3 hours
Research projects in music education.

## MUS 514 GEN MUS/SECONDARY SCHOOL 3 hours

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

## MUS 518 ADVANCED CONDUCTING 3 hours

Course designed to sharpen and enhance skills as an ensemble conductor. Emphasis on specific conducting problems, rehearsal techniques and score study.

MUS 525 MUSIC \& THE HUMAN EXPER
3 hours
An investigation and study of the art of music encompassing the historical, philosophical, psychological and sociological tenets of the discipline. MUS 530 MUSIC LITERATURE 3 hours
Investigation of a specialized area not covered in other music literature courses.
MUS 538 IND DIR STUDY/THEORY-LIT
3 hours
Supervised private research culminating in a scholarly paper.
MUS 559 GRADUATE RECITAL 2 hours
NURS 415G COMPLEMENTARY HEALTH CARE 3 hours
Selected holistic modes of healing will be explored. Focus will be on history, research findings, theoretical basis and legal implications.

## NURS 450G RURAL HLTH \& SFTY

3 hours
Students will explore a variety of health and safety issues unique to rural populations. The interdisciplinary team concept will be used throughout the course to foster collaboration that facilitates sharing of the expertise of students and faculty.
NURS 490G PARISH NURSING
3 hours
Prerequisite: Permission of instructor. An exploration of the dimensions of parish nurse practice, its key concepts, and how it is practiced using the nursing process. Registered nurses who successfully complete the core curriculum can be recognized as parish nurses by the International Parish Nurse Resource Center. Baccalaureate nursing students who successfully complete the course may be recognized as parish nurses upon completion of the baccalaureate nursing program and licensure as registered nurses.

## NURS 500 ADV PHYS AND PATHO CONCEPTS 4 hours

Prerequisite: Admission to graduate nursing program or completion of baccalaureate in nursing. Normal physiological and pathophysiological mechanisms of disease are used to explain human responses to potential and actual health problems across the life span as a foundation for clinical practice, decision-making and management.

## NURS 501 NURSING POLITICS \& HLTH POLICY 2 hours

Prerequisite: Admission to graduate program. Focuses on health care economics and policy analysis of current health care problems and issues. Emphasizes the role of the advanced practice nurse in health policy formation and political action.

## NURS 502 ADV HEALTH ASSESSMENT

## 1-3 hours

Prerequisite: Admission to graduate nursing program. Emphasis is on the advanced skills and techniques of interviewing and health assessment that are utilized by the nurse in a primary or acute care setting. Diagnostic laboratory studies will also be discussed as they relate to the nurse in Advanced Professional Practice. Two hour lecture and four hours clinical per week.
NURS 504 THEORY/FOUND/PROF NURSING
3 hours
Prerequisite: Admission to graduate nursing program. This course provides the student with a basis for theory development, analysis of selected conceptual and theoretical frameworks for advanced professional nursing practice, and provides knowledge concerning ANA's Social Policy Statement, and role socialization in advanced nursing practice. In addition, the concepts of case management and management care will be analyzed as approaches to advanced nursing practice.

## NURS 506 TRANSITION TO ADV NURSING PRAC 1 hour

Prerequisite: Admission to graduate nursing program. Focuses on the transition from the professional nursing role to an advanced nursing practice role. Legal, ethical and advanced practice issues are emphasized.

## NURS 508 ADV ISSUES/PROF NURSING 1 hour

Analysis and synthesis of content from NURS 501/506 and new content regarding political, legal, socioeconomic, and technological. Issues that impact advanced nursing practice.

## NURS 509 PRACTICE MANAGEMENT FOR APN 1 hour

Corequisites: Nurs 552 or Nurs 554. Focuses on legal and regulatory issues and business skills important to the management of a primary care practice for advanced practice nurses.
NURS 510 GRAD NURSING RESEARCH
3 hours
Prerequisites: Admission to graduate nursing program and a graduate level statistics course prior or concurrent. This course is designed to increase excitement about nursing research and facilitate the search for knowledge through research. A strong conceptual framework linking research with practice, theory, knowledge and philosophy will be stressed.
NURS 512 RESEARCH APPLICATIONS
2 hours

Prerequisites: Admission to graduate nursing program and completion of NURS 510. Includes interpretation, critique and communication of research findings; examine sources and application process for research funding. Written papers, oral presentations and projects required.

## NURS 514 ADV CLINICAL NURSING I 1-3 hours

Prerequisites: Admission to graduate nursing program and completion of NURS 501, 502, 504, 506 and 510 . This course will provide the foundation for concepts and issues that influence advanced nursing practice including health teaching, policy development, environmental health concerns, family relationships, case management/managed care, cultural influences, and selected health care problems. Two hours seminar and six contact hours per week.

## NURS 515 ADV PHARMACOLOGY 4 hours

Prerequisite: Admission to graduate nursing program or completion of baccalaureate program in nursing. Pharmacologic applications for primary care practice designed to prepare nurse practitioners for prescribing drugs within their scope of practice. Basic pharmacologic principles and the pharmacologic actions of major drug classes will be discussed in relation to physiologic systems with emphasis on the application of these agents to primary care practice.

## NURS 518 CLINICAL TEACHING IN NURSING <br> 3 hours

NURS 520 TEACHING IN SCHOOLS NSG
3 hours
Prerequisites: NURS 514 and 6 hrs restricted electives. This course is designed to assist the student to develop skills necessary for teaching nursing. Focus will be on development of the teaching - learning plan, identification of appropriate teaching strategies, development of appropriate evaluation methods, and socialization activities for nursing faculty.

## NURS 522 TEACHING NURSING INTERNSHIP 4 hours

Prerequisite: NURS 520. This course provides the student the opportunity to implement the nurse-faculty role in an academic setting. The student works with a nurse-faculty to gain actual experience teaching nursing and refining techniques learned about the teaching-learning process.

## NURS 528 LEADERSHIP \& MGMT NURS ADMIN $\mathbf{3}$ hours

Prerequisites: NURS 504, 506, 510; BA 500, 501, 505. Integrates nursing, business and related theory to provide a framework for examination of issues related to efficient and effective administration and management of resources for patient care delivery.

## NURS 530 NURSING ADMIN PRACTICUM 1-3 hours

Prerequisite: NURS 528. This course will provide an opportunity to develop advanced nursing administration skills in the management of human resources and analysis of models for the organization of nursing services.

NURS 540 OCCUP HLTH NURS PRACT I
1 hour
Prerequisites: NURS 506 and PH 575 or PH 402. Field experience in selected areas of advanced practice in occupational health nursing. Experiences will be planned with faculty and Preceptors that assist the student in acquiring skills related to environmental and occupational health assessment, health surveillance and health promotion in the workplace setting.

## NURS 541 OCCUP HLTH NUR PRACT II 1hour

Prerequisite: NURS 540. Field experience in selected areas of advanced practice in occupational health nursing. Experiences will be planned with faculty and Preceptors that assist the student in acquiring skills related to environmental and occupational health assessment, health surveillance and health promotion in the workplace setting.

## NURS 542 OCCUP HLTH NURS PRACT III 3 hours

Prerequisite: NURS 541. Concentrated internship experience in selected areas of advanced practice occupational health nursing. Emphasis on integration of the roles of the advanced practice occupational health nurse.
NURS 550 PRIMARY CARE CHILDREN 1-5 hours
Prerequisite: Admission to graduate program and completion of NURS 500, 502, 504 and NURS 515. This course provides both didactic and clinical experience focusing on pediatric and adolescent health. Emphasis will be on health maintenance, management of common health problems, and health education. The role of the nurse as primary care practitioner in a variety of settings will be examined. Two-hour seminar; eight hours clinical per week or 120 total hours.

## NURS 552 PRIMARY CARE: ADULTS 1-5 hours

Prerequisites: Admission to graduate nursing and completion of NURS 550.This course provides both didactic and clinical experience focusing on adult health. Emphasis will be on health maintenance, management of common health problems, and health education. The role of the nurse as primary care practitioner in a variety of settings will be examined. Two-hour seminar; eight hours clinical per week or 120 total hours.

## NURS 554 PRIMARY CARE INTERNSHIP

5 hours
Prerequisite: Completion of NURS 552. This course is a clinical practicum and the student will focus on children, adolescents, adults and the aged. The role of the nurse as a primary health care provider in a variety of settings will be explored. Minimum of twenty-eight hours per week. (Pass/Fail)
NURS 590 SPECIAL TOPICS IN NURSING 1-3 hours
Prerequisites: Permission of instructor. Supervised individual or group study on special topics in nursing. (maximum 6 hours)
NURS 599 THESIS RESEARCH/WRITING 1-6 hours (6 total)
NURS 600 MAINTAIN MATRICULATION 1-6 hours
PE 501 RESEARCH METHODS IN PE 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)

## PE 503 MOTOR LEARNING 3 hours

Theories and principles of learning as they apply to the acquisition of gross motor skills. Emphasizes the interpretation and practical application of experimental data.
PE 504 ADVANCED EXERCISE PHYSIOLOGY 3 hours
Application of physiological principles of motor activity. Emphasis on improving instructional practices.
PE 505 FOUND CURRIC CONSTR 3 hours
Principles, procedures, and criteria for curriculum construction and revision, course building, and lesson planning.

## PE 508 ADAPTIVE PHY EDUCATION 3 hours

In-depth study of instruction of disabled children in mainstream and/or special physical education classes. Knowledge and skills necessary to assess, plan intervention, and instruct mild, moderate, severely/profoundly disabled children in physical education.

## PE 515 PE/REC ASSESSMENT 3 hours

Focusing on assessment tools utilized to measure motor development, fitness, motor skills, etc.

## PE 520 TEACH STRATEGIES 3 hours

Study and application of teaching strategies utilized in the elementary and secondary physical education setting.

## PE 521 CRITICAL ANALYSIS PROF LIT 1-3 hours

PE 522 ADVANCED EXERCISE PRESCRIPTION 3 hours
PE 523 SEMINAR IN EXERCISE SCIENCE 3 hours
PE 524 APPLIED BIOMECHANICS 3 hours
Advanced study of the mechanical, neuromuscular, and anatomical bases of human movement.
PE 530 INDEP INVESTIGATION/PE 1-3 hours
Research problems or projects in the organizational, administrative, or supervisory areas of physical education.

| PE 596 | PRACTICUM IN EXERCISE SCIENCE | 3 hours |
| :--- | :--- | :---: |
| PE 599 | THESIS RESEARCH/WRITING | $\mathbf{1 - 6}$ hours ( $\mathbf{6}$ total) |

## PE 600 MAINTAIN MATRICULATION 1-6 hours

PH 402G WORKSITE HEALTH PROMOTION
3 hours
Prerequisite: PH 390. This course will provide specific concepts and skills needed in worksite health promotion using comprehensive health promotion and education techniques. This course will also discuss policy issues, program planning and special population interactions that are unique to the worksite setting.
PH 443G HEALTH PROB OF 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.

## PH 444G DEATH EDUCATION 3 hours

Prerequisite: Three hours of social or behavioral science. Man's relationship to death and dying, coming to terms with eventual death, coping with death of loved ones and with fear of death. Includes suicide prevention. Field trips are required.

## PH 447G HUMAN VALUES/HEALTH SCI 3 hours

Prerequisites: PH 261 and PH 381 or appropriate background in the social, behavioral, biological, or allied health sciences. Analysis of the difficult ethical, legal, and social dilemmas confronting the health care delivery system, patients, medical practitioners, and other health care professionals in contemporary American society.
PH 450G RURAL HLTH \& SFTY 3 hours

Students will explore a variety of health and safety issues unique to rural populations. The interdisciplinary team concept will be used throughout the course to foster collaboration that facilitates sharing of the expertise of the students and faculty. One Saturday meeting will be required for a team building activity. A fee is required for this course.

PH 460G SCH/COM HEALTH WKSP
3 hours
Prerequisite: Permission of instructor. Emphasizes the coordination of school and community health programs and personnel in seeking solutions for health problems.

## PH 461G COMP SCH HLTH PRO 3 hours

Prerequisite: PH 381. Examination and application of the components of the comprehensive school health program. Discussion of the role of administrators, teachers, counselors and health service personnel in conducting, coordinating and evaluating the comprehensive school health program. Includes visitation in public schools.

## PH 462G FOLK MEDICINE 3 hours

Crosslisted FLK 462G. This course examines the role of traditional culture in shaping attitudes and behavior related to sickness, health, and healing. Institutional, alternative and informal medical settings are discussed.
PH 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.

## PH 464G WOMEN'S HEALTH 3 hours

Prerequisites: Permission of instructor. An analysis of the major health problems of contemporary women with a special emphasis on health promotion, disease prevention, and consumer health concerns.

## PH 465G HEALTH/SAFETY/ELEM SCH 3 hours

Nature and purpose of school health and safety in the elementary school, including curriculum development, instructional content areas, appraising students' health, and evaluation.

## PH 466G CLINICAL HEALTH ED 3 hours

Prerequisite: 12 hours of health. Multidisciplinary approaches for health educators in a clinical situation. Includes education of patient, health facility personnel and family. Also covers program development and discharge counseling. May include field trip.

## PH 467G DRUG ABUSE EDUCATION

## 3 hours

Prerequisite: PH 100 or equivalent. A drug abuse education and prevention course designed to provide current and documented information about abused substances. Includes study of the development, implementation and evaluation of drug prevention programs in the home, school, community and workplace.

## PH 468G SEXUALITY EDUCATION 3 hours

Emphasis in this course is on planning, implementation and evaluation of school and community sexuality education programs. Health and policy issues which affect sexuality and sexual behavior are addressed along with analysis of contemporary health issues with sexual dimensions.

## PH 469G CRITICAL ISSUES IN H \& S 3 hours

Prerequisites: PH 261 and PH 381. Research and discussion of specific local, national, and world wide health and safety problems.
Methods, materials, techniques, and planning of research studies used and conducted by the profession.
PH 510 WATERSHED MGMT AND SCIENCE $\mathbf{3}$ hours
Watershed management and science including water resources protection, watershed health development and assessment, and environmental and water ethics.

## PH 520 VITAL \& MEDICAL STATS

3 hours
Application of statistical techniques to health and safety data. Emphasizes basic principles and techniques in designing and analyzing health problems.
PH 524 APPLIED BIOMECHANICS 3 hours
Advanced study of the anatomical, mechanical, and neuromuscular bases of human movement.

## PH 530 INDEP INVEST IN COMM HL

1-6 hours
Research problems or projects in the area of public health.

## PH 545 HEALTH EDUC CURRICULUM 3 hours

Prerequisite: SEC 580. Review of health curriculum guides and curriculum studies in health education. Laboratory work in construction of curriculum guides.

## PH 546 GRADUATE INTERNSHIP 1-6 hours

Supervised, full-time, 12 week field experience planned with various agencies, organizations, facilities, industries, and businesses with health related missions or programs, and approved by the Department of Public Health. Off campus travel required. A maximum of six hours may be earned.
PH 548 COMMUNITY HEALTH ORGANIZATION 3 hours
Prerequisites: Graduate standing, Public Health Education or Environmental Health concentration, or permission of instructor. Social, political and economic forces that exacerbate health inequities in different communities; various organizational strategies for effective solution. Review and analysis of community organization and mobilization processes, legislative advocacy, cultural competency, and the role of mass media in conceptualization of public health issues. Transportation requirements for field trips will be provided.

## PH 560 ENVIRON MGT \& RISK ASSESSMENT

3 hours
Prerequisites: PH 584 or permission of instructor. Application of environmental management systems, methods, and tools to mitigate threats to environmental and human health. Guide students to understand their role as an environmental health professional working with the public and private sectors in controlling adverse environmental conditions through the competencies of assessment, management, and communication.

## Application of risk assessment as it relates to human and environmental health.

## PH 567 ADMN COMPR SCH HLTH PROG 3 hours

Management and coordination of policies, procedures, activities and resources designed to promote and protect the health and well being of students and staff. Includes administration of family resource and youth service centers, and coordination of school health education, healthful environment, and health services.

## PH 568 STD/HIV PREV: A PUBLIC HLTH APP 3 hours

A study of the most common sexually transmitted infections, including infection with the human immunodeficiency virus, and their complications, with special emphasis on prevention and control. Topics include STI/HIV counseling and testing, partner notification, and the development of educational interventions for target populations.

## PH 571 AIR QUALITY MANAGEMENT 3 hours

Prerequisites: PH 584 or permission of instructor. Examines the origins, dispersion, control and effects of air pollution; indoor air pollution; and the history of air quality control management. Provides a balanced account of air quality control regulations including the provisions and implications of the Federal Air Quality regulations, standards, setting, policy implementation and technical and management aspects of air quality control.

## PH 572 PRACTICE/DRUG ABUSE PREVENTION 3 hours

Examines the epidemiology of the use and abuse of alcohol, tobacco, and other drugs. In addition, there will be in-depth study of relevant prevention science as applied to school and community settings. The course will be a didactic presentation of material, with substantial engagement activities for students.

## PH 575 HEALTH ED/PROGRAM PLANNING 3 hours

Prerequisites: PH 583 and PH 587. An overview of the public health education program planning process. Assessment of educational needs at the community, institutional, and individual levels. Steps involved in planning, implementing, and evaluating health education programs to promote positive health practices in a variety of settings.
PH 576 EDUCATION AND COMMUN TECH 3 hours
Prerequisite: PH 587. Provide concepts and skills in using education and communication techniques in public health promotion programs. Discuss policy advocacy and principles of effectively interacting with community constituents influential in health promotion programs.

## PH 577 ENVIRONMENTAL TOXICOLOGY 3 hours

Toxicological principles and environmental risk assessment with emphasis on routes of exposure, biokinetics, and response to chemical stressors.
PH 579 SOLID AND HAZARDOUS WASTES 3 hours
Management of solid and hazardous wastes in the environment. Emphasis on regulatory compliance, control and remediation technologies, and environmental pathways.
PH 580 HIST/PHIL/PUBLIC HEALTH 3 hours
Development and scope of public health within a historical and philosophical context.

## PH 581 METH PUBLIC HEALTH EDUC 3 hours

The roles and functions of community health educators, concepts of health education, and specific methods which may be applied to health problems in the community.
PH 582 EPIDEMIOLOGY 3 hours
Prerequisite: 3 hours of graduate level statistics. Applications of epidemiological principles to representative occurrences of communicable and noncommunicable diseases. Emphasizes problem solving and interpretation.

## PH 583 PUBLIC HEALTH ADMIN 3 hours

Advanced concepts of organization, administration and management of public health agencies and programs.
PH 584 PRIN OF ENVIRONMENTAL HEALTH
3 hours
Prerequisite: Admission to the MPH program or permission of instructor. A study of the traditional, emerging and controversial issues associated with environmental health. Biological, chemical and physical threats to human health are included.

## PH 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.

## PH 586 VIOLENCE PREVENTION 3 hours

Prerequisites: Graduate Standing, PH 261 and 381, or permission of the instructor. An examination of the nature and extent of family, school and community violence, the psychosocial and biological roots, past efforts to prevent and control violence, and principals of violence prevention.

## PH 587 HEALTH BEHAVIOR $\mathbf{3}$ hours

Models of positive health within the individual's life style. Includes types of illnesses and factors influencing health behavior.
PH 588 SEMINAR IN PUBLIC HEALTH 3 hours
Current issues in public health.
PH 590 PUBLIC HEALTH LAW 3 hours
The judicial system and the development, enactment and enforcement of laws as they relate to public health.
PH 591 HEALTH PROGRAM EVALUATION 3 hours
Prerequisite: 12 hours of graduate public health course work including 3 hours of statistics. Introduces methods of undertaking evaluations of the efficiency and effectiveness of public health programs.
PH 595 PUBLIC HEALTH MGT OF DISASTERS 3 hours
Prerequisites: PH 584 or permission of instructor. Examines the background and history of natural and technological disasters, their characteristics, human health and environmental impacts, and the management activities needed to control them. Provides an overview of federal programs to enhance state and local prevention, preparedness, and public health response to disasters.

| PH 599 | THESIS RESEARCH/WRITING | $\mathbf{1 - 6}$ hours $\mathbf{( 6 ~ t o t a l ) ~}$ |
| :--- | :--- | :--- |
| PH 600 | MAINT MATRICULATION | $\mathbf{1}$ hour |

## PHIL 401G READINGS IN PHILOSOPHY 3 hours

An intensive study of selected philosophic classics or readings in a selected area of philosophy. May be repeated for different topics.

## PHIL 405G EXISTENTIALISM 3 hours

Readings from both the philosophical and literary sources of existentialism. The works of Kierkegaard, Nietzsche, Sartre, Jaspers, Heidegger, Kafka, Camus, Marcel, and Tillich are included.

## PHIL 415G ADVANCED LOGIC 3 hours

Prerequisite: PHIL 110 or PHIL 115 and permission of the instructor. Advanced topics in First Order Logic, through Quantification Theory with Identity, and topics in the Philosophy of Logics. The course will emphasize Computer Assisted Instruction (CAI) and will use the campus VAX network.
PHIL 426G PHILOSOPHY AND OLD AGE 3 hours
Examination of philosophical themes bearing on old age, such as: meaning, memory, selfhood, autonomy, immortality, euthanasia, filial
obligation, intergenerational justice, authority, dignity, virtue/vice, beauty.

## PHIL 499G IND RESEARCH IN PHIL 3 hours

Directed study and research in one area of philosophy. The research will culminate in an acceptable thesis.
PHIL 500 HUMANITIES SEMINAR 3 hours
Problems in and approaches to interdisciplinary study.
PHIL 501 READINGS IN PHIL 3 hours
Philosophic classics or readings in a selected area of philosophy.
PHIL 502 SEM ANCIENT/MEDIEVAL PHI 3 hours
Topics in ancient and medieval philosophy. May be repeated with different topics.
PHIL 598 HUMANITIES ESSAY 3 hours
PHIL 599 THESIS RESEARCH/WRITING 1-6 hours ( 6 total)
PHYS 402G LAB APP MODERN PHYS I 1 hour
Prerequisites: PHYS 302 and PHYS 321 and MATH 327. Corequisite: PHYS 420G. Required for students enrolled in PHYS 420G. Laboratory experience focusing on applications of modern optics and astrophysics.

PHYS 403G LAB APP MODERN PHYS II 1 hour
Prerequisites: PHYS 302 and PHYS 321 and MATH 327. Corequisites: PHYS 430G. Required for students enrolled in PHYS 430G.
Laboratory experience focusing on applications of solid state and nuclear physics.

## PHYS 404G LAB OPTICS 1 hour

Corequisite: PHYS 441G.The conclusions and concepts of optics and techniques of experimental optics.
PHYS 409G LAB EXPER PHY/RES TECH
1 hour
Prerequisite: Two years of college physics. Laboratory techniques in experimental research, includes drawing and fabrication of apparatus, technical photography, and statistical treatment of data.

## PHYS 410G PHYSICS FOR TEACHERS 3 hours

A broad study, including laboratory experiences, of the areas of physics relevant to science teaching in grades K-12. For pre-service for inservice teachers who have a minimal physics background. Instruction will be differentiated according to student needs. Applicable toward a major or minor in physics only for those students obtaining teacher certification.
PHYS 420G APP MODERN PHYS I
3 hours
Prerequisites: PHYS 302 and PHYS 321 and MATH 327. Corequisite: PHYS 402G. An advanced-level survey of principles and applications of contemporary physics, focusing on modern optics and astrophysics.
PHYS 430G APP MODERN PHYS II 3 hours
Prerequisites: PHYS 302 and PHYS 321 and MATH 327. Corequisite: PHYS 403G. An advanced-level survey of principles and applications of contemporary physics, focusing on solid state and nuclear physics.

## PHYS 431G RADIATION BIOPHYSICS $\mathbf{1 - 4}$ hours

Prerequisites: PHYS 201-202 or PHYS 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 techniques of radioactive isotopes.

## PHYS 440G ELECTROMAGNETISM I <br> 3 hours

Introduction to the study of classical electromagnetic fields, including electrostatics.
PHYS 441G OPTICS
3 hours

Corequisite: PHYS 404G. Prerequisite: One year of college physics and one year of calculus. Geometrical and physical optics including wave propagation, refraction, dispersion, diffraction, and polarization

## PHYS 445G ELECTROMAGNETISM II 3 hours

Study of classical electrodynamics with emphasis on Maxwell's equations, electromagnetic waves, dispersion and radiation.
PHYS 450G CLASSICAL MECHANICS II $\mathbf{3}$ hours
A continuation of PHYS 350, Includes motion in central potentials, dynamics of systems of particles, rigid body motion.
PHYS 465G GEOPHYSICS
3 hours
(Also cross-listed as GEOL 465) Prerequisites: GEOL 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 isostasy, seismology, upper atmosphere, continents and ocean basins, etc.
PHYS 475G TOPICS/PHYSICS 1-3 hours
Directed study under the supervision of a faculty member. May be repeated with different topic.
PHYS 480G QUANTUM MECHANICS 3 hours
Prerequisites: PHYS 320, 350, 450. Fundamental principles of quantum mechanics including the hydrogen and helium atoms, the harmonic oscillator, and the Schroedinger wave equation.

## PHYS 501 CLASSICAL DEV IN PHYSICS 3 hours

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.

## PHYS 502 MODERN DEVELOP/PHYSICS 3 hours

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.

## PHYS 503 PHYSICS DEMONSTRATION

3 hours
Designed to acquaint the junior high and high school teacher with laboratory equipment and demonstrations for use in secondary education.
PHYS 505 INVESTIGATIONS/PHYSICS
3 hours
Topics of individual interest relating to the teaching of physics.
PHYS 510 METHODS IN MATH PHYSICS 3 hours
PHYS 520 ATOMIC AND MOLECULAR 3 hours
PHYS 530 STATISTICAL PHYSICS 3 hours
PHYS 540 ELECTROMAGNETIC THEORY 3 hours
PHYS 550 CLASSICAL MECHANICS 3 hours
PHYS 580 QUANTUM THEORY 3 hours
PHYS 598 GRADUATE SEMINAR 0.5 hours
PHYS 600 MAINT MATRIC 1-6 hours
PHYS 660 THEORY OF SOLIDS 3 hours
PHYS 670 THEORETICAL NUCLEAR PHY 3 hours
PHYS 675 AD TOPICS IN PHYSICS 1-3 hours
PS 412G KY GOVT AND POLITICS 3 hours
Prerequisite: PS 110 or permission of instructor. A general survey course tracing the government and political development of the state from its constitutional beginning to the present. Primary focus will be on the major factors and issues in the state's political development within the context of the national governmental setting. The course will trace the role and influence of various political and social institutions in the state's political development and their implications for the current political and governmental situation.
PS 415G FEDERALISM \& PUB POLICY 3 hours
Prerequisite: PS 110 or permission of instructor. A study of the nature and impact of American federalism, including its historical, fiscal, economic, and political significance.
PS Course Number: 417G LOCAL \& REG GOVERNMENT 3 hours
Prerequisite: Permission of instructor. A study and analysis of contemporary trends in local and regional governmental structure and activity; focuses on problems associated with the politics and policies found in local and regional governments, and how changes in local and regional communities affect the governmental process.

PS 424G ADMINISTRATIVE LAW
3 hours
Prerequisite: Junior standing or permission of the instructor. A study of the development of and trends in administrative law with emphasis on the problems caused by the exercise of quasi legislative and quasi judicial powers by administrative agencies, including the rights, duties and liabilities of public officials, relief against administrative action, jurisdiction, conclusiveness and judicial control.
PS 440G ELEMENTS PUBLIC ADMIN 3 hours
Prerequisite: PS 110 or permission of the instructor. Introductory survey of governmental administration; emphasizes relationships between political issues and the practice of administration in areas such as organizational structures, personnel and financial management, control and accountability, and ethical issues.
PS 500 WORKSHPS PUBLIC ADMINISTRATION 1.5 hours
PS 501 METH POLITICAL INQUIRY 3 hours
PS 505 WASHINGTON INT \& SEMINAR 3-6 hours
PS 510 PROB IN NAT GOVERNMENT 3 hours
PS 511 SEMINAR IN STATE GOVT 3 hours
PS 538 ETHICS AND BUREAUCRACY 3 hours
PS 540 SEM IN PUBLIC SECTOR ORG 3 hours
PS 541 PUBLIC PERSONNEL ADM 3 hours
PS 542 GOVT FINANCIAL ADM 3 hours
PS 543 POLITICS/ADMIN/RURAL COM 3 hours
PS 545 SEM/PUBLIC POLICY ANAL 3 hours
PS 546 SEM/PUBLIC POLICY EVAL 3 hours
PS 549 SEM/PROB IN PUBLIC ADMIN 3 hours
PS 580 IND DIRECTED STUDY 3 hours
PS 597 PROF SEM IN PUBLIC ADMIN 3 hours
PS 598 INTERN/PUBLIC ADMIN 3 hours

## PSY 405G COGNITIVE PSY 3 hours

Prerequisite: PSY 100. Overview of theory and research in human cognition, with primary emphasis on attention, memory, judgment and decision making, and problem solving. Cognition in special populations (e.g., elderly, brain-injured, mentally disordered) is also covered. PSY 410G PSY OF LEARNING 3 hours
Prerequisite: PSY 100. Facts and principles of human and animal learning, especially as these have been treated in theories attempting to provide a general framework for understanding what learning is and how it takes place.

## PSY 411G PSY SENS/PERCEP 3 hours

Prerequisite: PSY 100. Basic sensory mechanisms involved in taste, smell, hearing, and sight, with primary emphasis on auditory and visual perception. Topics include speech perception; visual illusions; color vision; perception of form, shape, movement, time, and space; perceptual motor coordination; and the development of perception.

## PSY 412G PSY MOTIV/EMOT 3 hours

Prerequisite: PSY 100. A study of the principal theories of motivation and emotion. Examination of needs, cognition, and social aspects.
Includes a critical review of research and application of these theories to human behavior.

## PSY 421G EARLY ADOLESCENCE 3 hours

Prerequisite: PSY 100. Focuses on theory and research related to cognitive, personality, and social development in early adolescence. Theories are applied to important developmental contexts such as peers, families, and learning environments. Designed for students planning to meet middle grades certification requirements. Either PSY 421 or PSY 422, but not both, may be taken to satisfy the requirements of the psychology major or minor. PSY 421 may not be used to satisfy the Developmental Course Category restricted elective requirement for the major.
PSY 422G ADOLESCENT PSY 3 hours

Prerequisite: PSY 100. Introduction to behavior and development from early adolescence to adulthood, emphasizing a critical review of research and literature.

## PSY 423G PSY ADULT/AGING 3 hours

Prerequisite: PSY 100. Psychological processes in adulthood and aging. Emphasis on contemporary theories, methodological issues, and interactions of psychological, biological, social, and environmental factors in adulthood and aging.

## PSY 424G TOPICS IN DEVELOPMENTAL PSY 3 hours

Prerequisite: PSY 199 or PSY 321 or equivalent and graduate standing. A consideration of special topics to acquaint students with theoretical and research issues of particular interest in developmental psychology. May be repeated once for credit provided the topic differs.

## PSY 430G PSY OF WOMEN 3 hours

Prerequisite: Six hours of psychology, including PSY 100. Scientific study of the behavior and mental processes of girls and women. Topics include gender differences and similarities, inclusion of females in psychological research, psychological development of girls and women, sexuality, and mental health issues.

## PSY 432G GIFTED \& CREATIVE 3 hours

Prerequisite: PSY 100. The course covers identification of gifted children and adults with an emphasis upon the development of educational programs which maximize the development of giftedness. Included will be a critical review of research and literature in the areas of giftedness and creativity.

## PSY 435G MORAL DEVELOPMENT \& EDUC 3 hours

Prerequisites: PSY 100 or equivalent and graduate standing. An in-depth study of and reflection upon psychological theories of morality, moral development, moral functioning, and current models of moral education and professional identity.

## PSY 440G ABNORMAL PSY

## 3 hours

Prerequisite: PSY 100. Introduction to abnormal psychology emphasizing forms of abnormal behavior, etiology, developmental factors, interpretations, behavioral manifestations and treatment programs.

## PSY 441G PSY OF ALCOHOLISM 3 hours

Intensive study of theories and research regarding alcoholism; emphasis on application of psychological theories to the treatment of alcoholism. PSY 442G INTERVIEW/SKILLS $\mathbf{3}$ hours
Prerequisites: Six hours in PSY including PSY 100 and permission of instructor. Paraprofessional skills for conducting structured and unstructured interviews in non-therapy settings. Emphasizes skills development but also covers some theoretical material.

## PSY 443G BEHAVIOR MODIFICATION

3 hours
Prerequisites: Six hours of psychology including PSY 100, and permission of instructor. Introduction to theory and application of behavior modification techniques. Emphasizes the use of behavior modification in education, child rearing, clinics and self modification. Course activities or assignments may require the individual to disclose personal information.

## PSY 450G INTRO PERSONALITY

3 hours
Overview of the major theoretical approaches to the study of personality, including historical as well as contemporary theorists, avenues of analysis, and concepts.

## PSY 455G INTR CLINICAL PSY

3 hours
Prerequisites: PSY 440 or 450 . Survey of theories, models, and techniques in clinical, counseling, and school psychology. Includes emphasis on professional ethics for psychologist. Field experiences in appropriate off-campus settings may be required. Students are responsible for arranging their own transportation to designated or assigned sites.

## PSY 470G PSYCHOLOGY AND LAW

3 hours
Prerequisites: PSY 100 or equivalent and graduate standing. Psychological knowledge that is pertinent to the legal system. Emphasis on how human characteristics and psychological factors influence attitudes, decisions, and behavior throughout the legal process. Field trips to offcampus locations will be required. Students are responsible for arranging their own transportation.

## PSY 473G TRNG BUS/INDUS

3 hours
Prerequisites: PSY 370 or MGT 310 and 311, or permission of instructor. Theories, research and methods of training needs analysis, program design, implementation, and evaluation.

## PSY 475G GRANT WRIITING 3 hours

Prerequisite: English 300 or equivalent and graduate standing. In depth exploration of researching grant opportunities, writing and submitting grant proposals, administering grants and developing evaluation plans for collecting, analyzing and reporting data.

## PSY 480G PHYSIOLOGICAL PSYCHOLOGY 3 hours

Prerequisites: PSY 100. Study of physiological mechanisms underlying behavior with an emphasis on current research on neurological,
biochemical, and sensory mechanisms that influence behavior.

## PSY 483G EVOLUTIONARY PSYCHOLOGY $\mathbf{3}$ hours

Prerequisites: PSY 100 or equivalent and Graduate standing. A survey of the research methods and core concepts of evolutionary psychology as they apply to human adaptive problems, including problems of survival, sex and mating, parenting and kinship, and aggression.
PSY 485G PSY OF RELIGION
3 hours
Prerequisites: Nine hours of PSY including PSY 100, graduate standing, PSY 201210 and 450 are preferred but not essential. Study Classical theories and current research in the psychology of religion.

## PSY 490G RESEARCH PROJECT IN PSYCHOLOGY 1-3 hours

Prerequisite: PSY 100 and permission of the faculty project supervisor. Advanced students will conduct research and/or readings or projects concerning issues in psychology under the direction of faculty members. The course may be repeated.

## PSY 495G HIST/SYSTEMS PSY 3 hours

Prerequisite: Nine hours in psychology including PSY 100 and graduate standing. Overview of the main historical systems of psychology: introspectionist, functionalist, purposive, psychoanalytic, behaviorist, gestalt, existentialistic, and humanistic. Emphasizes the recent history of psychology, and the identification of important systematic trends in contemporary writings in psychology and their underlying assumptions.
PSY 499G SENIOR SEMINAR
3 hours
Seminar in which major concepts and issues in psychology are considered. Directed reading, guest lectures, field trips, and/or oral reports by students are utilized.

## PSY 500 TRENDS/SCIEN PSY 1-3 hours

New developments and special topics in contemporary psychological research. May be repeated with a different topic.
PSY 501 INTERNET INSTRUC
2 hours
Prerequisites: Internet access, a WEB page, and instructor permission. Survey of principles and techniques of college-level instruction via the Internet. Students create an Internet-based course or adapt administrative policy to accommodate Internet instruction.
PSY 505 STAT SOFTWARE

## 3 hours

Prerequisites: Three hours of undergraduate statistics and graduate standing or permission of instructor. Develops proficiency in use of statistical software for mainframe and personal computers. Emphasis on SPSS. Data base management for the PC also addressed. (fall and summer of each year)
PSY 510 ADVANCED ED PSY 3 hours
Application of psychological and developmental theories to teaching and learning. Examination of cognitive, social, and moral development, learner diversity, learning theories, motivation, effective classroom management, productive instructional practices, and assessment.

## PSY 511 PSY OF LEARNING <br> 3 hours

Intended for teachers wishing to develop a deeper understanding of high school algebra and calculus. Examines links among different fields of mathematics and connections among high school mathematics, college mathematics and higher mathematics. (Not applicable to the M.S. degree in mathematics).
PSY 512 EXPMTL 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.
PSY 513 ADVAN STAT ANAL 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.

## PSY 514 PROGRAM EVAL

## 3 hours

Prerequisite: PSY 512 or equivalent. Examination of program accountability. Emphasizes all phases of evaluation. Also covers decision making processes.
PSY 516 ADV STUDY IN MOTIV 3 hours
Historical and present motivation theories. Particular emphasis on a current literature survey of both human and animal research.
PSY 519 CLASSROOM BEHAV
3 hours
Strategies and techniques designed for coping with problem behaviors in the classroom. Covers both preventative and problem encounter measures.
PSY 520 INDIV DIFFERENCES \& DIVERSITY 1-3 hours
Research and theory in aspects of human diversity, including intelligence, motivation, personality, achievement, and aptitudes. Both individual and group differences are addressed, and sources of diversity are explored.

## PSY 521 ADV CHILD DEV PSY <br> 3 hours

Particular emphasis upon a critical review of current research in child development.
PSY 522 AD ADOLES PSY
3 hours
Current research and theories in the area of adolescent psychology as they relate to physical, social, emotional, and intellectual development.

PSY 523 ADVANCED TOPICS IN COGNITION
3 hours
Advanced overview of human cognition. Covers theory and research on the topics of learning, memory, attention, judgment and decisionmaking, and problem-solving.

## PSY 540 BEHAV PROB CHILD

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

## PSY 541 PROFESSION ISSUES/ETHICS 3 hours

Proposed catalog course listing: Roles and responsibilities of professional psychologists emphasizing ethical, legal, and methodological issues for the master's level professional.
PSY 545 CLIN CHILD PSY 3 hours
Prerequisite: PSY 540 or PSY 640 or permission of instructor. For psychology or mental health profession students desiring to work with mental health problems in children and adolescents.

## PSY 550 PERSONALITY THEOR <br> 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.

## PSY 551 SOCIAL PSY ORGAN 3 hours

The dynamics of groups and organizations. Current theory and research in psychology of organizations.
PSY 552 ADV SOCIAL PSY 3 hours
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.

## PSY 560 COGNITIVE/INTELLECTUAL ASSESS 3 hours

Prerequisite: Permission of instructor. Administration of the WISC, WAIS and other individually administered tests used as basic tools in education, occupational guidance, clinical diagnosis.
PSY 561 ADV ASSESSMENT/EDUC SETTINGS 3 hours
Prerequisite: PSY 560 and permission of instructor. Interpretation and integration of assessment information for use in educational settings. Includes tests, behavior ratings scales, ecological analysis, systematic observations, and functional behavioral assessment.

## PSY 562 PRAC PSY ASSESS

## 1-3 hours

Corequisite: PSY 560 or 561. Prerequisite: Permission of instructor. Supervised experience in the administration and interpretation of instruments and practices used in the assessment of intellectual abilities and learning problems in educational or clinical settings. Field experiences in appropriate off-campus settings may be required. Students are responsible for arranging their own transportation to designated or assigned sites. (May be repeated)
PSY 563 STAT/PSYCHMETRICS 3 hours
Required of all graduate students in psychology. Introduction to psychometric theory. Emphasis on statistical techniques, construction and psychological measurement instruments.
PSY 570 JOB ANALYSIS AND COMPENSATION 3 hours
Overview of the I/O discipline with an emphasis on job analysis and compensation.
PSY 571 PERSONNEL PSY 3 hours
Prerequisite: PSY 570. Employee selection procedures, with emphasis on criterion and validity issues. Direct involvement in data collection and analysis.
PSY 572 ORG PSY 3 hours
Prerequisite: PSY 570. Selected topics relevant to work organizations. Emphasizes current theories and research practices.

## PSY 580 ADV PHYSIOL PSY 3 hours

Anatomy of the nervous system, relationships among the components of the nervous system and psychological functioning.
PSY 590 RDGS/RESRCH PSY
1-3 hours

Prerequisite: Departmental permission only. Individual readings or research. Arrangements must be made before enrollment.

## PSY 591 INTERN COL TCHNG

3 hours
Problems and methods of teaching at the college level. Students enrolled in this course will concurrently teach a course in introductory or general psychology.
PSY 592 PSY INTERNSHIP 3 hours
Prerequisite: Permission of instructor. Field experience for clinical, school, industrial, or other psychologists. Required for Kentucky certification. Typically taken in the student's last semester in residence.

| PSY 599 | THESIS RESEARCH | $\mathbf{1 - 6}$ hours $\mathbf{( 6 ~ t o t a l )}$ |
| :--- | :--- | :--- |
| PSY 600 | MAINTAIN MATRIC | $\mathbf{1 - 6}$ hours |
| PSY 637 | THEORIES OF ADDICTION | $\mathbf{3}$ hours |
| PSY 640 | PSYCHOPATHOLOGY | $\mathbf{3}$ hours |

Major forms of child and adult psychopathology with emphasis upon recent research, classification systems, the modification of deviant behavior and developmental patterns of learning and motivation variables.

## PSY 641 THEORIES OF PSYCHOTHERAPY 3 hours

Prerequisite: Permission of instructor. Selected theories and techniques of psychotherapy and counseling. Also covers group therapy, clinical topics, and professional and ethical issues.

## PSY 642 CLIN INTERVIEWING 3 hours

Prerequisite: PSY 641 and permission of instructor. Continuation of 641 with emphasis on group, family, and marital psychotherapy.

## PSY 643 PSYCHOED ASSESS

3 hours
Prerequisites: PSY 560, 561 and permission of instructor. Diagnostic instruments and procedures for assessing educationally-related disabilities. Emphasis on current laws and regulations regarding special education, academic interventions, and Individualized Education Programs. Field experiences in appropriate off-campus settings may be required. Students are responsible for arranging their own transportation to designated or assigned sites.

## PSY 645 CONSULTATION

PSY 647 ADDICTIONS
Prerequisites: Admission to or completion of approved graduate program in a helping profession, and instructor permission. This course involves the selection, administration, and interpretation of assessment methods and techniques used to diagnose addiction disorders, as well as the development of appropriate treatment plans and issues involved in treatment planning.
PSY 660 PERSONALITY ASSESSMENT $\mathbf{3}$ hours
PSY 661 PSY EVAL II 3 hours
PSY 662 PRACTICUM IN PSY 1-3 hours

## PSY 667 CNS SUBSTNCE ABUSE 3 hours

Counseling issues related to substance abuse diagnosis, treatment and aftercare program.
PSY 670 EEO/LAW/ETHICS 3 hours

Prerequisite: PSY 570. Issues relevant to providing equal employment opportunity: EEOC and FEA guidelines regarding selection practices; review of major court decisions and their implications for the conduct of selection; professional and ethical considerations in the practice of I/O psychology.
PSY 673 ADV TRNG BUS/IND 3 hours
Prerequisites: PSY 571 or permission of instructor. Theories, research and methods of training needs analysis, program design, implementation, and evaluation.
PSY 699 SPECIALIST PROJ $\quad$ 1-6 hours ( 6 total)

PSY 700 MAINTAIN MATRIC 1-6 hours
PSY 770 LEGAL ISSUES FOR LEADERS 3 hours
Prerequisite: Admission to Ed.D. Program or permission of instructor. Survey of Equal Employment Opportunity laws and other employment laws and their implications for organizational leaders.

## PSY 771 HRM FOR ORG LEADERS 3 hours

Prerequisite: Admission to the Ed.D. program or permission of instructor. Survey of leadership roles in managing human resources in organizations to achieve both individual and organizational objectives and ensure effective work practices in dynamic work environments. Topics include selection and placement of employees, evaluation of employee performance, compensation and benefits, and effective utilization of human capital.

## PSY 773 TRAINING \& DEVELOP FOR LEADERS 3 hours

Prerequisite: Admission to the Ed.D. program or permission of instructor. Review of training needs assessment, issues in the design and development of training programs, evaluation of training programs, methods and delivery systems for training, managing the training function and special issues in training.

## REC 404G RECREATION FACILITY MANAGEMENT 3 hours

## REC 420G COMMERCIAL RECREATION TOURISM 3 hours

Prerequisites: REC 200, REC 300, REC 302, and REC 306. Commercial recreation and tourism, including the establishment, supervision, and operation of areas and facilities.

## REC 423G CAMP \& CONFERENCE CENTER ADMIN 3 hours

REC 424G CAMP \& CONFERENCE CENTER ADMIN 3 hours
Organization and administration of camp and conference center programs and facilities including history, trends, staffing, client needs, finance, marketing, and legal issues.
REC 426G FACILITY PLANNING AND DESIGN 3 hours
Facility planning and design process with emphasis on the unique features on many different areas and types of facilities. Field experiences required. Students are responsible for their own transportation to off campus meetings. University transportation provided when possible.
REC 428G COMMUNITY CENTERS\& PLAYGROUNDS 3 hours
REC 430G RECREATION RESOURCE MANAGEMENT 3 hours
Multi-use natural resource management concepts, issues in resource management and the synthesis of concept and practical knowledge into real and simulated applications of land use and environmental problems related to the leisure service industry. Field trips required. Students are responsible for their own transportation to off campus meetings. University transportation provided when possible.

## REC 434G ENVIRONMENTAL INTERPRETATION 3 hours

Environmental interpretation in leisure and educational settings. Includes interpretive design of exhibits and facilities. Emphasizes the development of presentation and program skills.
REC 435G OUTDOOR EXPEDITION PLANNING 3 hours
Prerequisites/Corequisites: REC 335 and REC 337. Principles and techniques for planning, designing, implementing and evaluating extended outdoor expedition programs. Overnight field trips required. Students are responsible for their own transportation to off campus meetings. University transportation provided when possible.

## REC 437G OUTDOOR LEADERSHIP EXPEDITION <br> 3 hours

Prerequisite/Corequisite: REC 435G or instructor permission. Outdoor Leadership capstone course involving a backcountry expedition, leadership development, and teaching techniques. Successful students will receive the Wilderness Education Association Outdoor Leader Certification. Overnight, extended field-trips required. Field experiences required. Students are responsible for their own transportation to off campus meetings. University transportation provided when possible.
REC 482G RECREATION WORKSHOP 1-3 hours
Workshops are designed to study special areas relating to the recreation profession. Workshops may be experiential in nature or may follow a traditional class format. Field experiences and/or study at extended campus locations are usually required. Students are responsible for their own transportation to off-campus meetings. University transportation provided when possible.

## REC 501 RESEARCH METHODS IN REC SPORT 3 hours

Research terminology, design, methods, data analysis, and manuscript preparation in recreation and sport.

## REC 513 RECREATION AND SPORT ADMIN 3 hours

Leadership and management of recreation and sport agencies with emphases on strategic planning, policy, human resources, programming,
governance, and organizational behavior and culture.

## REC 515 REC SPORT FACILITY DEVELOPMENT 3 hours

Facility development process with emphasis on the unique features of many different types of facilities. Field experiences required. Students are responsible for their own transportation to off campus meetings. University transportation provided when possible.

## REC 517 LEGAL ISSUES IN REC \& SPORT 3 hours

Legal systems, legal concepts, and landmark cases influencing the recreation and sport industry.
REC 519 FISCAL PRACTICES IN REC SPORT 3 hours
Financial principles and practices relevant in recreation settings. Topics include economic principles, financial management and organization, income sources, fundraising, pricing, and budgeting.
REC 521 PUBLIC RELATIONS IN REC/ SPORT 3 hours
Specialized application of effective communication techniques for building relationships with internal and external constituencies that support marketing from the general practice of public relations.
REC 523 THEORY OF RECREATION AND SPORT 3 hours
Philosophy, theory, and ethics of recreation and sport, including current professional trends in the field.

## REC 530 ADVANCED STUDIES IN RECREATION 3 hours

Specific and detailed analysis of issues in recreation and sport incorporating individualized instruction between student and faculty. Restricted enrollment pending faculty approval.

## REC 532 ENVIRONMENTAL EDUC RESOURCES 3 hours

Experiential learning with environmental education resources. Emphasis is place on Kentucky based interpretation of the natural environment. Field experiences required and students are required to provide their own means of transportation to field sites.
REC 590 PRACTICUM IN REC AND SPORT
3 hours
Cooperative field experiences in approved recreation and sport settings where students obtain professional administrative and/or programming experience with agency and faculty supervision. This course requires off campus travel. Students are responsible for their own transportation to off campus meetings.
REC 598 MASTERS PROJECT IN REC \& SPORT 3 hours
Prerequisite: Instructor Certification. Directed investigation of a faculty approved topic in recreation and sport culminating with the submission of a paper for publication.
REC 599 THESIS RESEARCH/WRITING 1-6 hours (6 total)
REC 600 MAINTAIN MATRICULATION 1-6 hours
RELS 400G CONTEMP RELIGIOUS THOT 3 hours
A study of the writings of the creative theological minds of the twentieth century.
RELS 401G REL ST SEMINAR 3 hours
A seminar with rotating topics designed primarily for advanced students in religious studies. May be repeated for different topics.
RELS 402G RELIG STUDIES AS A DISPL 3 hours
The questions, interpretations, and methods which shape the academic study of religion.
RELS 415G OLD TESTAMENT THEMES 3 hours
Examination of such Old Testament themes as creation, covenant, human being, sin, righteousness, truth, and faithfulness.
RELS 430G CHRISTIANITY TO $1517 \quad 3$ hours
Development of Christian thought and institutions prior to the Reformation.
RELS 431G CHRISTIANITY/1517-PRESEN 3 hours
Development of Christian thought and institutions from the Reformation to the present.
RELS 440G JUDIASM 3 hours

An integration of the history, literature, religion, art, and music of eastern European and American Jewry in order to provide the student with a cultural experience in Judaism. A field trip to a Nashville synagogue is required.
RELS 445G RELIGIOUS TRAD OF ISRAEL 3 hours
A study of development of ancient sacred traditions of the Hebrew people and their formative influence upon the structure of the five books of Moses.
RELS 499G IND RESEARCH REL ST
Directed study and research in one area of religious studies.
RELS 501 SEM RELIGIOUS STUDIES
3 hours

Specific issues in one of the areas of concentration.
RELS 510 SEM RELIGIOUS LITERATURE 3 hours
Selected literature from one major religious tradition. May be repeated with different topics.

## RELS 520 SEM RELIGIOUS HISTORY $\mathbf{3}$ hours

Significant topics, movements, or events in the development of one major religious tradition. May be repeated with different topics.
RELS 530 SEM RELIGIOUS THOUGHT 3 hours
Selected topics or thinkers from one major religious tradition. May be repeated with different topics.

## SEC 445G INTRO EDUC TECHNOLOGY 3 hours

Instruction and laboratory experiences in the basic theory and application of educational technology to the design, production, evaluation, and utilization of various media. Cross listed with LME 445G.
SEC 470G TEACHING VOC AGRICULTURE 3 hours

Course organization, methods, farming programs, employment training, and Future Farmers of America activities.
SEC 471G ORGANIZATION/PLAN AG EDU

See course description under Agriculture (AGED). Field experiences in public schools and/or other appropriate settings away from campus are required in this course. Students are responsible for arranging their own transportation to designated or assigned sites.
SEC 484G METH/MAT/ENGL 2ND LANG 3 hours
Prerequisites: ENG 469/469G and one linguistics course. Develops skills, procedures, and strategies for teaching and utilizing commercial materials for the teaching of English as a second language. Crosslisted with ENG 470.
SEC 487G METHODS/TEACH VOC AGRI
3 hours
SEC 488G YNG FARMER/ADULT ED/AGRI
3 hours
SEC 528 TEACHING SECRETARIAL 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.
SEC 529 TEACHING BOOKKEEPING 3 hours
Purposes, materials, methods, and techniques for teaching bookkeeping and basic business. Review and application of research findings to this area.
SEC 530 SEM IN ENGLISH ED 3 hours
Prerequisite: Permission of instructor. Current methods and materials for middle grades and secondary English courses, research and professional trends. Crosslisted with MGE 530.
SEC 531 SEM ART EDUCATION 3 hours
Prerequisite: Permission of instructor. Curricular trends in art education; methods and materials for teaching and supervising art in the public schools.
SEC 532 FOREIGN LANGUAGE EDUCA 3 hours
Prerequisite: Permission of instructor. Trends in foreign language education methods and materials for teaching a foreign language at the secondary and advanced levels of instruction.
SEC 533 INDUSTRIAL ARTS ED
3 hours
Prerequisite: Permission of 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.

## SEC 534 MATH EDUCATION 3 hours

Prerequisite: Permission of instructor. Covers newer concepts in curriculum and methods of instruction, current research and problems in mathematics education. Crosslisted with MGE 534.

## SEC 535 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 education thought and their implications for instruction, supervision, administration, and evaluation in music education.
SEC 536 TEACHING PHYSICAL EDUC 3 hours
Traditional and recent techniques, methods and knowledge in 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.
SEC 537 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. Crosslisted with MGE 537.

SEC 538 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. Crosslisted with MGE 538.

## SEC 539 AGRICULTURE EDUCATION 3 hours

Current problems in the organization, teaching supervision, administration, and evaluation of agricultural education programs. Investigation, papers, and reports.
SEC 542 SPEECH EDUCATION 3 hours
Includes historical development, exploration of curricular trends and innovations and current research and problems.
SEC 543 INTERACTIVE TEACHING 3 hours
SEC 545 IND INVEST CLASSRM TEACH 1-3 hours
Opportunity for secondary teachers to engage in the concentrated study of specific problems and/or the development of specific skills related to effective classroom instruction.
SEC 570 WORKSHOP/SELECTED TOPICS 1-3 hours
SEC 580 CURRICULUM
3 hours
Philosophy, principles and practices of curriculum improvement.
SEC 599 THESIS RESEARCH/WRITING $\quad \mathbf{1 - 6}$ hours ( 6 total)
SEC 600 MAINTAIN MATRICULATION 1-6 hours
SEC 699 IND SPECIALIST PROJECT $\quad$ 1-6 hours ( 6 total)
SEC 700 MAINTAIN MATRICULATION 1-6 hours
SFTY 470G DR ED TRNG SFTY II 3 hours
Prerequisite: PH 370.Management of classroom and laboratory phases of the high school driver and traffic safety education program. Emphasizes simulation and range programs.
SFTY 471G ADV STDY DRIV ED 3 hours
Prerequisite: PH 470.Advanced instructional technology to meet the needs of the driver and safety education program. Emphasizes behavioral approaches to traffic safety education.

## SFTY 530 IND INVEST COMM HLTH 3 hours

## SFTY 570 SCHOOL/COMM SAFETY 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.
SOCL 408G SURVEY APPLICATIONS 3 hours

Prerequisite: SOCL 300 and 302 or their equivalent and permission of instructor. Student involvement in the design, conduct, analysis, and dissemination of an actual social survey research project.
SOCL 415G SOCIOLOGY OF LANGUAGE 3 hours
Intensive examination of forms and functions of language from a sociological perspective.
SOCL 420G POLITICAL SOCIOLOGY 3 hours
Prerequisite: Nine hours of Sociology or consent of instructor. Political behavior within a sociological perspective. Includes social cohesion, legitimacy, political socialization, and power structures.

## SOCL 430G PENOLOGY 3 hours

Prerequisite: SOCL 330 or consent of instructor. Development of punishment and correctional programs, with emphasis on sociological considerations. Prison field trips required.
SOCL 432G SOCIOLOGY OF CRIMINAL LAW 3 hours
Sociological research and theory focusing on social structural factors affecting the creation of criminal codes, the enforcement of criminal law, and the imposition of penal sanctions.

## SOCL 433G COMMUNITY CORRECTIONS 3 hours

Prerequisite: SOCL 330, its equivalent, or permission of instructor. Socio-legal analysis of community based treatment of criminal offenders including forms of diversion, probation, and parole; the techniques of sentencing; the supervision of clients; and a program evaluation.
SOCL 434G ORGANIZED CRIME
3 hours
Prerequisite: Graduate standing. The study of both traditional and nontraditional organized crime from a sociological perspective.
SOCL 435G FAMILY VIOLENCE 3 hours
Prerequisite: Six hours of sociology. This course is designed to provide the student with a sociological perspective on family violence in the United States. Emphasis is placed on child abuse and wife abuse. Research, theory, laws, treatment and prevention are analyzed.
SOCL 440G MEDICAL SOCIOLOGY

## 3 hours

Comprehensive examination of the social organization of the health care industry in the U.S. Focus on origins and development of medicine, social epidemiology, the social construction of illness and illness behavior, the professionalization of medicine and patterns of social interaction between health providers and patients.
SOCL 450G OCCUPATIONS AND PROFESSIONS 3 hours
Prerequisite: SOCL 346 or consent of instructor. Deals with 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.

## SOCL 470G ENVIRONMENTAL SOCIOLOGY 3 hours

Prerequisites: ENG 300, three credit hours of sociology, or consent of instructor. Explores environmental thought within the sciences and the general public, including shifting worldviews, social movements and social structural change associated with sustainability, environmental justice, and the rights of nature.
SOCL 500 SEMINAR TEACHING SOCL 2 hours
Workshop for students who plan to teach sociology.
SOCL 501 PRACTICUM TCHNG SOCL 1 hours
Perquisites: SOCL 500 and 16 additional graduate hours in sociology. Seminar for students who are teaching sociology.
SOCL 510 QUAL METH SOC RESEARCH 3 hours
Prerequisite: Admission to program or consent of instructor. Covers epistemological and philosophical bases of qualitative inquiry; research design and data analysis in participant observation, in-depth interviewing, hermeneutic content analysis, and discourse analysis; issues in validity, reliability, and ethics of qualitative research.
SOCL 512 SOCIOLOGICAL THEORY 3 hours
Prerequisite: Six hours of sociology or consent of instructor. Analysis of current sociological theories, including a survey of recent approaches to the construction and application of systematic theoretical models.
SOCL 513 QUANTITATIVE METH SOC RESEARCH 3 hours
Prerequisite: Six hours of sociology or 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.

## SOCL 514 ADVANCED SOCIAL STATISTICS 3 hours

Prerequisite: Basic statistics at the undergraduate level or consent of instructor. Deals with forms of statistical analysis commonly applied to sociological research data. Includes multiple and partial correlation and regression, one-and two-way analysis of variance, path and nonlinear function analysis, interaction effects, and introduction to factor analysis.

## SOCL 515 ADVANCED DATA ANALYSIS <br> 3 hours

Prerequisites: SOCL 400G, 513, 514 or equivalent. Deals with multivariate forms of statistical analyses commonly applied to quantitative sociological research data. Covers applications and extensions of the general linear model, including dummy variable regression, analysis of variance and covariance, etc.

## SOCL 520 PROFESSIONAL RESEARCH/WRITING 3 hours

Designed to assist students in writing theses, proposals, and papers for publication. Emphasizes techniques needed to locate literature and data, on the Internet, and in the library.
SOCL 531 DEVIANT BEHAVIOR 3 hours
Prerequisite: Six hours of sociology or consent of instructor. Deals with types of deviant behavior with emphasis on criminality, delinquency, drug addiction, and alcoholism. Also covers current sociological theory and research in the field.

## SOCL 532 CRIMINOLOGY 3 hours

Prerequisite: Six hours of sociology or permission of instructor. Theories of crime causation and current research in the areas of criminology and corrections and methodological research considerations.

## SOCL 541 DEMOGRAPHY 3 hours

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

## SOCL 542 COMMUNITY 3 hours

Prerequisite: Six hours of sociology or consent of instructor. Ecological and social concepts of the community and its structure and function.
SOCL 545 RURAL POVERTY
3 hours
Explores the nature and scope of poverty in contemporary rural America. Current theories of and policy solutions to poverty will be critically examined. Students are responsible for arranging their own transportation for optional field trips.

## SOCL 551 SOCIOLOGY OF THE FAMILY 3 hours

Prerequisite: Six hours of sociology or consent of instructor. Analysis of the family institution; the impact of modern culture on the family.
SOCL 561 ADVANCED SOCIAL INTERACTION 3 hours
Prerequisite: Six hours of sociology or permission of the instructor. The self in social environment, especially face-to-face interaction as individuals interpret, influence, and react to others' actions. Emphasis on identity, roles, and definitions of the situation.
SOCL 571 TOPICAL SEMINAR SOCIOLOGY 3 hours
Significant topics, issues, or developments in the discipline. May be repeated with a different topic.
SOCL 595 DIRECTED STUDY 1-3 hours
Prerequisite: Consent of instructor and department head. Individual research in a specific area of sociology in close cooperation with supervising faculty.
SOCL 598 INTERN IN SOCIOLOGY 3-6 hours
Prerequisites: Twenty-four graduate credit hours earned and the research tool successfully completed. Practical experience in a supervised work situation with a cooperating agency.
$\begin{array}{lll}\text { SOCL } 599 & \text { THESIS RESEARCH/WRITING } & \text { 1-6 hours (6 total) } \\ \text { SOCL } 600 & \text { MAINTAIN MATRICULATION } & \text { 1-6 hours }\end{array}$
SPAN 470G ADVANCED ORAL SPANISH
Prerequisite: SPAN 370. Conversation units, dramatic sketches, original oral topics.
SPAN 471G ADVANCED SPANISH COMPOSITION 3 hours
Prerequisite: SPAN 371. Examination of selected literary works; original compositions on selected topics.
SPAN 476G 20TH CENTURY SPAIN 3 hours
Chronological study of the culture of Spain through literary masterpieces of the present century. Ideas and characteristics of cultural and literary periods in Spain and approaches to literary texts will be discussed.
SPAN 478G TWENTIETH CENTURY LATIN AMER 3 hours
Prerequisite: SPAN 376 or equivalent. A chronological presentation of the cultures of Latin America through examples of literature and cultural production of the twentieth century. The course will discuss the ideas and characteristics of cultural and literary movements in Latin America. Approaches to literary texts discussed in depth.
SPAN 490G HISPANIC CINEMA
3 hours
Prerequisite: graduate standing. Introduces students to the cinematic work of Latin American, Spanish and US-Hispanic-Latino film artists and develops critical interpretative skills that enhance appreciation of films.

## SPAN 499G ADVANCED STUDIES IN SPANISH 1-4 hours

Prerequisites: Junior or senior standing and permission of instructor. For guided independent study in culture, language, or literature. May be used with consent of full-time program faculty members for work accomplished during study abroad. Number of credit hours will be determined in consultation with instructor. May be repeated for a maximum of six hours of credit.

## SPAN 530 SUMMER SEMINAR FOR TEACHERS $\mathbf{1 - 3}$ hours

## SPAN 555 TOPICS HISPANIC LIT \& CULTURE 3 hours

Prerequisite: Graduate Status. This course will examine different literary and cultural topics of interest in Hispanic studies.

## SPAN 578 SEMINAR: HISPANIC LIT OR LANG <br> 3 hours

May be repeated once.

## STAT 549 STAT METH I

3 hours
SWRK 433G ETHICAL ISSUES IN SOCIAL WORK 3 hours
Prerequisite: permission of instructor. An examination of professional ethics and common ethical dilemmas in social work. Models of ethical decision making are applied in case vignettes.
SWRK 436G SERVICES TO CHILDREN 3 hours
A survey of institutional and community services with focus on principles of social services for children and their families.
SWRK 490G SELECTED TOPICS IN SOCIAL WORK 3 hours
This course permits in-depth examination of selected topics in social work. The specific topics vary. May be repeated with different topics.
SWRK 501 CULTURAL COMPETENCY SOC WORK 2 hours
Expands culturally competent standards of practice used in making effective assessments and providing interventions across cultures.

## SWRK 510 HUMAN BEHAVIOR SOCIAL ENVIRON 3 hours

Prerequisite: Admission to the MSW Program. Examines behavior within the context of families, groups, organizations, communities, and cultures. Topics include developmental stages of the individual within multiple systems with a particular focus on issues of diversity.

## SWRK 511 UNDERSTANDING RURAL COMMUNITY 2 hours

Prerequisites: SWRK 510, advanced standing, or permission of the instructor. Explores basic social work macro theories and practice modalities in the context of rural communities focusing on organization, leadership, and human behavior.
SWRK 520 GENERALIST SOCIAL WRK PRACTICE 3 hours
Prerequisite: Admission to the program and enrollment in SWRK 560. Presents micro level theories as they apply to individuals and families. Foundation level skills are tied to theory for practice including communication skills, case management skills, and assessment skills. Field experiences in appropriate off-campus settings may be required. Students are responsible for arranging their own transportation to designated or assigned sites.
SWRK 521 SOC WRK CLINIC ASSESS/INTERVEN 3 hours
Prerequisites: SWRK 500, 510 and 520 or advanced standing. Focuses on clinical processes of assessment and diagnosis for rural-centered social work practice. Topics include theories within the Bio-Psycho-Social paradigm, frameworks for organizing and formulating diagnostic understanding with diverse populations.

## SWRK 522 GROUP DYNAMICS IN SOCIAL WORK 3 hours

Prerequisites: SWRK 500, 510 and 520. An introduction to group work based interventions in social work, including dynamics of group interaction, stages of group development, and group types. Experiential exercises are used to promote understanding of group processes.

## SWRK 530 FOUNDATION SOC WELFARE POLICY 3 hours

Prerequisite: Admission into the MSW Program. Foundations to social policy, social welfare, and the American society. Introduction to analytical and critical thinking about social welfare policy and processes.

## SWRK 540 SOCIAL WORK RESEARCH METHODS 3 hours

Prerequisite: SWRK 500 or permission of the instructor. Basic skills, knowledge, and values of social work research methods. Introduces single subject design and program evaluation.

## SWRK 560 FOUNDATION SOC WORK FIELD I 4 hours

Prerequisite: Admission to the MSW Program and enrollment in SWRK 520. A beginning application of advanced social work principles and practice skills in a human services environment. Field experiences in an appropriate off-campus setting is required. Students are responsible for arranging their own transportation to designated or assigned sites. Grading: Pass/Fail.
SWRK 561 FOUNDATION FIELDPRACTICUM II 4 hours
Prerequisite: SWRK 560. Continued application of advanced social work principles and practice skills in a human services environment. This is a continuation of SWRK 560. Field experiences in an appropriate off-campus setting are required. Students are responsible for arranging their own transportation to designating or assigned sites. Graded: Pass/Fail.
SWRK 571 INTRO TO KY CHILD WELFARE 3 hours
Special Requirement: Permission of the Instructor. Focuses on understanding problems and issues faced by children and families within an ecological framework. Examination of the complexities of social work practice within the Kentucky child welfare system.

## SWRK 572 FAM VIOLENCE:SWRK PRACTICE 3 hours

Special Requirement: Permission of Instructor. Provides students with the research, practice, and policy knowledge necessary for understanding, assessing, and intervening in various forms of family violence - child, partner, elder and sibling abuse. Additionally, students examine their own values, beliefs, and biases related to working in this area of social work practice in the public child welfare system.

## SWRK 573 ASSESS CASE MGT CHILD SEX ABU 3 hours

Special Requirement: Permission of instructor. Prepares students to identify family dynamics associated with childhood sexual abuse, advocacy, crisis assistance and intervention. Students gain knowledge and skills required to interview children, families, and offenders, assess needs, make appropriate referrals, and prepare for the placement of the child. Students will learn the social worker's role in a multi-disciplinary team and increase their preparation for and participation in related judicial proceedings.
SWRK 574 ENHANC SAFETY \& PERM CHILDREN 3 hours
Special Requirement: Permission of instructor. Students develop professional social work practice knowledge and skills in the delivery of services to children and youth in foster and out of home care as well as families (birth, relative, foster, and adoptive) who care for them. Students are prepared to enhance the safety and permanency of children receiving services from the Kentucky Cabinet for Health and Family Services. Students are responsible for their own transportation.
SWRK 575 ADOL ISSUES IN KYCHILD WELFARE 3 hours
Focuses on special issues related to adolescents and status offenders involved with the Kentucky Child Welfare system. Emphasis is on related policy issues and developing skill sets for working with adolescents within the Kentucky Child Welfare system. Issues related to both urban and rural areas will be explored.

## SWRK 610 SOC WRK ADMIN AND SUPERVISION 2 hours

Prerequisite: SWRK 511. Teaches the knowledge, skills, and values necessary for advanced practice focusing on the social work roles of administrator and supervisor. Field experiences in appropriate off-campus setting may be required. Students are responsible for arranging their own transportation to designated or assigned sites.
SWRK 620 ADV APPROACHES FOR RURAL PRACT 3 hours
Prerequisite: SWRK 521. Focuses on knowledge, skills, and values for advanced micro level social work within a rural area. Topics include clinical interventions with individuals, families, and groups, empowerment and interdisciplinary approaches.
SWRK 621 RURAL COMMUNITY ORGAN AND DEV
3 hours.
Prerequisites: SWRK 510 and SWRK 511. Teaches knowledge, skills, and values of advanced macro level social work practice with a focus on complex skills in community development, economic development, and organizational change within the rural community.

## SWRK 630 RURAL SOCIAL WELFARE POLICY 3 hours

Prerequisite: SWRK 530. Corequisite: SWRK 660. Focuses on policy analysis with emphasis on skills in legislative advocacy and decision making related to social policy and services for rural areas. Includes local and state government decision-making.

## SWRK 637 THEORIES OF ADDICTION 3 hours

Prerequisites: Admission to or completion of approved graduate program in helping profession, and instructor's permission. This course involves introduction to theoretical, philosophical and historical premises of addictions. Topics include professional ethics, diversity, family roles and relationships, and dual diagnosis.

## SWRK 640 APPLIED SOCIAL RESEARCH 2 hours

Prerequisite: SWRK 540 or advanced standing. Corequisite: SWRK 661. Focuses on skills, knowledge, and values for evaluation of advanced rural social work with emphasis on single subject design and program evaluation. Students conduct a research project on their practice.

## SWRK 647 ADDICCTIONS ASSESS \& DIAGNOSE 3 hours

SWRK 660 ADVANCE FIELD PRACTICUM I 4 hours
Prerequisite: Successful completion of SWRK 561 and permission of field director. Corequisite: SWRK 630. An advanced application of social work principles and practice skills in a human services environment with a specific population. Field experiences in an appropriate off-campus setting are required. Students are responsible for arranging their own transportation to designated or assigned sites. Graded: Pass/Fail.
SWRK 661 ADVANCED FIELD PRACTICUM II

## 4 hours

Prerequisite: Successful completion of SWRK 660. Corequisite: SWRK 640. The capstone course, a continuation of SWRK 660. Application of advanced social work principles and practice skills in a human services environment with a specific population. Field experiences in appropriate off-campus settings are required. Students are responsible for arranging their own transportation to designated or assigned sites. Graded: Pass/Fail.
SWRK 667 CNS SUBSTNCE ABUSE 3 hours
SWRK 671 SOCIAL WORK AND THE LAW 3 hours
Prerequisite: SWRK 500 or permission of instructor. Introduction to legal issues in social work. Identifies similarities and differences between legal and ethical obligations and dilemmas. Topics include courtroom evidence, procedure and testimony.
SWRK 672 CHILD SEXUAL ABUSE 3 hours
Prerequisite: SWRK 510, advanced standing or approval of instructor. Dynamics, causes, and effects of child sexual abuse across the life span. Focuses on interventions, skills, and knowledge for working with families and individuals experiencing child sexual abuse.

## SWRK 673 GRIEF/LOSS ISSUES INTERVENTION 3 hours

Prerequisite: SWRK 520 or permission of the instructor. Dynamics of grief and loss. Theories $/$ models for interventions that are relevant for advanced direct social work practice in rural settings.
SWRK 695 SPECIAL TOPICS IN SOCIAL WORK 3 hours
Prerequisite: Admission to the MSW Program or permission of the instructor. An in-depth examination of a selected topic in social work. Topics will vary. May be repeated with different topics for a total of 6 credit hours.

## SWRK 698 SELECTED READINGS IN SOC WORK 3 hours

Prerequisite: Completion of the 1st year of MSW or advanced standing. An independent study with a faculty member focusing on the development of a literature review or thesis topic pertaining to an agreed upon area within rural centered social work practice.
SWRK 699 SELECTED RESEARCH IN SOC WORK 3-6 hours (6 total)
Prerequisite: SWRK 698. An independent study with a faculty member focusing on the completion of the research proposal initiated in SWRK 698. This course may be taken for 3 or 6 credit hours.

THEA 491G PUPPET THEATRE 3 hours
Puppets, muppets and marionettes with emphasis on history, construction, operation, and performance.
THEA 499G IND ST/BRITISH THEATRE 3 hours
Includes a tour to England and viewing of representational plays, visits to historical and cultural sites.
WOMN 421G WOMEN AND SCIENCE 3 hours
Prerequisite: Six hours of science from General Education category D1 or permission of instructor and junior standing.
Study of women's participation in natural and physical sciences, the scientific education of women, contemporary workplaces, and feminist critiques of science.
WOMN 470G SPECIAL TOPICS IN WS 3 hours
Prerequisites: Graduate standing and permission of the instructor. A detailed study of a specialized topic in Women's Studies.
WOMN 535 ROOTS OF FEMINISM 3 hours
Survey of key historical feminist writings with emphasis on intersections of gender, race, class, and sexuality in feminist theory.
WOMN 545 FEMINIST KNOWL SOC CHANGE 3 hours
Examination of both feminist knowledge and research as political practices that have the goal of improving the lives of women and challenging rigid configurations of race, class, gender, and other elements of difference.

## WOMN 555 GLOBAL/CROSS-CULT PERSPEC WOMN 3 hours

Examination of a range of scholarship done in various disciplines on women's political practices around the world and a comparison of women's experiences cross-culturally.
WOMN 589 INTERNSHIP WOMEN'S STUDIES
WOMN 590 DIRECTED STUDY IN WS
Prerequisites: Permission of the instructor. Individual research in a specific area of women's studies in close cooperation with supervising faculty
in women's studies or other field.
WOMN 625 WOMEN AND LEADERSHIP
Cross-disciplinary study of women leaders, issues of gender, race, class and power in relationship to women leaders and contemporary issues
facing women leaders.

## Degree Programs

| Program, Degree, Ref. \# | Hours | Specialization/Other | GRE | Other <br> Requirements | Contact | Page |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agriculture, MS (052) | 30 | Secondary Ed-major (053) <br> Secondary-Ed minor (001) | 2200 GAP |  | $\begin{aligned} & 270-745- \\ & 3151 \\ & \hline \end{aligned}$ | 107 |
| Administrative Dynamics MA, (041) | 33 |  | $\begin{aligned} & 2200 \text { GAP } \\ & \text { or } 450 \text { GMAT } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 270-745- \\ & 2446 \\ & \hline \end{aligned}$ | 142 |
| Adult Education, MAE (047) | 30 |  | 2500 GAP and 3.5 writing |  | $\begin{aligned} & 270-745- \\ & 4607 \\ & \hline \end{aligned}$ | 76 |
| Applied Economics, MA (0410) | 30 |  |  | Departmental Requirements | $\begin{aligned} & 270-745- \\ & 2249 \\ & \hline \end{aligned}$ | 102 |
| Art, MAE (055) | 30-33 |  | 2200 GAP | Teaching Certificate | $\begin{aligned} & 270-745- \\ & 3944 \\ & \hline \end{aligned}$ | 127 |
| Biology, MS (056) | 30 | Biochemistry, Cellular, Molecular <br> Organismal, Ecological Secondary Ed-major (054) Secondary Ed-minor (003) Environmental Science option | 2200 GAP |  | $\begin{aligned} & 270-745- \\ & 3696 \end{aligned}$ | 111 |
| Business Administration, MBA (057) | 30 | Accounting <br> Economics <br> Finance <br> General <br> Online program available | $\begin{aligned} & \text { GMAT only: } \\ & 500 \text { Total Score } \\ & 1050 \text { GAP } \\ & \\ & \text { GAP =(UG } \\ & \text { GPA } \times 200)+ \\ & \text { GMAT score } \end{aligned}$ | Departmental Requirements | $\begin{aligned} & 270-745- \\ & 5458 \end{aligned}$ | 99 |
| Chemistry, MS (059) | 30 | Biochemistry, Coal Chemistry, Teacher <br> Secondary Ed-major (061) <br> Secondary Ed-minor (005) <br> Environmental Science option | 2200 GAP |  | $\begin{aligned} & 270-745- \\ & 3457 \end{aligned}$ | 113 |
| Communication, MA (109) | 33 |  | 2200 GAP |  | $\begin{aligned} & \hline 270-745- \\ & 3296 \\ & \hline \end{aligned}$ | 128 |
| Communication Disorders, MS (114) | 48 | Online program available | $\begin{gathered} 2800 \text { GAP } \\ 3.2 \text { UG GPA } \end{gathered}$ |  | $\begin{aligned} & 270-745- \\ & 4541 \end{aligned}$ | 82 |
| Computer Science, MS (117) | 30 |  | 2200 GAP |  | $\begin{aligned} & 270-745- \\ & 4642 \\ & \hline \end{aligned}$ | 116 |
| Counseling, MAE (043) | 60 | Marriage and Family Therapy <br> (MHMF) <br> Mental Health Counseling (MNHC) | 2200 GAP and 4.0 writing | Departmental Requirements | $\begin{aligned} & 270-745- \\ & 4953 \end{aligned}$ | 29 |
| Counselor Education, EdS (112) | 30 |  | 3.5 master's GPA or 850 GRE and 4.0 Analytical Writing | Masters in Counseling or related field | $\begin{aligned} & 270-745- \\ & 4953 \end{aligned}$ | 32 |
| Education, PhD (142) | 90 | Cooperative program with the University of Louisville |  |  | $\begin{aligned} & 270-745- \\ & 4890 \\ & \hline \end{aligned}$ | 60 |
| Education and Behavioral Science Studies, MAE (042) | 30 |  | 2200 GAP and 3.5 writing | Departmental Requirements | $\begin{aligned} & 270-745- \\ & 4662 \\ & \hline \end{aligned}$ | 25 |
| Educational Leadership, (EdD) ${ }^{8}$ |  |  | Contact Department |  | $\begin{aligned} & 270-745- \\ & 4890 \\ & \hline \end{aligned}$ | 26 |
| Elementary Education MAE (065) EdS (118) | 30 | Certification endorsement for: Literacy <br> Gifted education <br> English as a second language Instructional Computer Technology | 2200 GAP and 3.5 writing | Teaching Certificate | $\begin{aligned} & 270-745- \\ & 2157 \end{aligned}$ | $\begin{aligned} & 36 \\ & 38 \end{aligned}$ |

[^13]| English, MA (067) | 30 | Creative Writing <br> Education <br> Literature <br> Rhetoric <br> Teaching English as a Second <br> Language | 2200 GAP | Teaching Certificate, if seeking education option | $\begin{aligned} & 270-745- \\ & 3043 \end{aligned}$ | 130 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Exceptional Education MAE (107) EdS (098) | $\begin{aligned} & 30 \\ & 36 \end{aligned}$ | Learning and Behavioral Disorders (KLB) Moderate \& Severe Disability (KMS) <br> Online program available <br> Alternate Route to Teacher Certification (ARTC) | 2200 GAP and 3.5 writing | Teaching Certificate <br> Departmental Requirements (EdS) | $\begin{aligned} & 270-745- \\ & 4607 \end{aligned}$ | 67 |
| Folk Studies, MA (069) | 39 | Public Folklore Historic Preservation | 2200 GAP |  | $\begin{aligned} & 270-745- \\ & 5295 \end{aligned}$ | 132 |
| Geoscience, MS (072) | 30 | Environmental Science option | 2200 GAP |  | $\begin{aligned} & 270-745- \\ & 4555 \end{aligned}$ | 117 |
| Health Administration, MHA (153) | 56 |  | 2500 GAP 3.5 writing 450 each V and Q |  | $\begin{aligned} & 270-745- \\ & 4797 \end{aligned}$ | 91 |
| History, MA (078) | 33-36 |  | 2200 GAP |  | $\begin{aligned} & 270-745- \\ & 3842 \end{aligned}$ | 134 |
| Homeland Security, MS (0413) ${ }^{9}$ | 30 |  | 2200 GAP |  | $\begin{aligned} & \text { 270-745- } \\ & 4357 \\ & \hline \end{aligned}$ | 124 |
| Interdisciplinary Early Childhood Education, MAE (144) | 36 |  | 2200 GAP and 3.5 writing |  | $\begin{aligned} & 270-745- \\ & 3899 \\ & \hline \end{aligned}$ | 70 |
| Instructional Leader- School Principal, MAE (151) | 36 | Education Administration (EAEA) <br> School Leader (EASL) | 2200 GAP and 3.5 writing | Teaching Certificate <br> Departmental <br> Requirements | $\begin{aligned} & 270-745- \\ & 4890 \end{aligned}$ | 46 |
| Library Media Education, MS (083) | 33 | Educational Technology <br> School Media <br> Online program available <br> RI available as second master's degree | 2500 GAP and 3.5 writing | Teaching Certificate may be required | $\begin{aligned} & 270-745- \\ & 4607 \end{aligned}$ | 72 |
| Literacy Education, MAE (044) | 36 |  | 2300 GAP and 3.5 writing | Teaching Certificate Departmental Requirements | $\begin{aligned} & 270-745- \\ & 4607 \end{aligned}$ | 66 |
| $\begin{array}{\|r\|} \hline \text { Mathematics } \\ \text { MS (085) } \\ \text { MA (049) } \\ \hline \end{array}$ | 30 |  | 3000 GAP |  | $\begin{aligned} & 270-745- \\ & 3651 \end{aligned}$ | $\begin{aligned} & 121 \\ & 122 \\ & \hline \end{aligned}$ |
| Middle Grades Education, MAE (139) | 30 | Certification endorsement for: <br> Literacy <br> Gifted education <br> English as a second language <br> Instructional Computer <br> Technology | 2200 GAP and 3.5 writing | Teaching Certificate | $\begin{aligned} & 270-745- \\ & 5414 \end{aligned}$ | 39 |
| Music, MAE (089) | 30-33 |  | 2200 GAP | Teaching Certificate may be required | $\begin{aligned} & 270-745- \\ & 3751 \end{aligned}$ | 137 |
| Nursing, MSN (149) | 45 | Primary Care Practioner (MSNP) <br> Nurse Educator (MSNE) Nurse Administrator (MSNA) Occupational Health Nurse | 2200 GAP | Departmental Requirements | $\begin{aligned} & 270-745- \\ & 3391 \end{aligned}$ | 85 |

[^14]| Physical Education, MS (090) | 30 | Exercise Science (PEXS) <br> Teacher Education (PPED) | 2200 GAP | Teaching Certificate if seeking education option | $\begin{aligned} & 270-745- \\ & 3347 \end{aligned}$ | 89 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Psychology MA (092) <br> EdS (147) | $45-48$ $75$ | Clinical (MACL) <br> Experimental (MAAE) <br> General (MAGE) <br> Industrial/Organizational (MAIN) | 2200 GAP and 3.5 writing |  | $\begin{aligned} & 270-745- \\ & 2695 \end{aligned}$ | $62$ $64$ |
| Public Administration, MPA (051) | 39 |  | 2200 GAP |  | $\begin{aligned} & 270-745- \\ & 4558 \\ & \hline \end{aligned}$ | 139 |
| Public Health, MPH (152) | 46 | Environmental Health (PHEH) <br> Public Health Education (PHED) | 2200 GAP | Departmental Requirements | $\begin{aligned} & 270-745- \\ & 4797 \\ & \hline \end{aligned}$ | 91 |
| Recreation, MS (095) | 30 |  | 2200 GAP |  | $\begin{aligned} & \text { 270-745- } \\ & 3347 \end{aligned}$ | 90 |
| School Counseling MAE (046) | 36 |  | 2200 GAP and <br> 3.5 writing | Teaching Certificate | $\begin{aligned} & 270-745- \\ & 4953 \\ & \hline \end{aligned}$ | 28 |
| Secondary Education MAE (103) EdS (119) | 30 | Majors: art, biology, history, music, <br> secondary education <br> Minors: agriculture, art, biology, <br> business and marketing <br> education, chemistry, <br> earth/space science, English, <br> family and consumer science, <br> French, German, health, history, <br> technology education, <br> mathematics, physical <br> education, physics, secondary <br> education, Spanish <br> Alternate Route to Teacher <br> Certification (ARTC) <br> Certification endorsement for: <br> Literacy <br> Gifted education <br> English as a second language <br> Instructional Computer <br> Technology | 2200 GAP and <br> 3.5 writing | Teaching Certificate | $\begin{aligned} & 270-745- \\ & 5414 \end{aligned}$ | $\begin{aligned} & 41 \\ & 42 \end{aligned}$ |
| Social Work, MSW (157) | $\begin{aligned} & 60 \\ & 37 \\ & \hline \end{aligned}$ | Traditional Advanced Standing | 2200 GAP | Departmental Requirements | $\begin{aligned} & 270-745- \\ & 5312 \\ & \hline \end{aligned}$ | 95 |
| Sociology, MA (105) | 30-36 |  | 2200 GAP |  | $\begin{aligned} & \hline 270-745- \\ & 3759 \\ & \hline \end{aligned}$ | 140 |
| Student Affairs in Higher Education, MAE (145) | 48 |  | 2200 GAP and 3.5 writing | Departmental Requirements | $\begin{aligned} & 270-745- \\ & 4953 \\ & \hline \end{aligned}$ | 31 |
| Technology Management, MS (045) | 33-36 |  | 2200 GAP | Departmental Requirements | $\begin{aligned} & 270-745- \\ & 3251 \\ & \hline \end{aligned}$ | 109 |

Non-Degree Programs

| Communication Disorders, RI (164) |  |  |  |  | $\begin{aligned} & \hline \hline 270-745- \\ & 4541 \\ & \hline \end{aligned}$ | 83 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Guidance, RI (048) |  |  |  | Teaching Certificate | $\begin{aligned} & 270-745- \\ & 4953 \\ & \hline \end{aligned}$ | 29 |
| Elementary Education <br> RII (091) <br> RI (084) |  |  |  | Teaching Certificate | $\begin{aligned} & 270-745- \\ & 2157 \end{aligned}$ | 38 <br> 39 |
| Interdisciplinary Early Childhood Education, RI (156) |  |  |  |  | $\begin{aligned} & 270-745- \\ & 3899 \\ & \hline \end{aligned}$ | 71 |
| Middle Grades Education RII (154) <br> RI (158) |  |  |  | Teaching Certificate | $\begin{aligned} & 270-745- \\ & 5414 \end{aligned}$ | 40 <br> 41 |
| School Administration, RI (121) |  |  | 2200 GAP | Teaching Certificate GRE Required | $\begin{aligned} & 270-745- \\ & 4890 \\ & \hline \end{aligned}$ | 50 |
| Secondary Education <br> RII (125) <br> RI (124) |  |  |  | Teaching Certificate | $\begin{aligned} & 270-745- \\ & 5414 \\ & \hline \end{aligned}$ | 43 <br> 44 |

Certificate Programs

| Addictions Counseling and Education (218) | 15 |  |  | $\begin{aligned} & 270-745- \\ & 4953 \end{aligned}$ | 33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Autism Spectrum Disorders (0441) | 15 |  |  | $\begin{aligned} & \hline 270-745- \\ & 4607 \end{aligned}$ | 75 |
| Community College Faculty Preparation (162) | 9 |  |  | $\begin{aligned} & 270-745- \\ & 2446 \end{aligned}$ | 143 |
| Educational Technology (167) | 12 |  |  | $\begin{aligned} & \hline 270-745- \\ & 4607 \\ & \hline \end{aligned}$ | 74 |
| Geographic Information Science (203) | 12 |  |  | $\begin{aligned} & 270-745- \\ & 4555 \\ & \hline \end{aligned}$ | 119 |
| History (165) | 12 | Early Modern Europe (HEME) <br> Kentucky (HKEN) <br> Military (HMIL) <br> Modern Europe (HMEU) <br> Social/Intellectual (HSOC) <br> Southern (HSOU) <br> United States (HUST) |  | $\begin{aligned} & 270-745- \\ & 3841 \end{aligned}$ | 134 |
| International Student Services ${ }^{10}$ | 15 |  |  | $\begin{aligned} & \hline 270-745- \\ & 4953 \\ & \hline \end{aligned}$ | 34 |
| Leadership Studies (163) | 14 |  | Departmental Requirements | $\begin{aligned} & 270-745- \\ & 5373 \end{aligned}$ | 143 |
| $\qquad$ (175) | 12 |  |  | $\begin{aligned} & 270-745- \\ & 3296 \\ & \hline \end{aligned}$ | 128 |
| Post-MSN Complementary Health Care (206) | 9 |  |  | $\begin{aligned} & 270-745- \\ & 3391 \end{aligned}$ | 87 |
| Post-MSN Nursing Education (172) | 16 |  |  | $\begin{aligned} & \hline 270-745- \\ & 3391 \\ & \hline \end{aligned}$ | 87 |
| Post-MSN Primary Care (176) | 28 |  |  | $\begin{aligned} & 270-745- \\ & 3391 \\ & \hline \end{aligned}$ | 87 |
| Women's Studies (161) | 15 |  |  | $\begin{aligned} & \text { 270-745- } \\ & 6477 \end{aligned}$ | 145 |

[^15]
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Health Services
Housing
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Orientation
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Residence Life
Resnet
Student Records
Student Life
Transcripts
Tuition and Fees
WKU Police

| Wetherby Administration Building | (270) $745-0111$ |
| :--- | ---: |
| Downing University Center A330 | (270) $745-5065$ |
| Downing University Center 230A | (270) $745-2691$ |
| Downing University Center 124 | (270) $745-2416$ |
| Downing University Center A200 | (270) $745-5004$ |
| Downing University Center 241 | (270) $745-2456$ |
| Downing University Center 101 | (270) $745-5305$ |
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| Southwest Hall 18 | (270) $745-4359$ |
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| Potter Hall Technology Hall 379 | (270) $745-7000$ |
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| Potter Hall 2 | nd |
| foorter Hall 208 | (270) $745-2791$ |
| Police Department | (270) $745-5448$ |
|  | (270) $745-6381$ |
|  | (270) $745-2548$ |

## Colleges

Potter College of Arts and Letters
Gordon Ford College of Business
Bowling Green Community College
College of Education and Behavioral Sciences
Ogden College of Science and Engineering
College of Health and Human Services
Fine Arts Center 200
(270) 745-2344

Grise Hall 445
(270) 745-6311

South Campus 103
(270) 745-2550

Tate Page Hall 201
Thompson Complex Central Wing 105
(270) 745-4662
(270) 745-4448
(270) 745-7003

Extended Campus Centers
Community College
Elizabethtown/Fort Knox Center
Glasgow Campus
Owensboro Center

| South Campus | (270) $780-2550$ |
| :--- | :--- |
| Fort Knox | (270) $745-5079$ |
| Glasgow | (270) $745-5096$ |
| Owensboro | (270) $745-5095$ |

## Accreditations

Volume 86, Number 2<br>Fall 2007

# Western Kentucky University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; telephone: 404-679-4501) to award associate, baccalaureate, master's and specialist degrees. WKU is also a member of: 

American Association of Colleges for Teacher Education<br>American Association of State Colleges and Universities American Council on Education<br>Association of Schools of Allied Health Professionals<br>Association of Schools of Journalism \& Mass Communication<br>Institute of International Education

Certain programs of the University are accredited by the following:
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Accrediting Council on Education in Journalism
\& Mass Communications
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American Bar Association
American Chemical Society
American Dental Association Commission on Dental Accreditation
American Dietetic Association
American Medical Association
American Healthcare Information Management Association
American Speech \& Hearing Association
Association of University Programs in Health Care Administration
Commission on Collegiate Nursing
Education/American Association of Colleges
of Nursing
Computing Accreditation
Commission/Accreditation Board for
Engineering \& Technology (CAC/ABET)

Council for Accreditation of Counseling \& Related Educational Programs
Council on Education for Public Health (CEPH)
Council on Social Work Education
Department of the Army
Kentucky's Educational Professional Standards Board
Kentucky State Board of Nursing
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National Association of Schools of Music
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National League for Nursing
National Recreation \& Parks Association (NRPA)
Engineering Accreditation Commission/Accreditation Board for Engineering \& Technology (EAC/ABET)
Society of Public Health Educators \& Association for the Advancement of Health Education

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For general inquiries: (270) 745-0111.


[^0]:    ${ }^{1}$ Pending Council on Postsecondary Education (CPE) approval

[^1]:    ${ }^{2}$ Subject to WKU Board of Regents approval

[^2]:    ${ }^{3}$ Pending CPE approval

[^3]:    ${ }^{4}$ Subject to WKU Board of Regents approval

[^4]:    Professional Education Component-18 hours
    Required Courses-9 hours
    +EDU 501 Seminar: Designing Professional Development Plan (1 hour)
    ELED 503 Organization of the Elementary School
    ++EDU 596 Portfolio Development and Professional Educator Growth (2 hours) EDFN 500 Research Methods
    Deficiency Requirement-3 hours*
    EXED 516 Exceptional Child: Perspectives and Issues
    *Must be taken unless an Exceptional Education course is on the student's undergraduate transcript
    ${ }^{+}$Students should enroll in EDU 501 within the first 7 hours of course work.
    ${ }^{++}$Students should enroll in EDU 596 after completing at least 24 hours of course work.
    Restricted General Electives-9 hours**
    ELED 505 Advanced Materials and Methods in Modern Mathematics for Elementary Teachers
    ELED 506 Seminar in Elementary School Science
    ELED 507 Advanced Materials and Methods in Social Studies
    ELED 509 Advanced Methods and Materials for Early Childhood Education
    EDU 544 Classroom Teaching Strategies
    LTCY 519 Foundations of Reading Instruction
    **Not required for students seeking Literacy or Gifted Education endorsements
    Specialization Component-12 hours
    Required Psychology elective-3 hours
    PSY 510 Advanced Educational Psychology
    PSY 511 Psychology of Learning
    PSY 519 Psychological Perspectives on Classroom Behavior
    PSY 540 Behavior Disorders of Childhood and Adolescence
    General Content Electives-6-9 hours
    Chosen with advisor approval from the following: Art, Biology, Chemistry, Communication, Economics, English, Folk Studies, Geography, Geology, Government, History, Languages, Mathematics, Music, Physics, Sociology, Theatre
    Restricted Content Elective-0-3 hours
    If fewer than 9 hours are selected from General Content Electives, 3 hours may be selected from the following:

    CNS 580 Family Life Studies
    PH 465G Health and Safety in the Elementary School
    PH 467G Drug Abuse Education
    PH 468G Sexuality Education
    PH 481G Environmental Health
    PH 518 Violence Prevention
    AMS 465G Industrial Technology for Elementary Teachers
    JOUR 481G Problems in Mass Communications
    LME 410G Storytelling
    LME 411G Creative Media Experiences for Elementary Children
    LME 535 Survey of Educational Technology Practices
    LME 537 Principles of Educational Technology Applications
    LME 518 Advanced Children's Literature

[^5]:    Professional Education Components- 18 hours
    Professional Development Component-3 hours
    ${ }^{+}$EDU 501 Seminar: Designing Professional Development Plan (1 hour)
    ${ }^{++}$EDU 596 Portfolio Development \& Professional Education Growth Plan (2 hours)
    ${ }^{+}$Students should enroll in EDU 501 within the first 7 hours of course work.
    ${ }^{++}$Students should enroll in EDU 596 after completing 25 hours of course work.
    Educational Psychology Component-3 hours
    PSY 510 Advanced Educational Psychology
    PSY 511 Psychology of Learning
    PSY 519 Psychological Perspectives on Classroom Behavior
    Strategies Component-3 hours
    EDU 522 Foundations of Differentiated Instruction
    EDU 524 Educational Assessment
    EDU 544 Classroom Teaching Strategies
    ENVE 575 Introduction to Environmental Education
    LTCY 524 Content Area Teaching
    GTE 537 Curriculum, Strategies, \& Materials for Gifted Students
    LTCY 444G Reading in the Secondary Grades

[^6]:    Graduate Courses in Educational Leadership
    All courses worth 3 credits unless otherwise noted.
    EDLD 700 Orientation to Doctoral Studies and Professional Development
    EDLD 710 Leadership Theories and Ethics
    EDLD 711 Methodology in Leadership Research
    EDLD 720 Individual and Group Issues in Leadership
    EDLD 721 Measurement and Validity in Leadership
    EDLD 730 Leading the Organization
    EDLD 731 Advanced Data Analysis Tools in Leadership Research

[^7]:    Specific course requirements-15 hours
    PSY 500: Trends \& Scientific Approaches in Psychological Thinking
    PSY 513: Advanced Statistical Analysis

[^8]:    Concentration Course work- 12 hours
    PH 575 Health Education \& Promotion Program
    PH 576 Education and Communication Techniques in Public Health Education
    PH 548 Community Health Organization
    PH 588 Public Health Seminar

[^9]:    ${ }^{5}$ Pending University committee approvals

[^10]:    ${ }^{6}$ Italicized section is pending University committee approvals

[^11]:    7 Italicized section is pending University committee approvals

[^12]:    United States (Code HUST): HIST 630, 525, 526, and an elective
    Modern Europe (Code HMEU): HIST 606, 422G, 425G, and 3 hours of electives
    Military (Code HMIL): HIST 443G, 606 (WWI), 630, 606 (WWII)
    Social/Intellectual (Code HSOC): HIST 525, 526, 527, and 447G
    Kentucky (Code HKEN): HIST 554, 631, 456G, and an elective
    Southern (Code HSOU): HIST 630, 457G, 458G, and an elective
    Early Modern Europe (Code HEME): HIST 606 (Middle Ages), 606 (Renaissance), 419G, and an elective

[^13]:    ${ }^{8}$ Pending CPE approval 198

[^14]:    ${ }^{9}$ Pending University committee approvals

[^15]:    ${ }^{10}$ Subject to WKU Board of Regents approval

