

# 2007 Graduate Catalog

# University of Central Missouri Warrensburg, MO 64093

# 1-877-SAY-UCMO (1-877-729-8266)

For updated information, visit the university's web site:

# www.ucmo.edu

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# **University of Central Missouri**



### Greetings

Welcome to the University of Central Missouri. We offer you this catalog as a way to keep you better informed about our institution and its exciting array of nationally and internationally known academic programs. We hope the catalog will also provide you with a better understanding of the many advantages of an education at UCM, and how the university can help you achieve your life's goals.

The University of Central Missouri aspires to be a national-level, comprehensive university that delivers a world-class university education by providing a small-college learning environment coupled with large-university opportunities. It's an ambitious goal, but one we are poised to accomplish. Founded in 1871, UCM today is a comprehensive institution with a



Aaron Podolefsky University President

statewide mission in professional applied sciences and technology. It provides more than 150 undergraduate and graduate programs of study to students who come from the United States and 51 foreign countries.

We're proud to be a state leader in discipline-specific accreditation, and we offer a personalized classroom experience with our 16-1 student-faculty ratio. We believe you'll be impressed with the university's beautiful 1,561-acre campus and the friendliness of the people who make this university a great place to learn and live.

While you are here, we will help you attain skills needed for lifelong success. You will not only reap the benefits of a quality education, but also leave here feeling confident that you can conquer the challenges that are awaiting you in the professional world. Here's a sample of what you can expect from UCM:

- committed, inspired faculty members focused primarily on student learning;
- campus life filled with opportunities for involvement and personal growth in a safe, beautiful environment;
- a level of competence in your chosen field of study;
- · a culture of friendship and service that extends from UCM around the globe; and
- a community of successful alumni with traditions that span generations.

The University of Central Missouri is committed to providing you with an education that will benefit you long after you have earned your diploma. Thank you for choosing UCM.

Aaron M. Podolefsky, Ph.D. University President

#### UNIVERSITY ADMINISTRATION

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GEORGE W. WILSON Provost and Vice President for Academic Affairs

JOSEPH B. VAUGHN Interim Assistant Provost for Research and Dean of The Graduate School

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**DELETA P. WILLIAMS** Board of Governors Vice President

JENNIFER HILL NIXON Board of Governors Secretary

Photo: The Administration Building

#### **UCM BOARD OF GOVERNORS**

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Photo: Many offices frequently visited by graduate students are located in the Ward Edwards Building on the north side of the quadrangle. **The Graduate School** - Ward Edwards 1800 • **Registrar** - Ward Edwards 1000 • **International Center** - Ward Edwards 1200

# Calendar 2007-2008

### SUMMER SESSIONS 2007: MAY 7 - JULY 27

May 6	. Housing facilities open at 1 p.m. for 1st session students.
May 7	. Monday, 1st 3-, 6-, 9-, 12-week sessions begin.
May 25	. Friday, 1st 3-week session ends and final exams.
	. Housing facilities close, 6 p.m.
	. Housing facilities open at 1 p.m. for 2nd session students.
	. Monday, Memorial Day Holiday. CLASSES DISMISSED and
	UNIVERSITY OFFICES CLOSED.
May 29	. Tuesday, 2nd 3-, 6-, 9-week sessions begin.
June 15	. Friday, 2nd 3-week, 1st 6-week sessions end and final exams.
June 15	. Housing facilities close, 6 p.m.
June 17	. Housing facilities open at 1 p.m. for 3rd session students.
June 18	. Monday, 3rd 3-week, 3rd 6-week sessions begin.
July 4	. Wednesday, Independence Day Holiday, CLASSES DISMISSED
	and UNIVERSITY OFFICES CLOSED.
July 6	. Friday, 3rd 3-week, 2nd 6-week, 1st 9-week sessions end and
	final exams.
July 6	. Housing facilities close, 6 p.m.
July 8	. Housing facilities open at 1 p.m. for 4th session students.
	. Monday, 4th 3-week session begins.
July 27	. Friday, 4th 3-week, 3rd 6-week, 2nd 9-week, 12-week sessions
	end and final exams.
July 27	. Housing facilities close, 6 p.m.
•	<b>.</b>

### FALL SEMESTER 2007: AUGUST 22 - DECEMBER 14

Aug. 17       University apartments open, 8 a.m.         Aug. 19       Residence halls open, 8 a.m.         Aug 20, 21       Monday, Tuesday, faculty planning         Aug. 22       Wednesday, 8 a.m., classes begin.
Aug 20, 21 Monday, Tuesday, faculty planning Aug. 22 Wednesday, 8 a.m., classes begin.
Aug. 22 Wednesday, 8 a.m., classes begin.
Aug 78 Last day for Fall comostor enrollment and changing classes
Aug. 28       Last day for Fall semester enrollment and changing classes.         Sep. 3       Monday, Labor Day Holiday, CLASSES DISMISSED and
IINIVERSITY OFFICES CLOSED
Sep. 25 Last day to drop first half semester classes with a W recorded.
Oct. 11 Thursday, final examinations for first half semester classes and end of first half semester
Oct. 12 Friday, Mid-Semester Break. CLASSES DISMISSED.
Oct. 15 Monday, second half semester classes begin.
Oct. 31Last day to drop semester classes with a W recorded.
Nov. 15 Last day to drop second half semester classes with a W recorded.
Nov. 20 Residence halls close, 6 p.m.
Nov. 21 Wednesday, Thanksgiving Holiday, CLASSES DISMISSED.
Nov. 22, 23 Thursday, Friday, Thanksgiving Holidays, CLASSES DISMISSED
and UNIVERSITY OFFICES CLOSED.
Nov. 25 Residence halls open, noon.
Dec. 10-14 Monday through Friday, Fall semester final examinations
(includes second half semester classes).
Dec. 14 Residence halls close, 6 p.m.
Dec. 14 Friday, Graduate School Commencement
Dec. 15 Saturday, Commencement
Dec. 24-Jan.1 Winter Holidays, UNIVERSITY OFFICES CLOSED

### SPRING SEMESTER 2008: JANUARY 14 - MAY 9

Jan. 2	Offices open
	Residence halls open, 8 a.m.
	Nonday, 8 a.m., classes begin.
	Last day for Spring semester enrollment and changing classes.
Jan. 21	Monday, Martin Luther King Jr. Holiday, UNIVERSITY OFFICES
	CLOSED.
Feb. 15	Last day to drop first half semester classes with a W recorded.
Mar. 5	. Wednesday, final examinations for first half semester classes and
	end of first half semester.
Mar. 6	Thursday, second half semester classes begin.
Mar. 7	Residence halls close, 6 p.m.
Mar. 10-14	Monday through Friday, Spring Break, CLASSES DISMISSED.
Mar. 16	. Residence halls open, noon.
Mar. 28	Last day to drop semester classes with a W recorded.
Apr. 1	Priority date for students to submit the 2007-2008 federal
	financial aid application (FAFSA) to the national processing
	agency.
Apr. 15	Last day to drop second half semester classes with a W recorded.
•	Monday through Friday, Spring semester final examinations
May 5 7	(includes second half semester classes).
May 0	
·	Housing facilities close, 6 p.m.
·	Friday, The Graduate School Commencement
May 10	Saturday, Undergraduate Commencement

### SUMMER SESSIONS 2008: MAY 12 - AUGUST 1

May 11	Housing facilities open at 1 p.m. for 1st session students.
May 12	Monday, 1st 3-, 6-, 9-, 12-week sessions begin.
May 26	Monday, Memorial Day Holiday. CLASSES DISMISSED and
	UNIVERSITY OFFICES CLOSED.
May 30	Friday, 1st 3-week session ends and Final Exams.
May 30	Housing facilities close, 6 p.m.
June 1	Housing facilities open at 1 p.m. for 2nd session students.
June 2	Monday, 2nd 3-, 6-, 9-week sessions begin.
June 20	Friday, 2nd 3-week, 1st 6-week sessions end and final exams.
June 20	Housing facilities close, 6 p.m.
June 22	Housing facilities open at 1 p.m. for 3rd session students.
June 23	Monday, 3rd 3-week, 3rd 6-week sessions begin.
	Friday, Independence Day Holiday, CLASSES DISMISSED and
	UNIVERSITY OFFICES CLOSED.
July 11	Friday, 3rd 3-week, 2nd 6-week, 1st 9-week sessions end and
	final exams.
July 11	Housing facilities close, 6 p.m.
July 13	Housing facilities open at 1 p.m. for 4th session students.
July 14	Monday, 4th 3-week session begins.
Aug. 1	Friday, 4th 3-week, 3rd 6-week, 2nd 9-week, 12-week sessions
	end and final exams.
Aug. 1	Housing facilities close, 6 p.m.

# STUDENT PROGRESS CHECKLIST

### Admission

- □ Complete Application for Admission to The Graduate School. Forms are available in The Graduate School. Submit \$30 application fee at least three weeks prior to the first semester you plan to take a graduate course. International students must be enrolled in full-time degree seeking programs. International admission instructions may be found at *http://www.ucmo.edu/international*.
- □ Request that all transcripts of work completed at other colleges be sent to The Graduate School at the time of Application for Admission to The Graduate School is made.
- Receive notification regarding your admission to UCM from The Graduate School within one week after all needed materials are received by The Graduate School.
- □ Submit the Free Application for Federal Financial Aid (FAFSA) prior to April 1 each year. *http://www.fafsa.ed.gov*
- ☐ Receive and respond to your Financial Aid Notification, mailed from UCM's Office of Student Financial Assistance. Several weeks after submitting your FAFSA.
- Apply for Federal Stafford Student Loan aid after receiving your Financial Aid Notification.

### <u>Acceptance by Department</u>

□ Receive notification regarding your acceptance into a degree program and designation of adviser from the department offering your program within two weeks after The Graduate School notifies you of admission status. Respond to directives from your department. Contact your assigned adviser and request a time for a personal interview immediately upon receiving notice of your acceptance into program.

### **Graduate Student Orientation**

All new graduate students should complete the online orientation at *http:// www.ucmo.edu/graduate/orientation*.

☐ International graduate students should also attend the International Graduate Student Orientation.

### Enroll in classes

- Seek approval from your adviser to enroll in courses.
- ☐ Enroll in classes each semester. Enroll on the web *https://www.ucmo.edu/portal* or by calling The Graduate School 660-543-4621.
- A Pre-enrollment Conference with your graduate adviser is recommended before enrolling in any courses.

### **Program of Study**

- Complete an aptitude test if required by the department or college prior to admission or during the first semester of graduate study.
- Check with the Testing Center and the department for types of tests and dates when specific tests are offered.
- Meet departmental requirements after checking with your program adviser.
- ☐ Submit Program of Study to program adviser upon admission to program. Must be filed prior to completing 12 hours of graduate coursework.

### Application for Degree

- ☐ In the first month of the semester in which final requirements are met, submit an Application for Degree form. File the form with your adviser prior to deadline date. Request application for degree forms and deadline dates from The Graduate School.
- ☐ Take Final Comprehensive Exam, if required. Check for the specific date with your program adviser.
- □ Complete final approval of thesis and issuance of a bindery number by The Graduate School. Submit the bindery number to your adviser three weeks prior to commencement.
- Comply with Alumni Relations request and complete the Permanent Record Information Form.
- Pay all graduation fees. The Office of Student Accounts will bill you; pay upon receipt of bill.

### Graduation

☐ Approximately November 15 and April 15 of each year contact The Graduate School to obtain a commencement packet. Following the conclusion of the semester that degree requirements are met, a diploma will be mailed to you in about six weeks at the address you provide on the Application for Degree Card.

# The UCM Community Creed

Choosing to become a citizen of the University of Central Missouri implies an acceptance of and willingness to contribute to the common goals and purposes of the community. The UCM Community Creed outlines the principles which guide the creation and maintenance of desired community at UCM. The creed also provides a framework for individual behaviors which help build our vision.

### As a member of the UCM community, I will join in building . . .

a **learning** community by striving for academic and personal excellence and by promoting the value of education and lifelong learning;

an **open** community by creating and maintaining effective channels of communication and by accepting and respecting individuals whose values, ideas, beliefs, and life experiences may be different from my own; a **caring** community by seeking opportunities to serve and by supporting and affirming the well-being of others;

a **just** community by behaving in ways which are ethical, honest, equitable, trustworthy, civil and respectful;

a **disciplined** community by seeking to understand and fulfill personal responsibilities, by upholding University guidelines and by working toward self and community betterment;

a **celebrative** community by observing and honoring existing traditions and by seeking and creating opportunities to enrich and define UCM;

a **purposeful** community by helping to shape and achieve the common goals of the University of Central Missouri.

### **SECTION I**

# **General Information** INTRODUCTION —

### The Graduate School Contacts

The personnel in the Offices of The Graduate School and Sponsored Programs seek to provide quality services to support graduate education and research at UCM. These offices are located in Ward Edwards, Suite 1800. Phone 660-543-4621 or

#### 1-800-729-8266

1 000 / 1 0100	
The Graduate School	
Dean of The Graduate School	
Director of Sponsored Programs	
Associate Dean of The Graduate School	
Coordinator of Graduate Studies	
Graduate Admissions Evaluator	
Graduate School Fax	
University Information Operator	
web site: http://www.ucmo.edu/graduate	
email: gradinfo@ucmo.edu	

### How to Use This Catalog

The University of Central Missouri Graduate Catalog contains a wealth of information for graduate students and faculty members. Please examine it carefully. The catalog is a helpful guide for reviewing available programs of study, planning a program, selecting courses, and determining whether graduation requirements have been met. If you are a graduate student entering UCM, you should keep this catalog until you graduate. Because the policies and the programs at the University are constantly changing, no catalog can be completely up-to-date. Students, therefore, should review their programs periodically with their graduate advisers and with the staff in The Graduate School to ensure that requirements are being met.

# The UCM Graduate Catalog is organized into the following sections:

- Contents.
- Calendar, a list of prominent dates and deadlines for the academic year.
- Student Progress Check List, a list of steps that should be followed while completing a graduate degree at UCM.
- General Information, an explanation of the history and mission of the University and its accreditations, the mission and goals of graduate study, the organization and administration of The UCM Graduate School, Office of Sponsored Programs, the Graduate Council, the Research Council, graduate faculty, graduate advisers, coordinators, Missouri Residency and other useful information.
- Graduate Support, types of support for graduate students available at UCM, including graduate assistantships, scholarships, and Federal financial aid.
- University Fees, a description of University fees.
- Admission to Graduate School, policies and procedures for admission.
- Master's Degree, policies, procedures, and requirements for master's degrees.
- Education Specialist Degree, policies, procedures, and requirements for Education Specialist Degree.
- Doctoral Degree, cooperative doctorates available at UCM.

- Course Prefixes, list of course prefixes by college and department.
- Graduate Programs, list of Master's, Education Specialist, and Doctoral Degrees.
- Colleges, Departments, Degrees and Courses Offered, a listing of degrees and courses organized according to the college and department which offers them.
- The Graduate Faculty, list of The Graduate Faculty. Index.

### **Rights and Responsibilities**

A statement of rights accorded to students by the Family Educational Rights and Privacy Act and the policy statement relative to this Act may be obtained from Academic Advisement, the Office of the Registrar, or the Office of the Vice President for Student Affairs.

Graduate students are subject to current administrative policies, procedures, and regulations for the University. The general policies and regulations listed in the 2007 Graduate Catalog become effective Fall 2007. Consult the University General Catalog and the UCM Student Calendar/Handbook for other University policies.

### University of Central Missouri Drug Free Schools and Workplace Statement

The University has established and is committed to enforcing clear policies that promote an educational environment free from the abuse of alcohol and other substances. The University complies with federal regulations that require an alcohol and drug testing program for safety sensitive positions. The University expects students, employees, visitors and organizations to adhere to state statutes prohibiting individuals under the age of 21 from drinking or having alcohol in their possession. Drinking or possession of alcoholic beverages is prohibited in university buildings and residence halls except in those places where an explicit exception has been granted. The University also expects students, employees, and visitors to comply with laws that prohibit the possession, use, distribution, and sale of alcohol and illicit drugs. Anyone found to be in violation of such laws shall be subject to all applicable criminal penalties, as well as disciplinary action in accordance with applicable policies of the University of Central Missouri. Students under the age of 21 are reminded that it is unlawful to use fictitious identification for purchasing alcohol. Health risks associated with the use of illicit drugs and alcohol include, but are not limited to, addiction, accidents as a result of impaired judgment and ability, overdose, damage to internal organs or a developing fetus, and unpredictable or violent behavior. Resources for assistance with alcohol- and drug-related problems include Counseling and Psychological Services, University Health Services, Human Resources, and a variety of community and regional referral services. For more information, call 660-543-4060 or 660-543-4770.

### The University's History

The University of Central Missouri is a comprehensive, public university dedicated to providing personalized higher education experiences for a diverse body of students. Through its commitment to service and excellence, UCM seeks to meet the educational needs of the region, with extended responsibility to meet state, national, and international needs through selected programs.

From its establishment in 1871, and until 1947, UCM offered only undergraduate studies. Changing needs prompted continual improvement and development of the curriculum. In 1945, the State General Assembly, responsive to the needs of the State and to requests from teachers, authorized a change in name as well as an extension of mission. This legislation provided the legal basis for the establishment of graduate studies. Graduate work leading to the Master of Science in Education was offered for the first time in 1947.

The guiding principles of graduate education at UCM have remained constant since its inception. Graduate work demands independent, critical, and creative thinking, the ability to collect, organize, and develop data, and the ability to formulate, interpret, and defend conclusions.

Programs leading to the Master of Arts, Master of Science, Master of Science in Education, Master of Business Administration, Master of Arts in Teaching, the Education Specialist, and Cooperative Doctoral degrees have been added since 1947, and are a direct response to the needs of the citizens of the State of Missouri. In 1996, a statewide mission in academic technology for the University of Central Missouri was approved to "acquire, disseminate and utilize technology to enhance the university's comprehensive educational mission and to enrich the lives of all Missourians."

### **University Mission Statement**

The University of Central Missouri is a comprehensive, public university dedicated to student learning and committed to service and excellence. Through a foundation in the liberal arts, professional degree programs, personalized higher education experiences, and use of current academic technologies, UCM prepares a diverse body of students to be lifelong learners who are proficient in their fields of study, able to adapt to a changing world, and contribute to the betterment of society. UCM serves as Missouri's lead professional technology institution, and is committed to acquiring, disseminating, and utilizing technology to enhance the University's comprehensive educational mission and to enrich the lives of all Missourians.

In order to fulfill its mission, the University of Central Missouri:

- Admits graduates of accredited high schools based on specific admission criteria, actively recruits traditionally under-represented students, and offers a strong merit-based scholarship program to attract highly capable students.
- Provides a learner-centered academic environment which challenges individuals to participate actively in the educational process and empowers the faculty to excel in teaching while engaging in scholarship, research, creative activities and public service.
- Offers an undergraduate foundation in the liberal arts, with an emphasis on integrating critical thinking, interaction, valuing, communication skills and technological applications into the curriculum across all disciplines.
- Provides pre-professional, professional, academic and careeroriented undergraduate and graduate programs to meet the changing and technological needs of the workforce.

- Provides in-service instruction for technical educators and other professionals needed to make Missouri competitive in a national and world market.
- Continues its historical emphasis in preparing educators for Missouri.
- Provides advanced graduate studies and research in areas of particular strength and need.
- Uses assessment to enhance teaching, learning, research and all university operations.
- Fosters a campus community responsive to the needs of a diverse student population, provides opportunities for global awareness, and promotes an appreciation for human diversity.
- Shares human and academic resources with schools, businesses, industries, and public agencies through partnerships and outreach activities.
- Serves as a cultural, artistic and information center for the citizens of Missouri.

Approved by the Board of Governors Feb. 19, 2003

### Graduate Program Accreditations

- National Council for Accreditation of Teacher Education
- The Missouri Department of Elementary and Secondary Education
- The Association to Advance Collegiate Schools of Business (AACSB)
- American Speech-Language-Hearing Association
- Applied Science Accreditation Commission of the Accreditation Board for Engineering and Technology (ASAC/ABET)
- Commission on Collegiate Nursing Education
- National Association of Schools of Music

### University Institutional Memberships

- American Association for Higher Education
- American Association of State Colleges and Universities
- American Association of University Women
- American Council on Education
- Association for Gerontology in Higher Education
- Association of American Colleges and Universities
- Association of Governing Boards of Universities
- Center for Academic Integrity
- Coalition for Positive Family Relationships
- · Council for Public Higher Education for Missouri
- Council on Undergraduate Research
- Council of Social Work Education
- Mid-America Intercollegiate Athletics Association
- Missouri Academy of Science
- Missouri School College Relations Committee
- National Collegiate Athletic Association
- National Council for Accreditation of Teacher Education
- National Council of Educational Opportunity Associations
- · North Central Association of Colleges and Schools
- The Higher Learning Commission
- The Renaissance Group

### The Graduate School Mission Statement

The mission of The Graduate School at the University of Central Missouri is to provide high-quality graduate programs that are offered in multiple delivery modes and meet the needs of the students' personal and professional development, forwards their educational advancement and adapts to the changing needs of the workforce. The Graduate School accomplishes its mission by creating an environment conducive to learning, scholarship, and creativity for both students and faculty.

### Organization and Administration of The Graduate School

Significant in the organization and administration of The Graduate School are the Graduate Faculty Assembly, Graduate Council, Graduate Faculty Review Committee, University Research Council, Director of Sponsored Programs, graduate advisers and coordinators, the faculty as a body, and the Dean of The Graduate School. The Dean reports directly to the Provost and Vice-President for Academic Affairs.

**Graduate Faculty Assembly**—The Graduate Faculty Assembly (GFA) is the governing body of Graduate Programs for the University. The GFA is comprised of all members of the Graduate Faculty and the administrators assigned to the Graduate School. Recognizing that input from the graduate faculty is crucial to the quality of graduate education, the GFA provides a forum for discussion of graduate education issues and elects members to the Graduate Council (GC) and Graduate Faculty Review Committee (GFRC). Graduate faculty members of the GFA are recognized as associate or full members with differing rights and responsibilities.

**Graduate Faculty Review Committee**–The Graduate Faculty Review Committee (GFRC) serves to review initial and reappointment applications for Full Graduate Faculty Status. Review of requests for initial and reappointment applications for Associate Graduate Faculty Status are conducted by the Dean of The Graduate School. The GFRC is composed of five full members of the Graduate Faculty Assembly, elected by the GFA. The Chair-Elect of the Graduate Council serves as Chair of the GFRC and votes only in cases of a tie. The Dean of The Graduate School serves as an *ex officio*, non-voting member, and the Coordinator of Graduate Studies serves as secretary to the GRFC. The secretary of the GRFC is *ex officio* and non-voting.

**Graduate Council**–The Graduate Council (GC) develops and reviews University policies and procedures for graduate education; reviews and recommends graduate curriculum; monitors the quality of graduate programs of the University; and advises the graduate dean on university, college, and department policies and procedures as set forth in the Graduate Catalog.

The Graduate Council is composed of thirteen members. Full members of the GFA nominate and elect from their number nine representatives to the GC: four at-large members and one representative each from the College of Arts, Humanities and Social Sciences, College of Education, College of Health and Human Services, College of Science and Technology, and the Harmon College of Business Administration. Two graduate student members are appointed by the Graduate Student Association. The Dean of The Graduate School serves as an *ex officio*, nonvoting member, and the Coordinator of Graduate Studies serves as secretary to the GC. The secretary of the GC is *ex officio* and non-voting.

**University Research Council**–The University Research Council formulates policies and procedures pertaining to faculty research and assists the Director of Sponsored Programs in promoting research at the University of Central Missouri. The University Research Council is composed of eight members. One representative each from the College of Arts, Humanities and Social Sciences, College of Education, College of Health and Human Services, College of Science and Technology, and Harmon College Of Business Administration, Department of Library/Academic Enrichment, Director of Sponsored Programs (ex-officio), and Dean of The Graduate School (*ex-officio*). **Graduate Advisers**—Graduate program advisers are recommended and approved by the department chair and college dean to teach graduate level courses and advise graduate students. Graduate advisers must have full graduate faculty status. Graduate program advisers counsel students about enrollment, program planning, qualifying examinations, research studies and/or thesis, comprehensive examinations, and eligibility for graduation.

**Graduate Coordinators**–Graduate Coordinators are responsible for implementing the policies and procedures of graduate study at the University within their respective units. They advise faculty and students and coordinate departmental graduate programs relative to the policies and procedures set forth by the Graduate Council and Dean of The Graduate School.

**Graduate Student Association**–All graduate students are members of the Graduate Student Association by virtue of being enrolled as graduate students at UCM. The purposes of the organization are:

- To serve as an advocacy group for the academic, professional, and personal needs of graduate students.
- To serve as a liaison between the graduate population and the faculty and administration.
- To provide the opportunity to initiate programs, workshops, and discussions relevant to the graduate experience.
- To provide opportunities for social activities in an effort to create a sense of community.

The GSA meets once a month and/or as deemed necessary. Officers are elected from the membership.

**Graduate Student Responsibility**–Admission to The Graduate School and graduate programs at UCM presume a degree of initiative on the part of the graduate student. Graduate students assume responsibility for engaging in intellectual activities at the graduate level as well as responsibility for complying with all policies and procedures as set forth in this catalog and in departmental regulations in earning an advanced degree.

Requirements will not be waived, and exceptions will not be granted because of ignorance of policies, requirements, or procedures for graduate study at UCM. Graduate advisers, the faculty, and the staff in The Graduate School assist students; however, the responsibility to adhere to the policies and procedures as stated in this catalog lies with the student.

Academic Ethics and Plagiarism–Academic honesty is a prerequisite for academic achievement; all members of the academic community are expected to act in accordance with this principle. The University recognizes plagiarism as a serious academic offense. See the UCM Student Planner/Handbook for details on academic dishonesty.

**Graduate Appeals**–A student may appeal a decision related to any policy stated in the Graduate Catalog. The appeal begins in the department or academic unit where the degree program is located. A completed Petition to The Graduate School must be submitted first to the department or academic unit for their review and recommendation. Departments and academic units will designate the individual(s) authorized to review the appeal. The petition will then be forwarded for review by the Graduate Dean. If the student is not satisfied with the Dean's decision, the petition will be forwarded to the Graduate Council for review. The Graduate Dean may request the Graduate Council to review exceptional cases or those in which there may be the appearance of a conflict of interest without first rendering a decision. The decision of the Graduate Council is final in all appeals submitted to it by the student or the Graduate Dean.

### Accessibility Services

The Office of Accessibility Services provides accommodations to persons with disabilities. Contact Accessibility Services at Elliott Union 220, (V/TTY) (660) 543-4421, fax (660) 543-4724, email *oas22000@ucmo.edu*, or visit *http://www.ucmo.edu/access*. A minimum of 48 hours notice is recommended for accommodations for programs, events, and general services. Notice of six to eight weeks is requested for special accommodations regarding University housing, location of classrooms, and other services. Relay Missouri number for TTY callers is (800) 735-2966 or for voice callers is (800) 735-2466.

### Assessment and Testing Services

The Office of Assessment and Testing Services is located in Ward Edwards 1114, (660) 543-4919. Currently, the Director of Assessment is located in Administration Building, Room 203e, (660) 543-4116, and the Interim Director of Testing Services is located in Ward Edwards 1114, (660) 543-4919. The Office of Assessment and Testing Services administers, supports and coordinates UCM's Assessment and Testing Services Programs. The University's assessment program is called UCM's Quality Improvement Program (CQIP). A description of the major goals and components of CQIP can be found at *http://www.ucmo.edu/testingservices*.

To protect confidentiality and privacy an official Photo ID with signature is required for most services.

**Official Score Report Policy:** Only score reports that are sent directly from the test company to the Office of Assessment and Testing Services, Ward Edwards 1114, Warrensburg, MO 64093, are considered official. Official score reports are required to be on file in Testing Services for students to meet admission and/or other program requirements.

Testing Services, Ward Edwards 1114, (660) 543-4919, maintains test scores and provides registration information and materials for most tests listed below. **Those tests administered at UCM through Testing Services are marked with an asterisk (\*).** To obtain test dates and/or to register for some tests, visit *http://www.ucmo.edu/testingservices.* Test fees may apply to some tests. Official score reports, reports sent from the testing company to Testing Services, are required.

- \*ACT-Compass/ESL
- \*American College Testing Program (ACT)
- \*American Drafting and Design Association Exam (ADDA)
- \*Area Concentration Achievement Test (ACAT)
- -Arnett Development Corporation "Complete RN Testing Success" Exams (CRST)
- \*Assessment Technologies Institute, LCC (ATI-Nursing)
- \*Certified Manufacturing Technologist Exam (CMTE)
- \*College Basic Academic Subject Examination for General Education Assessment
- \*College Basic Academic Subject Examination for Teachers
- \*College-Level Examination Program (CLEP)
- \*Constructor Certification Exam (CCE)
- \*Counselor Preparation Comprehensive Exam (CPCE)
- -Diagnostic Readiness Test (DRT-RN)
- \*General Education Development (GED)
- -Graduate Management Admission Test (GMAT) computer based test (UCM to become a GMAT-iBT site Fall 2007).
- \*Graduate Record Examination General Test (GRE-General) Internet-based test (UCM to become a GRE-iBT site September 2007.
- \*Graduate Record Examination Subject Tests (GRE-Subject)
- \*Institutional Test of English as a Foreign Language (ITP TOEFL)

- \*Law School Admissions Test (LSAT)
- -Major Field Achievement Test (MFAT)
- \*Major Field Achievement Tests (MFT-iBT)
- -Medical College Admissions Test (MCAT)
- -Miller Analogies Test (MAT)
- \*Minnesota Language Proficiency Assessments (MLPA)
- \*Missouri Police Officers State Certification Exam (MPOSCE)
- \*National Association of Industrial Technology Exam (NAIT) \*National Automotive Technician Education Foundation
- (NATEF)
- -National League of Nursing Achievement Tests (NLN-Achievement)
- -National Registry of Emergency Medical Technician First Responder (NREMT-FR)
- \*PRAXIS Series (previously National Teacher Exams)
- \*Professional Photographers of America (PPA)
- \*School Leadership Licensure Assessments (SLLA and SSA) TeckChek
- \*Test of English as a Foreign Language (TOEFL) Internetbased test
- -Test of Spoken English (TSE)
- -Travel Agency Proficiency Exam (TAP)
- -Watson Glaser Critical Thinking Appraisal (WGCTA)

**Candidates with Documented Disabilities:** A candidate with documented disabilities and who wants to use test accommodations in compliance with the Americans with Disabilities Act needs to obtain test company accommodation policies prior to registering for a test. Registration deadlines apply.

### **Campus Living**

UCM provides a variety of campus living opportunities. To graduate students, convenience and a sense of community are the keys that make campus living so appealing. The residence halls offer single and double living accommodations in suite-style living especially for upper-class and graduate level students. University apartments offer one to three bedroom private living accommodations. Married couples with or without children, single parents with children living with them full-time and single graduate students are eligible to live in these comfortable and unique environments. For up-to-date information: Fax (660) 543-4846 or email *housing@ucmo.edu*.

### **Classroom Policies**

Persons who are not officially enrolled in a course may not attend a class session without the prior consent of the instructor. Persons bringing children on campus are responsible for their appropriate supervision and behavior. Additional policies may be outlined in syllabi provided by course instructor.

### **Degree Revocation Policy**

The purpose of the degree revocation policy is to describe the conditions under which a degree granted by UCM may be revoked. It is the policy of the University of Central Missouri that degrees may be revoked when:

- 1. Evidence is presented which verifies that a degree had been erroneously conferred when all requirements had not been satisfied at the time the degree was granted.
- 2. Evidence is presented which verifies that a degree had been erroneously conferred as a result of an act of academic dishonesty.

**Guidelines and Responsibility**–Upon the receipt of evidence suggesting the erroneous conferral of a degree, the Associate Provost for Academic Affairs will convene the Degree Review Committee to investigate the circumstances and to make initial recommendations. The committee membership will consist of the following: the Registrar, the Associate Provost, the Dean(s) of the college(s) responsible for the major program(s), and the Dean of The Graduate School, if a graduate degree is involved. The committee will be augmented by the department chair(s), faculty, and graduate adviser when the requirements of a specific major, minor or course were not met. The committee chair will be elected from the assembled membership.

If the Degree Review Committee finds the charge unfounded and, therefore, decides not to recommend revocation of the degree, the matter will be closed. If the Degree Review Committee concludes that the degree was improperly granted and recommends that the degree be revoked, the chair of the committee will forward this recommendation to the Provost. The Provost shall ensure that the appropriate levels of procedural due process be extended to the degree recipient. If, upon the conclusion of this investigation, the Provost concurs that the degree be revoked, this recommendation will be forwarded to the President for consideration. If the President deems the evidence warrants degree revocation, that recommendation will be forwarded to the Board of Governors for action.

### Family Educational Rights and Privacy Act

UCM adheres to the Federal Family Educational Rights and Privacy Act (FERPA). Copies of the full policy implementing the FERPA may be obtained from the Office of the Vice President for Student Affairs.

### Final Examinations

Final examinations are given at the end of each semester according to an announced schedule. Permission to take an examination out of the scheduled hours is granted only in special cases, with the approval of the instructor of the class and the Vice President for Student Affairs. A fee of \$10 per final is charged for rescheduling of final examinations. Any student who has three final examinations scheduled on any one day may request permission to move one of the examinations to another day during the final examination period. There is no charge for this, but approvals must be secured as described above. Resolution of conflicting examination schedules, as well as arranging make-up examinations, must be made with class instructors.

### Information Services

The Department of Information Services provides information processing, computer support, network and telecommunications services for the entire University. The Computer Support Services unit operates, on a nearly around-the-clock basis, the large-scale central academic and administrative computer systems which house many databases critical to the University's operations. Access to these systems is provided through microcomputers, terminals, and web interfaces. The Management Information Systems unit designs, develops, acquires and supports application software systems, including financial, student services, developmental and human resource management for the many administrative offices of the University. The User Services unit provides 24/7 campuswide computing access through high speed network infrastructure, computer support through a central HELP desk facility and support staff, general and customized training for faculty, staff, and students, along with internet user support and academic consulting. They are located in Ward Edwards 0414 and may be contacted at (660) 543-HELP or helpdesk@ucmo.edu.

The Telecommunications Services unit, located in the Administration Building, provides consulting, design, installation and maintenance for all telecommunications services at UCM. The campus has a Meridian Option 81C Private Branch Exchange and Octel 350 voice mail system. The telecommunications services available consist of standard telephone (analog) service, business (digital) service, voice mail services, ISDN services in support of video requirements, Voice-over-IP services in support of remote facilities, as well as Ethernet connectivity from the end user to the floor electronics closet of each campus building.

### **Teacher Certification**

UCM, accredited by (NCATE) the National Council for Accreditation of Teacher Education, offers both courses and programs at the graduate level that meet the requirements for certain certificates issued by the Missouri State Department of Elementary and Secondary Education.

Authority has been granted to the University by the State Board of Education in Missouri to recommend for certification students who are qualified to teach or serve as administrators in the public schools of Missouri as well as in other states. Any student seeking initial certification or additional certification as a result of completing graduate courses or a graduate degree should contact the Director of Clinical Services and Certification University of Central Missouri in Lovinger 2170, Warrensburg, MO 64093 or at (660) 543-8441 or *clinicalsvs@ucmo.edu*.

### Self-Enrollment

Graduate students may complete self-enrollment by using the web at *https://www.ucmo.edu/portal* or using computer terminals at various locations on campus. Graduate students should come to The Graduate School, Ward Edwards 1800, if they need assistance. Contact Information Services for PIN assistance at (660) 543-HELP (4357).

### Admission to The Graduate School

**Prerequisite Degrees**–An applicant for admission to a master's degree program must have a bachelor's degree. An applicant for admission to an Education Specialist degree program must have a master's degree. Prerequisite degrees must be from institutions accredited by agencies recognized by University of Central Missouri.

Admission Limitation–Admission to The Graduate School, which permits enrollment in classes, is not equivalent to admission for a particular program or degree.

Application Procedures for Degree-Seeking Students– Individuals interested in pursuing a graduate degree at the University of Central Missouri can contact The Graduate School for application information or visit our web site at

*http://www.ucmo.edu/graduate* or apply for international admission at *http://www.ucmo.edu/international*. All application materials should be received by The Graduate School at least three weeks prior to the beginning of the semester in which the student wishes to register. All degree-seeking student applicants must:

- 1. Submit a formal application for admission to The Graduate School;
- 2. Submit official transcripts of all undergraduate/graduate course work;
- 3. Include a \$30 non-refundable application fee; international students should remit \$50.

When all materials are complete The Graduate School will conduct an initial evaluation. Applicant files meeting the requirements for admission to graduate study will be forwarded to the department, as designated by the student, for consideration and recommendation. The department will notify the student of action taken and admission status. A departmental adviser will be assigned and will assist the student in formulating a program of study leading to the attainment of the student's objectives in pursuing graduate work.

### Application Procedures for Non-Degree Students-An

individual with a bachelor's degree from a regionally accredited institution who is not seeking a graduate degree may enroll in graduate courses and receive credit as a non-degree student. Applicants for non-degree status need only submit an application for admission, a copy of their transcript showing the undergraduate degree and pay the application fee.

A student wishing to change from non-degree status to a degree program must file a new application for admission and adhere to all requirements specified for degree seeking students. International students with an F-1 student visa are not eligible to enroll under non-degree status.

Credits earned while in non-degree status may not be applicable to a degree program. If a non-degree student is accepted into a program, the department adviser will determine if credit earned while a non-degree student is applicable to the proposed program.

Application Procedures for Non-Degree Students–Special Enrollment–Students with an undergraduate degree who wish to enroll for graduate credit in special programs or short courses for a limited number of semester hours without submitting a transcript of previous academic work may be admitted as Non-Degree Student– Special Enrollment students.

Enrollment is predicated upon assurance of the student's eligibility for regular graduate admission. The decision for special enrollment is made in The Graduate School. For further information, please contact The Graduate School.

Credit received when classified as Non-Degree Student– Special Enrollment Students cannot be applied to a graduate degree program at UCM until the classification is changed. After a student applies for admission as a degree-seeking student and is accepted by a department into a specific graduate program, the department graduate adviser will determine whether credit earned while a Non-Degree Student–Special Enrollment is applicable to the student's proposed program.

Application Procedure for a Non-Degree Visiting Student– An individual in good standing as a graduate student at another regionally accredited graduate school may present a Certificate of Acceptance of Credit by his/her home institution and enroll as a Non-Degree Visiting Student without submitting complete official transcripts of previous college records. Such a certificate usually allows enrollment for only one semester except for students in cooperative doctoral programs.

A Non-Degree Visiting Student may at any time apply through the regular procedures to be admitted as a Degree-Seeking or Non-Degree Student. Credits earned as a Non-Degree Visiting Student will not necessarily apply to a degree program. After acceptance into a program, the department adviser will determine whether credit earned while a Non-Degree Visiting Student is applicable to the proposed program.

**Non-degree and Visiting Students–Federal Financial Aid**–In accordance with federal rules, non-degree and visiting students normally are not eligible to receive federal financial aid. To be eligible, a student must be fully admitted to a regular graduate degree or teaching certification program.

Admission of a Transfer Graduate Student–A transfer graduate student is one who has completed graduate credit at another institution within the preceding eight years. Transfer students with less than a cumulative graduate GPA of 3.0 will be admitted as Non-Degree Students and will not be eligible to become a degree-seeking student until a minimum of nine semester hours of graduate credit with a minimum cumulative GPA of 3.0 has been achieved at UCM. A transfer student should follow the same admission procedures as indicated above.

#### Admission of an International Graduate Student-

International graduate students applying for admission must file the following credentials with the International Center, Ward Edwards 1200, in accordance with the general practice of all NAFSA or AACRAO Institutions. These credentials must be submitted three months prior to the first semester of enrollment if the student is overseas or 30 days prior to the first semester of enrollment if the student is transferring from another institution in the United States. A completed international student application for admission includes the following:

- Official (or notarized copy) transcripts in English of all academic achievement in colleges or universities.
- Official (or notarized) statement(s) indicating all academic degree(s) earned.
- A statement showing evidence of financial resources while attending a college or university in the United States with sponsor's bank statements to verify.
- A brief statement describing educational objectives and career plans.
- Fulfillment of English proficiency requirement in one of the ways listed below:
- 1. Achieve a minimum score of 550 (paper based) or 213 (computer based) or 79-80 (internet based) on the Test of English as a Foreign Language (TOEFL).
- 2. Completion of 60 semester hours of satisfactory academic work or receipt of an earned bachelor's or graduate degree from an accredited college or university in the United States.
- 3. Students transferring to UCM from an English as a Second Language Program within the United States may be considered as having met minimum English proficiency requirements if a letter of ESL program completion from the program director is presented for admission review. This letter must clearly state that the applicant's proficiency in English is adequate for graduate study at the university level.
- 4. Applicants whose native language is English and who are citizens of a country where English is the official language will be considered as having fulfilled the minimum English requirement.

International students who meet minimum TOEFL requirements but score below 580 paper based (92-93 internet based) and have not received a baccalaureate or graduate degree from an accredited United States college or university will undergo further evaluation for English proficiency during the orientation period prior to the beginning of fall and spring semester classes.

If it is deemed necessary after the language evaluation, students will be required to enroll during their first enrollment period in a course of English as a Second Language (ESL). The specific ESL course or courses in which enrollment may be required are ENGL 1180 Communication Skills in English as a Second Language, or ENGL 1190 Expository Composition in English as a Second Language.

Graduate students in ENGL 1180 will be required to demonstrate that they have met the course objectives by earning a grade of C or better. Upon successful completion of the ELS course, ENGL 1180, graduate students may be required to enroll in the ELS course, ENGL 1190 if testing indicates further assistance in gaining needed language proficiency is needed. Graduate students enrolled in ENGL 1190 are required to earn a grade of C or better.

International students should submit a completed application form to the International Center, Ward Edwards 1200 or apply online at *http://www.ucmo.edu/international*. A non-refundable application fee of \$50 must accompany the application. Payment may be made by credit card, international money order drawn on a U.S. bank or a personal check drawn on a U.S. bank.

**Federal Financial Aid**–If a student is classified by the U.S. Immigration and Naturalization Service as an "eligible non-citizen" or "permanent resident," (s)he may be considered eligible to receive federal financial aid. Documentation of the student's status must be provided to the Office of Student Financial Assistance, Administration Building 104.

**Health Insurance for International Students**–All international students are required to participate in the Student Health Insurance Program.

Graduate Credit Enrollment of a UCM Last-Semester Senior-A UCM undergraduate student interested in taking courses for graduate credit during the last semester of the baccalaureate degree should apply to The Graduate School. A completed graduate application for admission, a Dual Enrollment Form, and a statement from the Registrar listing remaining baccalaureate requirements must be submitted. To be considered, the student must have an undergraduate cumulative grade-point average of 2.50. If a student enrolls in graduate credit courses during the last semester of the baccalaureate degree, the student must complete the baccalaureate degree that semester. In addition, for purposes of qualifying for Federal financial aid, the student will be classified as undergraduate at the senior level. If the baccalaureate degree is not obtained during that semester, the graduate courses taken will revert to undergraduate credit. Combined undergraduate and graduate total enrollment must not exceed sixteen semester hours.

**Readmission to Graduate School**–Students who do not enroll in graduate courses within one year of admission to The Graduate School must reapply for admission. Graduate students who were not enrolled the previous semester must contact The Graduate School either in person or by phone to update records before enrollment can be completed.

**Nondiscrimination/Equal Opportunity Statement**– University of Central Missouri actively follows a policy of nondiscrimination in regard to age, race, color, religion, sex, national origin, sexual orientation, marital status, Vietnam Era veterans, and persons with handicaps and disabilities. This policy applies to the awarding of student financial aid, and the recruitment, admission, housing, placement, and retention of students, faculty and staff.

The University complies with the regulations implementing Title VI and Title VII of the Civil Rights Act of 1964 regarding race, color, national origin, religion and sex discrimination; Title IX of the Education Amendments Act of 1972 regarding sex discrimination; the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973 regarding discrimination based on disabilities and handicaps; the Age Discrimination in Employment Act; and other state and federal laws and regulations.

Persons having inquiries concerning the University's compliance with the regulations implementing any of the above are directed to contact the General Counsel, Administration 208, University of Central Missouri, Warrensburg, Missouri 64093, (660) 543-4730. The Relay Missouri number for TDD callers is 800-735-2966 and 800-735-2466 for voice callers.

# FINANCIAL INFORMATION AND GRADUATE SUPPORT-

### Graduate Assistantships

The University of Central Missouri offers Graduate Assistant positions each year to many qualified students. Graduate assistantships include positions in teaching, laboratory, research, student affairs, and administration. Generally, full-time assistants work an average of 20 hours per week for each week school is in session. This scholarship includes a full or partial scholarship of 10 hours of graduate-level course work and a stipend. If the assistantship is three-fourths time, one-half time, or one-quarter time, work load and scholarship are adjusted accordingly. The Graduate Assistantship does not provide scholarship for classes taken for non-credit, pass/fail, or undergraduate credit.

**Criteria for Graduate Assistantships**–Eligibility for consideration and continuation of a Graduate Assistantship require a student to meet all of the following requirements.

- Possess a baccalaureate degree from an accredited institution by the time the assistantship is to become effective.
- Be accepted into a degree program at the University of Central Missouri.
- Have earned an overall undergraduate grade point average (GPA) of 2.70 or an undergraduate GPA of 3.0 in an appropriate major. If the student has completed graduate work prior to application, the student must have earned a cumulative graduate GPA of at least 3.0. If a student does not have a 2.70 undergraduate cumulative GPA or 3.0 undergraduate GPA in an appropriate major, a student may apply for an assistantship after completion of nine semester hours of graduate work with at least a 3.0 cumulative GPA.

#### • All departmental requirements must be met.

### Types of Graduate Assistantships

- Teaching Assistants–Generally, full-time teaching assistants teach two three-semester hour undergraduate courses per semester. Some teaching assistants aid instructors with large classes. University of Central Missouri complies with RSMO 170.012 which reads in part:
  - Section 2.1. Any graduate student who did not receive both his/her primary and secondary education in a nation or territory in which English is the primary language shall not be given a teaching appointment during his or her first semester of enrollment at any public institution of higher education in the state of Missouri. Exceptions may be granted in special cases upon approval of the chief academic and executive officers of the institution. Section 2.2 All graduate students who did not receive both their primary and secondary education in a nation or territory in which English is the primary language shall be tested for their ability to communicate orally in English in a classroom setting prior to receiving teaching appointments. Such testing shall be made available by the public institutions at no cost to the graduate student. Section 2.3 All graduate students prior to filling a teaching assistant position as a graduate student, who have not previously lived in the United States, shall be given a cultural orientation to prepare them for such teaching appointment.
- Laboratory Assistants-Laboratory assistants conduct laboratory activities, conduct music studio classes, assist in coaching an athletic team, work in the library, or work in a computer lab.
- **Research Assistant**–Research assistants support faculty and staff in research activities.

•Administrative Assistants–Administrative assistants work in campus offices.

• Student Affairs Assistants–Student affairs assistants assume responsibilities in various student services offices including the Elliott Union, Residence Halls, and Intramurals.

**Procedures for a Graduate Assistantship Application**–A graduate student interested in applying for a Graduate Assistantship should:

- Contact The Graduate School or go to the web site at http://www.ucmo.edu/graduate for an application.
- Complete the Graduate Assistantship Application and forward the completed application to one of the following: The Graduate School, the chair of the department in which assistantship is sought, or the supervisor of the office/area in which assistantship is sought.
- Request an official transcript be forwarded to the office/area or department in which the application is submitted.
- Request a minimum of three academic references. Letters should be mailed directly to the person to whom the application was submitted. Credentials on file in a university placement office may be used as a substitute for the reference letters.

The student is responsible for ensuring that necessary letters and references have been received. Action on the student's application cannot be taken until transcripts and credentials have been received.

The appointment process begins approximately March 1 each year. Although applications can be submitted anytime, students are urged to complete the application and submit credentials as early as possible. The majority of appointments are made for both fall and spring semesters at the same time. Single semester appointments for the spring semester only are usually made starting November 1.

If a current Graduate Assistant wishes to have the appointment renewed, the student should consult with his/her supervisor.

**Policies for Graduate Assistants**–A student may be awarded an assistantship for a maximum of four semesters, excluding summer sessions. An Education Specialist student who has had an assistantship while working on a master's degree may have three additional semesters, for a total of seven semesters as a Graduate Assistant, excluding summer sessions. A student who is working on a second Master's Degree is not eligible for any additional semesters of an assistantship.

All Graduate Assistants must be enrolled in at least six hours of graduate credit each semester. The recommended number of hours for half-time and full-time graduate assistants is nine hours per semester. The **maximum** number of hours for any graduate student with a half-time or greater assistantship is 12 hours per semester. Students who hold less than half-time assistantships may take a **maximum** of 16 hours during a regular semester. The **maximum** number of hours for students holding a summer appointment as a graduate assistant is nine hours for the summer. Courses taken for undergraduate credit and for audit are included in the maximum total semester hours. A full-time graduate hours per semester. The scholarship for less than full-time assistantships will be adjusted based on the 10 hour maximum. For e.g.: half-time assistantships will include a scholarship for a maximum of five hours.

Please be aware that any scholarship received as part of an assistantship can have an impact on the total amount of Federal student loan and employment assistance a graduate student is eligible to receive. The amount of the assistantship (stipend) has no impact on the total Federal financial assistance received during the year for which the assistantship has been awarded. For additional information, contact UCM's Office of Student Financial Assistance.

For further information about Graduate Assistantships, contact The Graduate School, Ward Edwards (800) 729-8266, or visit *http://www.ucmo.edu/graduate*.

### Graduate Scholarships

Applications for the following scholarships, awarded by The Graduate School, are available in Ward Edwards 1800, phone (660) 543-4621. A complete list of scholarships is also available in The Graduate School.

**Graduate Student Achievement Award**–This award waives \$500 of the recipient's fall and spring fees. The award is based on high academic achievement and leadership qualities. The award is applicable only to student fees. Students who receive a full-time Graduate Assistantship are not eligible for the award. Deadline: March 1.

**Graduate Non-Resident Scholarship**–Covers the nonresident fees for graduate study at UCM for all students enrolling no later than the fourth semester following graduation from an undergraduate program at UCM; the student must have earned a minimum of 60 hours at UCM with a 3.0 or higher UCM GPA; renewable for six semesters if student maintains a graduate GPA of 3.4 or higher. Deadline: Open.

Warren C. Lovinger Graduate Student Scholarship–A scholarship award has been given annually since 1980 in honor of Dr. Warren C. Lovinger, past president of UCM. Applicants must have received an undergraduate degree from UCM and have been admitted to a graduate program at UCM. Students must have at least 16 credit hours remaining on their graduate program to be eligible for this award. Deadline March 1.

**President's Diversity Scholarship**—This is an award of a graduate assistantship for one academic year. Applicants may meet an income eligibility requirement, and/or be a first-generation graduate student and/or be a member of an under-represented group in their discipline and have a minimum undergraduate GPA of 2.50. Graduate students who receive the award in their first year may reapply for a second year award. Deadline: March 1.

**The Reid Hemphill Outstanding Graduate Student Award**–This cash award is given to the university's outstanding graduate student.The award was funded and established by Dr. Reid Hemphill, UCM's first Graduate Dean. Nominations are made by faculty members to their deans. The deans of UCM's colleges then nominate one student from the college for the award. The recipient is selected by the Graduate Council. Deadline: March 1.

### Federal Financial Assistance

One of the best investments a person can make in his or her future is a graduate education. At the University of Central Missouri, reasonable charges for fees, books/supplies, and room/ board are a major benefit to our students. To help a graduate student achieve his or her educational goals, UCM offers a variety of federal loan and employment aid programs, most of which are awarded on the basis of a student's calculated financial need.

Each student's family and economic situation is recognized as unique, and every Federal financial aid application is examined on an individual basis. The total dollar amount of financial aid requested by UCM's students, however, always exceeds the amount of assistance available. Therefore, it is very important for each applicant to:

• Submit the Free Application for Federal Student Aid on time (by April 1 each year), using *http://www.fafsa.ed.gov*.

• Comply with all financial aid instructions, procedures, and requests for information and documents.

- Enroll each semester at least half-time (four or more graduate credit hours).
- Contact UCM's Office of Student Financial Assistance with any questions or concerns you may have: In person - Administration 104, Telephone (660) 543-4040, Fax (660) 543-8080, email *finaid@ucmo.edu*.

Federal financial assistance can be used to help pay direct educational expenses, such as fees, books and supplies, and residence hall charges, as well as variable living costs, such as offcampus housing, food, transportation, child care, and other personal costs related to attending UCM. Although the responsibility for meeting educational and living costs lies primarily with the student, financial aid from one or more of the following Federal programs can be awarded to supplement a student's ability to pay his/her total expenses.

### Types of Federal Financial Aid Available to Graduate

**Students Loans**–Low-interest Stafford Loan and Perkins Loan are types of aid that must be repaid, but normally not until after the student graduates, withdraws, or drops to less than half-time enrollment status.

**Employment**–Work-Study assistance enables a student to earn a portion of his or her educational resources through part-time work on-campus and off-campus. Available Federal Work-Study positions, as well as University-funded job opportunities are posted at UCM's Office of Career Services, Elliott Union 302, (660) 543-4955.

How to Apply–To apply for all types of Federal financial aid, a student must submit the Free Application for Federal Student Aid (FAFSA), preferably by April 1 each year. The FAFSA is submitted via the internet at *http://www.fafsa.ed.gov*. In addition to the FAFSA, selected financial aid applicants may be required to provide supporting documents or clarifying information to UCM's Office of Student Financial Assistance. If required to do so, the applicant will be contacted by mail and is expected to respond promptly.

**Financial Need**–A graduate student's calculated need for Federal financial assistance is determined by a careful examination of the results of the applicant's FAFSA data. Once this review has been completed, one or more types of financial aid is awarded to help meet the individual's need level. The student is notified of this award "package" by a mailed Financial Aid Notification, which outlines the type(s) and amount(s) of aid offered. The notification process begins early each spring for UCM's earliest FAFSA applicants and continues throughout the year.

**Satisfactory Academic Progress**–Federal law requires that each graduate student who wishes to continue receiving Federal financial aid maintain satisfactory academic progress toward the completion of his or her Masters or Education Specialist degree program. Satisfactory academic progress is defined as having successfully completed at least two-thirds of the credit hours attempted during an academic year in order to be eligible for financial aid for the subsequent year. In addition, a graduate student must maintain at least a 3.0 cumulative graduate GPA.

**Veteran Services**—The University of Central Missouri Office of Student Financial Assistance is a liaison between students requiring veteran services and the Veterans Administration offices in St. Louis and Kansas City.

Support is also provided to students enrolled at UCM who are in the Military Reserve/National Guard (Chapter 106), on active duty or no longer in the military but eligible for VA educational benefits (Chapter 30), Veterans Vocational Rehabilitation students (Chapter 31), dependents of military personnel (Chapter 35), and personnel who contributed to the Veterans Educational Assistance Program (Chapter 32).

For information or assistance completing the proper documentation to ensure VA educational benefits are received in a timely manner, contact the Office of Student Financial Assistance:

In person - Administration 104, Telephone (660) 543-4983, Fax (660) 543-8080, email *finaid@ucmo.edu*.

### Missouri Residency

The Missouri Department of Higher Education has issued regulations to be applied by Missouri universities to determine the resident status of students. This regulation is available at 6 Code of State Regulations 10-3.010. The burden of proof in establishing residency rests with the student. Students who are legal minors or tax-dependents whose parents reside outside the State of Missouri are not eligible for resident fee paying status. One can be classified as a resident for fee purposes immediately upon moving to the state if the move is to accept full time employment (or if one is the dependent of someone who came to Missouri to accept full-time employment.) In other situations continuous domiciliary presence in the state for twelve months must be proven AND sufficient proof of intent to be domiciled in Missouri permanently must be provided. Residency is determined by each educational institution and residency for attendance at a community college or obtaining a driver's license or serving in the Missouri Guard will not necessarily mean a residency determination for fee purposes. Applications and additional information is available for prospective students in The Graduate School Office.

### Nonresident Fee Credit

If a nonresident student pays income tax in Missouri, or is in the legal custody of a parent who pays income tax in Missouri, a credit will be provided against the nonresident student fee. For information on this credit see 6 Code of State Regulations 10-3.010(h) or the Office of Student Financial Assistance.

### **Other Non-Federal Assistance**

Other non-federal forms of financial assistance, such as scholarships and fellowships, are also available from the University of Central Missouri. Federal aid recipients should be aware, however, that receiving other types of financial aid, including assistantship fee waivers can sometimes mean an adjustment in the Federal aid that may have already been awarded.

**Short-Term Loans**–The University realizes that many students are dependent upon federal financial assistance to satisfy the costs of attending UCM. However, students are still expected to have some money on hand to pay for incidental costs during the first few weeks of each semester. If an emergency arises, however, a student can apply at the Office of Student Financial Assistance for shortterm loan funds (not to exceed \$500). These funds normally must be repaid within 60 days. A \$10 service charge will be levied to borrow money from the short-term loan fund.

### University Fees

Please refer to the **Costs and Financial Aid** section of the UCM web site for the current fees applicable at *http://www.ucmo.edu/x218.xml.* 

**Missouri Residency**–Questions regarding Missouri residency should be directed to the Admissions Evaluator in The Graduate School, Ward Edwards 1800.

**Off Campus**–Fees vary for courses offered on-site and through the use of distance learning technologies. Call the Office of Extended Campus, 1-800-729-2678, ext. 2, for fee information on specific courses.

**Textbook Fees**-The fees indicated above do not include the cost of textbooks. Graduate students usually will purchase textbooks; however, if available, some texts may be rented on a charge per book.

Please refer to the University Store site for information on rental charges and other textbook related information at *http://www.ucmbookstore.com*.

### **Special Fees**

The following fees are paid only for special purposes or because of certain conditions.

**Supplemental Course Costs**—Certain specific courses and programs require supplementary fees, materials, supplies, and activities at additional expense to the student.

### Fees may be altered at any time by action of the Board of Governors.

**Payment of Fees**–Students are responsible for paying all charges incurred by their class enrollment, room and board choices, departmental charges and fines. Payment for a semester's cost is due in full approximately ten (10) days before the semester begins. Full payment dates are published in the UCM Student Planner/ Handbook, on the Revenue Office web-site, and on the student billing statement. Non-payment of charges or failure to make payment arrangements by the due date may result in classes being dropped. Late payment fees are added to the student bill each month that payment is not made when due. Collection costs are assessed if collection action becomes necessary. Visit *http://www.ucmo.edu/revenue* for additional information regarding the payment of student accounts.

**Refund Policy-Reduced Load**–Reduced Load Refunds of instructional fees for student-initiated reduction in class load will not be processed until after the fourth week of classes. The following schedule for such refunds will apply for semester hours dropped:

Full Refund: Prior to beginning of semester

Full Refund: First week of classes

- 50% Refund: Second week of classes
- 25% Refund: Third week of classes
- NO Refund: After third week of classes

No refund of instructional fees will be made for studentinitiated reduction in class load after the third week. If a fee amount would be reduced due to load changes caused by failure of classes to materialize or class cancellation by the University, a full refund for that class will be made.

Federal financial aid recipients who drop to less than half-time enrollment status (three graduate credit hours or less) should be

aware that any resulting credit of fees must normally be refunded to the federal programs from which the aid was awarded.

**Refund Policy-Withdrawal**—Students who find it necessary to officially withdraw from the University should initiate the procedure in the Office of Student Affairs, Administration Building 214. Upon completion of withdrawal, the following refund schedule for instructional fees will apply to all students.

Full Refund: Prior to beginning of semester Full Refund: First week of classes 50% Refund: Second week of classes 25% Refund: Third week of classes NO Refund: After third week of classes

No instructional fees are refundable when a student withdraws after the third week. The policy which determines any repayment of financial aid loan disbursements by graduate students who officially or unofficially withdraw from the University of Central Missouri is determined by federal regulations (34 CFR 668.22). A copy of this policy is available from UCM's Office of Student Financial Assistance, Administration Building 104.

**Refund Appeal**–A student who believes that a refund greater than the established schedule should be issued may submit a written petition to The Graduate School. The reasons and unusual circumstances believed to justify a larger refund must be outlined in the written request. All requests for refunds must be submitted within two weeks of the end of the semester for which the fees were paid.

# GENERAL POLICIES APPLYING TO MASTER'S DEGREE ———

To receive a master's degree a student must earn a minimum of 32 semester hours of graduate credit applicable on an approved program. A student wishing to earn a master's degree must have, in addition to the minimum number of hours required in the graduate program, no fewer than 15 approved graduate or undergraduate hours in the major field (generally, this requirement is satisfied during undergraduate study). At least 15 semester hours on the approved program must have been in 5000/6000 level courses for graduate students only. A minimum of 23 semester hours of graduate credit on the approved program must have been taken through or with UCM (see "Transfer Credit").

**Time Limitation**–All courses that satisfy program requirements must have been completed during the eight-year period immediately preceding graduation.

**Course Level**–Most courses numbered at the 4000 level are offered for either graduate or undergraduate credit. A 4000 level course taken as undergraduate credit may not be applied or repeated as graduate credit. A 4000 level course taken for graduate credit will have different course requirements. Courses numbered at the 5000 and 6000 level are offered only for graduate credit. Students who have 10 or more semester hours of graduate credit may enroll in 6000 level courses.

Maximum Load–A graduate student may enroll in a maximum of 16 hours per fall or spring semester including both undergraduate and graduate-level courses. Maximum course loads for summer semester are 6 hours during a three-week session and 12 hours for the entire summer semester. Under extenuating cicumstances, students with at least a 3.50 graduate grade-point average, may submit a petition to the Dean of The Graduate School through their academic department to enroll in more than the maximum number of semester hours. Approval must be granted prior to the semester in which the student wishes to enroll for more thatn the maximum hours. Petitions from students who have grades of "U" in regular courses will not be granted.

**Full-time Student**–A full-time graduate student is one enrolled in 9 or more semester hours of graduate credit during the fall and spring semesters and 6 semester hours during the summer session. The average enrollment for graduate students is 12 hours per semester.

**Individualized Study Limitations**–Not more than one-half of the credit on an approved master's degree program may be individualized study. A student is limited to 6 hours of credit in Internship on a master's degree program. A student is limited to a maximum of 6 semester hours of credit in thesis or in an individual research project on a master's degree program.

**Course Repetition**–A student may repeat any course if it is on their Program of Study and the grade is a C. A student must repeat any course taken at UCM for which a grade of D or F is earned when the course is part of the student's approved program. No substitutions may be made on an approved program for courses in which the student has earned grades below B. All grades, including all grades received in repeated courses, are included in computing a graduate grade-point average.

**Transfer Credit**–Upon approval, a student may transfer a maximum of nine semester hours of graduate credit from another institution to a UCM master's degree program. Requirements for transfer of credit:

- Course must have been taken for graduate credit.
- Course must have been taken at an accredited institution recognized by UCM offering a master's degree.
- Course must be applicable toward a graduate degree at the University granting the credit.
- Course must not have been used to satisfy requirements for a degree granted by another institution.
- Course must be applicable to a student's UCM graduate program and become a part of the program of study when transferred.
- Course must reflect a grade of B or higher to be transferred.
- Transferred credit will not contribute to the GPA at UCM. Procedures for transfer of credit.
- The student may request courses be transferred at the time the Program of Study is filed or when a Request for Change in a Program of Study is submitted. An official transcript indicating the courses to be transferred must be on file in UCM's Office of the Registrar.
- The student's adviser and The Graduate School must approve the transfer.
- Upon approval, The Graduate School will post the approved transfer credit to the student's UCM transcript.
- UCM reserves the right to accept or reject any credit for transfer.

**Other Credit**—Credit earned by correspondence (not including distance learning, internet and web based courses) may not be applied toward graduate degree requirements. No work experience credit may be applied as credit toward a master's degree.

**Grades**–A student completing a course at UCM will receive a final grade in the course of an A, B, C, D, or F. No graduate course may be taken for Pass/Fail credit.

U Grades-An instructor may report a semester mark of U when, for justifiable reasons, the student has not completed the work of the course. During the next semester the U becomes an F unless the requirements of the course have been satisfactorily completed or the course is of an individualized nature, e.g., thesis, research report, or similar investigation.

**Minimum Grade**–A student must receive a grade of C or higher in each course on the approved Program of Study. Not more than six semester hours of credit with a grade of C will be applied toward degree requirements.

**Excessive Low Grades**–A student must maintain a cumulative grade point average (GPA) of 3.0 to remain in good standing. The first semester a student earns below a 3.0 cumulative GPA he/she will be placed on probation. The second consecutive semester a student earns below a 3.0 cumulative GPA he/she will be continued on probation. The third consecutive semester a student earns below a 3.0 cumulative GPA he/she will be ineligible for degree. A student who becomes ineligible for degree cannot earn a degree from UCM.

**Computation of GPA–**Whenever a student's graduate cumulative grade-point average is computed, only graduate credit completed at UCM is included. No transfer work may be used to change probation action. All UCM grades, including all grades of courses that have been repeated, are included in the computation. Each semester hour of credit is valued as follows: A=4 points, B=3, C=2, D=1, F=0, WF=0.

Academic Appeals–Students should refer to the current UCM Planner-Handbook for information regarding appeals of final grades, courses, classes or other academic matters. The policy provides a procedure for students who feel aggrieved in their relationship with the University, its policies, practices, procedures or its faculty and staff. This policy is not for reviewing instances where a student has been accused of cheating, plagiarism or other academic dishonesty. Also not covered by this policy are grievances based on discrimination.

Academic Honesty–The University's policy on academic honesty may be found in the current UCM Planner-Handbook. Students must be aware that the consequences of violating standards of academic honesty are extremely serious and costly and may result in the loss of academic and career opportunities. Students found to have committed violations against academic honesty face removal from University classes and degree programs, and/or suspension from the University.

**Changes in Schedules**–Changes in class schedules should be made during the Drop and Add period. Such changes will not be entered on the permanent record. Any request for adding a course after the Drop and Add period must be processed through the department. Such requests are subject to approval by the Dean of The Graduate School.

During the Withdrawal period, a student may withdraw from any full-semester class using the self enrollment system. Consultation with the course instructor is also recommended. A grade of W is recorded on the final grade sheet.

After the 10th week of the semester, withdrawal from a class is usually not allowed. In enrollment periods other than semester, withdrawal from classes is not permitted during the last one-third of the period. With unusual and extenuating circumstances, a student may submit a written petition to The Graduate School for a late withdrawal from a course along with a statement of approval and assigned grade from the instructor.

Withdrawal from the University–Students who leave the University should officially withdraw through the Office of Student Affairs, Administration Building 214. In the event that a student fails to initiate this process, his/her withdrawal may not be considered complete and grades of F will be recorded for failure to attend classes. Withdrawal during the last five weeks of a semester while receiving a failing grade in a course will result in the recording of a WF on the permanent record. Regulations governing credit for room and board payments are found in the housing contract. (See Credit Policy for information on the credit of fees.)

**Change of Degree or Program**–A student may initiate a change from one degree program to another degree program by contacting The Graduate School to complete the proper forms. Graduate credit earned on one degree program may not be applicable on a different degree program. In the event of a change in degree program a student must meet all requirements of the new degree program. A student should consult with departmental advisers for specific details. A student may initiate a change from one degree program to another degree program only if they are in good standing with a cumulative Graduate Grade Point Average of 3.0 or above.

Aptitude Examination–Departments may require students to take an aptitude examination before filing the Program of Study. Students should check specific program requirements listed elsewhere in this Catalog and with the graduate program adviser. **Comprehensive Examination**–Departments may require students to take a comprehensive examination. Students should check specific program requirements listed elsewhere in this Catalog and with the graduate program adviser.

**Qualifying Examination**–Departments may require students to take a qualifying examination before filing a Program of Study. Students should check specific program requirements listed elsewhere in this Catalog and with the graduate program adviser.

**Research**—The research component is an essential part of graduate education and an integral part of a graduate program. All graduate students should become knowledgeable about research in their particular fields of study and should engage in the process of conducting, analyzing, interpreting, and reporting their own personal research. The Graduate Council encourages departments to include a thesis or research paper, appropriate to the discipline, as part of the student's approved program. The fulfillment of a thesis requirement is a distinct advantage to the student who plans to do additional graduate study or to work in certain fields of employment.

Thesis and Research Papers–A thesis is the result of research, scholarly, or creative activity that gives evidence of independent, critical, and creative investigation. The thesis demonstrates the ability to define and develop a problem; to understand and synthesize relevant literature; to use appropriate methodology; to analyze and interpret data; and to draw reasonable conclusions based on the investigation. Research papers report scholarly findings discovered through library investigation or provide a synthesis of research specific to the area of study. All theses and research papers are presented in an accepted publication style. Theses are microphotographed and abstracts published by University Microfilms International.

**Thesis or Research Paper Requirements**–Departments determine whether or not a thesis or research paper is to be a required part of a master's degree program.

**Thesis Manual**–Students should obtain from The Graduate School a copy of the UCM Thesis Manual to follow when preparing a thesis.

**Research Involving Human Subjects**–In order to comply with federal regulations and to protect the health and safety of human subjects involved in research, all research protocols involving the use of human subjects must be in compliance with Academic Procedures and Policies #9: Procedures for Human Subjects Review. In all cases involving human subjects in research, a completed and signed "Protection of Human Subjects Clearance Form" must be approved in advance by The Human Subjects Review Committee and filed in the Office of Sponsored Programs before the research may start. Forms are available at *http://www.ucmo.edu/osp.* 

**Animal Research**–Federal law requires that all research projects involving the use of selected mammals and birds be conducted to ensure humane treatment of the animals. Accordingly, all such projects, regardless of funding source, must be approved in advance by the Institutional Animal Care and Use Committee. Forms are available at *http://www.ucmo.edu/osp*.

**Two Master's Degrees**–A student may earn more than one master's degree at UCM. Upon completion of one master's degree at UCM a second master's degree may be earned with a minimum of 24 hours of course credit, all earned at UCM. A subsequent degree must include courses specifically required for that degree, and may not have been used on a previous master's degree. An approved program must include 15 semester hours of 5000/6000 level.

### 16 General Policies

Acceptance into a Departmental Program–When an applicant requests admission to a specific graduate program, The Graduate School will send copies of the applicant's credentials to the department offering the proposed program. The department, after examining the credentials, will decide upon the student's acceptance into the program. The department will notify the student of its decision. Students must enroll in classes in the program within 12 months or reapply for admission to the program. After a review of the student's credentials, the staff of the department may determine that the student should fulfill certain departmental requirements before submitting a Program of Study or before applying for the degree. These requirements will be specified by the department at the time of acceptance into the program.

**Graduate Program Adviser**–When a student is accepted into a program, the department chair will appoint a faculty member as the student's graduate program adviser. The department chair will notify the faculty adviser, the student and The Graduate School of this appointment. The student shall seek the advice of the program adviser about enrollment, program planning (including any changes), qualifying examinations, the Program of Study, research studies and/or thesis, comprehensive examinations, and eligibility for graduation.

Acceptance Denied–If acceptance is denied into a specific program, a student may ask The Graduate School to have his/her credentials forwarded to another department. If no request is made, the student will be classified as a Non-Degree Student.

**Program of Study, Filing a Program of Study**–A Program of Study should be submitted to the graduate program adviser as soon as admission procedures are complete. It is the obligation of the student to ensure a Program of Study is filed with The Graduate School.

Students must file the Program of Study within one month after the completion of 12 hours of graduate study. Students who fail to do so are not eligible to enroll in further coursework until the Program of Study has been submitted.

No substitutions are permitted for courses required in the degree program when a student has earned a grade below a B in the course.

**Catalog Requirements**–A student submitting the Program of Study between August 1, 2007 and July 31, 2008, must use this catalog as a basis for program requirements. A student must earn academic credit at UCM during the academic year of the catalog chosen. The course and program requirements are listed in this Catalog.

**Procedures**—To file the Program of Study the following procedures must be followed:

- 1. The student must complete the Program of Study form and submit it to his/her graduate adviser. All classes must be listed on the Program of Study before submission to The Graduate School.
- 2. When the student's graduate adviser approves the Program of Study, the adviser forwards it to the graduate program coordinator/adviser, who in turn forwards it to The Graduate School.
- 3. The Program of Study is presented to the Dean of The Graduate School for final approval.
- 4. The Dean of The Graduate School will notify the graduate program coordinator/adviser of the action taken. The graduate program coordinator/adviser notifies the student.

**Certification**–All students seeking certification should check specific program requirements listed elsewhere in this catalog and with the graduate program adviser. It is the responsibility of the student wishing to receive any additional education certification to consult with the Director of Clinical Services and Certification, Lovinger 2170, (660) 543-4881.

# MASTER'S DEGREE REQUIREMENTS AND PROCEDURES FOR GRADUATION

A student becomes eligible for graduation by meeting all requirements for the degree. Included among the requirements, a student must:

- Complete satisfactorily all required background courses and all courses listed on the approved Program of Study, or those subsequently approved.
- Remove all U grades.
- Earn a cumulative graduate grade-point average of 3.0 or higher on all graduate study taken within the eight years immediately prior to the date of graduation. Earn a cumulative grade-point average of 3.0 on graduate courses that are a part of the student's program of study and on all graduate work completed at UCM.
- Complete and submit research papers, if required, for departmental approval.
- Complete and submit a thesis, if required, to departmental committee for final approval. Submit approved thesis to The Graduate School for final approval.
- · Satisfy all departmental requirements.

A student may apply for graduation after all requirements have been completed or during the semester in which all requirements will be completed. Application for Degree packets may be obtained in The Graduate School at the beginning of each semester. To apply for graduation a student must do the following:

- Submit an Application for Degree card to his/her graduate adviser by the deadline date indicated in the graduation packet for then semester in which the student expects to graduate. The Application for Degree Deadline Dates are listed below.
- Submit a Certificate of Eligibility for a Graduate Degree to his/her adviser by the deadline date indicated in the graduation packet for the semester in which the student expects to graduate.
- Complete the Permanent University Record form and return it to the Office of Alumni Relations.
- Pay, when billed, a graduation fee at the Revenue Office.
- Satisfy all obligations to the University.

Application for Degree Deadline Dates–Students must file application for degree forms with graduate program advisers according to the following deadlines:

Summer 2007	June 9, 2007
Fall 2007	October 12, 2007
Spring 2008	March 15, 2008
Summer 2008	

Graduate Program Advisers are to submit completed forms to The Graduate School. Contact The Graduate School for submission dates.

# GENERAL POLICIES APPLYING TO EDUCATION SPECIALIST DEGREE-

The Education Specialist degree at The University of Central Missouri provides for additional graduate-level study beyond the master's degree. Education Specialist degree programs are offered in three broad curricular areas: Administration, Curriculum and Instruction, and Human Services. Within these broad areas the programs are flexible, involving discipline specializations. Individual programs must be developed with departmental approval.

**General Policies and Requirements**—Courses applied to a master's degree program are not applicable to an Education Specialist degree program. To receive an Education Specialist degree a student must earn a minimum of 30 semester hours of graduate credit beyond a master's degree which would be applicable on an approved program. At least 18 semester hours of the approved program must have been in 5000/6000 level courses. A minimum of six semester hours of graduate credit in courses at the 6000 level is required. A minimum of 24 semester hours of graduate credit on the approved program must have been taken through or with UCM (see "Transfer Credit").

**Prior Courses**—A student pursuing a master's degree may enroll in graduate courses that are not a part of the approved master's degree program and which could at a later time be presented for use for an Education Specialist degree program providing (1) that the student has applied for and been accepted into an Education Specialist degree program contingent upon the completion of a master's degree and (2) that such courses were taken while the student was completing the last 12 hours of the master's degree program.

**Time Limitation**–All courses that satisfy program requirements must have been completed during the eight-year period immediately preceding graduation.

**Course Level**–Most courses numbered at the 4000 level are offered for either graduate or undergraduate credit. A 4000 level course taken for undergraduate credit may not be applied or repeated for graduate credit. A 4000 level course taken for graduate credit will have additional course requirements. Courses numbered at the 5000 and 6000 level are offered only for graduate credit. Only a student with 10 or more semester hours of graduate credit may enroll for 6000 level.

**Maximum Load**–A graduate student may enroll in a maximum of 16 hours per fall or spring semester including both undergraduate and graduate-level courses. Maximum course loads for summer semester are six hours during a three-week session and 12 hours for the entire summer semester. Under extenuating cicumstances, students with at least a 3.50 graduate grade-point average, may submit a petition to the Dean of The Graduate School through their academic department to enroll in more than the maximum number of semester hours. Approval must be granted prior to the semester in which the student wishes to enroll for more thatn the maximum hours. Petitions from students who have grades of "U" in regular courses will not be granted.

A full-time graduate student is one enrolled in 9 or more semester hours of graduate credit during the fall and spring semesters and six semester hours during the summer session. The average enrollment for graduate students is 12 hours per semester.

**Individualized Study Limitation**–Not more than 18 semester hours on an approved Education Specialist degree program may be

individualized study. A student is limited to sic semester hours of credit in Internship on an Education Specialist degree program. A student is limited to a maximum of six semester hours of credit in thesis or in an individual research project on an Education Specialist degree program.

**Course Repetition**–A student may repeat any course if it is on their Program of Study and the grade is a C. A student must repeat any course taken at UCM for which a grade of D or F is earned when the course is part of the student's approved program. No substitutions may be made on an approved program for courses in which the student has earned grades below B. All grades, including all grades received in repeated courses, are included in computing a graduate grade-point average.

**Transfer Credit**–Upon approval, a student may transfer a maximum of six semester hours of graduate credit from another institution to a UCM Education Specialist degree program. Requirements for transfer of credit:

- Course must have been taken for graduate credit.
- Course must have been taken at an accredited institution recognized by UCM offering an education specialist or doctoral program.
- Course must be applicable toward a graduate degree at the university granting the credit.
- Course must not have been used to satisfy requirements for a degree granted by another institution.
- Course must be applicable to a student's UCM graduate program and become a part of the program of study when transferred.
- Course must reflect a grade of B or higher to be transferred.
- Transferred credit will not contribute to the GPA at UCM. Procedures for transfer of credit:
- The student may request courses be transferred at the time the Program of Study is filed or when a Request for Change in the Program of Study is submitted.
- An official transcript indicating the courses to be transferred must be on file in UCM's Office of the Registrar.
- The student's graduate adviser and The Graduate School must approve the transfer.
- Upon approval, The Graduate School will post the approved transfer credit to the student's UCM transcript.
- UCM reserves the right to accept or reject any credit for transfer.

**Other Credit**–Credit earned by correspondence (not including distance learning, internet and web based courses) may not be applied toward graduate degree requirements. No work experience credit may be applied as credit for an Education Specialist degree.

**Grades**–A student completing a course at UCM will receive a final grade in the course of an A, B, C, D, or F. No graduate course may be taken for Pass/Fail credit.

U Grades–An instructor may report a semester mark of U when, for justifiable reasons, the student has not completed the work of the course. During the next semester the U becomes an F unless the requirements of the course have been satisfactorily completed or the course is of an individualized nature, e.g., thesis, research report, or similar investigation.

**Minimum Grade**–A student must receive a grade of C or higher in each course on the approved program of study. Not more

than six semester hours of credit with a grade of C will be applied toward meeting degree requirements.

**Excessive Low Grades**–A student must maintain a cumulative grade point average (GPA) of 3.0 to remain in good standing. The first semester a student earns below a 3.0 cumulative GPA he/she will be placed on probation. The second consecutive semester a student earns below a 3.0 cumulative GPA he/she will be continued on probation. The third consecutive semester a student earns below a 3.0 cumulative GPA he/she will be ineligible for a degree. A student who becomes ineligible for a degree cannot earn a degree from UCM.

**Computation of GPA–**Whenever a student's graduate cumulative grade-point average is computed, only graduate credit completed at UCM is included. No transfer work may be used to change probation action. All UCM grades, including both grades of courses that have been repeated, are included in the computation. Each semester hour of credit is valued as follows: A=4 points, B=3, C=2, D=1, F=0, WF=0.

Academic Appeals–Students should refer to the current UCM Planner-Handbook for information regarding appeals of final grades, courses, classes or other academic matters. The policy provides a procedure for students who feel aggrieved in their relationship with the University, its policies, practices, procedures or its faculty and staff. This policy is not for reviewing instances where a student has been accused of cheating, plagiarism or other academic dishonesty. Also not covered by this policy are grievances based on discrimination.

Academic Honesty–The University's policy on academic honesty may be found in the current UCM Planner-Handbook. Students must be aware that the consequences of violating standards of academic honesty are extremely serious and costly and may result in the loss of academic and career opportunities. Students found to have committed violations against academic honesty face removal from University classes and degree programs, and/or suspension from the University.

**Changes in Schedules**–Changes in class schedules should be made during the Drop and Add period. Such changes will not be entered on the permanent record. Any request for adding a course after the Drop and Add period must be processed through the departement.

During the Withdrawal period, a student may withdraw from any full-semester class using the self enrollment system. Consultation with the course instructor is also recommended. A grade of W is recorded on the final grade sheet.

After the tenth week of the semester, withdrawal from a class is normally not allowed. In enrollment periods other than semester, withdrawal from classes is not permitted during the last one-third of the period. With unusual and extenuating circumstances, a student may submit a written petition to The Graduate School for a late withdrawal from a course along with a statement of approval and assigned grade from the instructor.

Withdrawal from the University–Students who leave the University should officially withdraw through the Office of Student Affairs, Administration Building 214. In the event that a student fails to initiate this process, his/her withdrawal is not considered complete and grades of F will be recorded for failure to attend classes. Withdrawal during the last five weeks of a semester while receiving a failing grade in a course will result in the recording of a WF on the permanent record. Regulations governing credit for room and board payments are found in the housing contract. (See Credit Policy for information on the credit of fees.)

**Change of Degree or Program**–A student may initiate a change from one degree program to another degree program by contacting The Graduate School to complete the proper forms. Graduate credit earned on one degree program may not be applicable on a different degree program. In the event of a change in degree program a student must meet all requirements of the new degree program. A student should consult with departmental advisers about specific details. A student may initiate a change from one degree program to another degree program only if they are in good standing with a cumulative Graduate Grade Point Average of 3.0 or above.

**Aptitude Examination**–Departments may require students to take an aptitude examination before filing the Program of Study. Students should check specific program requirements listed elsewhere in this Catalog and with the graduate program adviser.

**Comprehensive Examination**–Departments may require students to take a comprehensive examination. Students should check specific program requirements listed elsewhere in this Catalog and with the graduate program adviser.

**Qualifying Examination**–Departments may require students to take a qualifying examination before filing a Program of Study. Students should check specific program requirements listed elsewhere in this Catalog and with the graduate program adviser.

**Research**–The research component is an essential part of graduate education and an integral part of a graduate program. All graduate students should become knowledgeable about research in their particular fields of study and should engage in the process of conducting, analyzing, interpreting, and reporting their own personal research. The Graduate Council encourages departments to include a thesis or research paper, appropriate to the discipline, as part of the student's approved program. The fulfillment of a thesis requirement is a distinct advantage to the student who plans to do additional graduate study or to work in certain fields of employment.

**Thesis and Research Papers**–A thesis is the result of research, scholarly, or creative activity that gives evidence of independent, critical, and creative investigation. The thesis demonstrates a mastery of defining and developing a research, scholarly, or creative problem, of the relevant literature of the discipline, of specific research methodology, and the ability to analyze and interpret data as well as draw conclusions and recommend further investigation. Research papers report scholarly findings discovered through library investigation or provide a synthesis of research specific to the area of study. All theses and research papers are presented in an accepted publication style. Theses are microphotographed and abstracts published by University Microfilms International.

**Thesis, Research Paper Requirement**–Students who are seeking an Education Specialist degree are required to complete a thesis or a research paper.

**Thesis Manual**–Students should obtain from The Graduate School a copy of the UCM Thesis Manual to follow when submitting a thesis.

**Research Involving Human Subjects**–In order to comply with federal regulations and to protect the health and safety of human subjects involved in research, all research protocols involving the use of human subjects must be in compliance with Academic Procedures and Policies #9: Procedures for Human Subjects Review. In all cases involving human subjects in research, a completed and signed "Protection of Human Subjects Clearance Form" must be approved in advance by The Human Subjects Review Committee and filed in the Office of Sponsored Programs before the research may start. Forms are available at *http://www.ucmo.edu/osp.* 

Animal Research–Federal law requires that all research projects involving the use of selected mammals and birds be conducted to ensure humane treatment of the animals. Accordingly, all such projects, regardless of funding source, must be approved in advance by the Institutional Animal Care and Use Committee. Forms are available at *http://www.ucmo.edu/osp.* 

Acceptance into a Departmental Program–When an applicant requests admission to a specific graduate program, The Graduate School will send copies of the applicant's credentials to the department offering the proposed program. The department, after examining the credentials, will decide upon the student's acceptance into the program. The department will notify the student of its decision. Students must enroll in classes in the program within 12 months or reapply for admission to the program. After a review of the student's credentials, the staff of the department may determine that the student should fulfill certain departmental requirements before submitting a Program of Study or before applying for the degree. These requirements will be specified by the department at the time of acceptance into the program.

**Graduate Program Advisery Committee**–When a student is accepted into a program, the department chair will appoint a faculty member as chairperson of the student's graduate program committee and two additional graduate faculty to serve as members of the student's advisery committee. The student shall seek the advice of the program adviser about enrollment, program planning (including any changes), qualifying examinations, submission of the Program of Study, research studies and/or thesis, comprehensive examinations, and eligibility for graduation. In all situations, the adviser shall work closely with other members of the advisery committee.

Acceptance Denied–If acceptance is denied into a specific program, a student may ask The Graduate School to have his/her credentials forwarded to another department. If no request is made, the student will be classified as a Non-Degree Student.

**Program of Study, Filing a Program of Study**–A Program of Study should be submitted to the graduate program adviser as soon as admission procedures are complete. It is the obligation of the student to ensure a Program of Study is filed with The Graduate School.

Students must file the Program of Study within one month after the completion of 12 hours of graduate study. Students who fail to do so are not eligible to enroll in further coursework until the Program of Study has been submitted.

No substitutions are permitted for courses required in the degree program when a student has earned a grade below a B in the course.

**Catalog Requirements**–A student submitting a Program of Study between August 1, 2007 and July 31, 2008, must use this catalog as a basis for program requirements. A student must earn academic credit at UCM during the academic year of the catalog chosen. The course and program requirements are listed in this Catalog.

**Procedures**–To file the Program of Study the following procedures must be followed:

- 1. The student must complete the Program of Study form and submit it to his/her graduate adviser. All classes must be listed on the Program of Study before submission to The Graduate School.
- 2. When the student's graduate adviser approves the Program of Study, the adviser forwards it to the graduate program coordinator/adviser, who in turn forwards it to The Graduate School.
- 3. The Program of Study is presented to the Dean of The Graduate School for final approval.
- 4. The Dean of The Graduate School will notify the graduate program coordinator/adviser of the action taken. The graduate program coordinator/adviser notifies the student.

**Certification**–All students seeking certification should check specific program requirements listed elsewhere in this catalog and with the graduate program adviser. It is the responsibility of the student wishing to receive any additional education certification to consult with the Director of Clinical Services and Certification, Lovinger 2170, (660) 543-4881.

### EDUCATION SPECIALIST DEGREE REQUIREMENTS AND PROCEDURES FOR GRADUATION

A student becomes eligible for graduation by meeting all requirements for the degree. Included among the requirements, a student must:

- Complete satisfactorily all required background courses and all courses listed on the approved Program of Study, or those subsequently approved.
- Remove all U grades.
- Earn a graduate grade-point average of 3.0 or higher on all graduate courses applicable to the Education Specialist degree program taken within the eight years immediately prior to the date of graduation. Earn a cumulative grade-point average of 3.0 on all graduate courses that are a part of the student's program of study and on all graduate work completed at UCM.
- Complete and submit research papers, if required, for departmental approval.
- Complete and submit thesis, if required, to the departmental committee for final approval. Submit completed thesis to The Graduate School for final approval.
- Satisfy all departmental requirements.

A student may apply for graduation after all requirements have been completed or during the semester in which all requirements will be completed. Application for Degree packets may be obtained in The Graduate School at the beginning of each semester. To apply for graduation a student must do the following:

- 1. Submit an Application for Degree card to his/her graduate adviser by the deadline date indicated in the graduation packet for the semester in which the student expects to graduate. The Application for Degree Deadline Dates are listed below.
- 2. Submit a Certificate of Eligibility for a Graduate Degree to his/her adviser by the deadline date indicated in the graduation packet for the semester in which the student expects to graduate.
- 3. Complete the Permanent University Record form and return it to the Office of Alumni Relations.
- 4. Pay, when billed, a graduation fee at the Revenue Office.
- 5. Satisfy all obligations to the University.

### 20 General Policies

Application for Degree Deadline Dates–Students must file application for degree forms with graduate program advisers according to the following deadlines:

Summer 2007	June 9, 2007
Fall 2007	October 12, 2007
Spring 2008	March 15, 2008
Summer 2008	June 7, 2008

Graduate Program Advisers are to submit completed forms to The Graduate School. Contact The Graduate School for submission dates.

# GENERAL POLICIES APPLYING TO DOCTORAL DEGREE

**Doctor of Education in Educational Leadership**–Students may pursue a Doctor of Education (Ed.D.) in Educational Leadership at the University of Central Missouri. The degree is conferred by the University of Missouri - Columbia. The program uses a cohort format that requires the student to complete required course work in two years. A dissertation follows the course work. Students are accepted into the cohort group every two years by meeting entrance requirements which include a Masters Degree, a substantiated goal of Educational Leadership, GRE scores, undergraduate and graduate GPA, evaluation of a writing assessment and a personal interview. The curriculum includes the following broad themes:

- Organizational Analysis
- Leadership Theory and Practice
- Analyzing Educational Policy
- Content and Context for Learning
- Research and Inquiry and Evaluation

Study commences with a summer schedule on the University of Missouri-Columbia campus. Fall and Spring semester courses are taught on campus and at UCM's Summit Center (CSC) by UCM faculty. Following a second summer of study in Columbia, as well as Fall and Spring study at UCM and CSC, students enter the dissertation stage of the degree. For more information contact the Department of Educational Leadership and Human Development, Lovinger 4101 or call (660) 543-4341.

**Doctor of Philosophy in Technology Management**–UCM is participating as a charter member of an eight-university consortium offering this degree, which is conferred by Indiana State University. This degree takes advantage of distance education technology with courses available through Internet, telecommunication, and other media. Selected courses are also available on the respective campuses.

The doctoral program is designed to provide students with planned opportunities to increase their depth and breadth of knowledge in technological studies. Students must complete a minimum of 90 semester hours of graduate study above the baccalaureate degree, with a majority of the course work at the 6000 level or higher.

The program of study includes 24-30 semester hours in an area of technical specialization. Admission occurs through Indiana State University. The Graduate Record Exam (GRE) is required. For more information, contact the Department of Industrial Technology, call (660) 543-4439 or email *jsutton@ucmo.edu* or visit *http://web.indstate.edu/ConsortPhD/*. In accordance with Federal rules, any Federal financial aid a doctoral student may be eligible to receive is processed and disbursed by the school (i.e., University of Missouri or Indiana State University) from which the doctoral degree will be granted.

# **Course Prefixes**

# College of Arts, Humanities and Social Sciences

ANTH	Anthropology
ART	Art
COMM	
ENGL	
GEOG	Geography
HIST	History
ML	Modern Languages
MUS	Music
POLS	Political Science
PSY	Psychology
REL	Religious Studies
THEA	Theatre

# **College of Education**

BTE	Business Teacher Education
CFD	Child and Family Development
COUN	Counselor Education
CTE	Career and Technology Education
EDAD	Education Administration
EDCI	Curriculum and Instruction
EDSP	Special Education
INST	Instructional Technology
LIS	Library Science and Information Services
T&OE	. Technology and Occupational Education

# College of Health and Human Services

CD	Communication Disorders
CJ	Criminal Justice
D&N	Dietetics and Nutrition
FACS	Family and Consumer Sciences
FOOD	Food
HED	Health Education
NUR	Nursing
PE	Physical Education
	Recreation
TR	Therapeutic Recreation
TOUR	Tourism
SAFE	Safety Science & Technology
	Sociology
SOWK	Social Work

# **College of Science and Technology**

	······································
	Agriculture
AMT	Aerospace Manufacturing Technology
AVIA	Aviation
BIOL	Biology
	Chemistry
	Construction Management
CS	Computer Science
EASC	Earth Science
ET	Electronics Technology
FAME	. Fashion and Apparel Merchandising
GRAP	Graphics
INDM	Industrial Management
INDT	Industrial Technology
MATH	Mathematics
MMGT	Manufacturing Management
NET	Electronics Technology
PHOT	Photography
	Physics
PR&T	Power & Transportation
	Technology Management Doctoral

### Harmon College of Business Administration

ACCT	Accounting
BE&O	Business Education & Office Admin.
BLAW	Legal Studies
CIS	Computer Information Systems
ECON	Economics
FIN	Finance
HRM	Human Resource Management
MGT	
MKT	Marketing

# **Other Prefixes**

AE	Academic Enrichment
ISP	International Studies
GRAD	The Graduate School

# Graduate Programs at UNIVERSITY OF CENTRAL MISSOURI

**MASTER'S DEGREES**—The University of Central Missouri provides graduate-level study beyond the baccalaureate degree. Five master's degrees are offered by the University.

### **Master of Arts**

Accountancy Communication English Environmental Studies History Music Sociology Teaching English as a Second Language Theatre

### **Master of Arts in Teaching**

Middle School Education Secondary Education

### **Master of Business Administration**

Accounting Concentration Finance Concentration Information Systems Concentration Marketing Concentration

### **Master of Science**

**Aviation Safety** Biology College Student Personnel Administration Counseling **Criminal Justice Educational Technology** Industrial Hygiene Industrial Management Industrial Technology Information Technology Library Science and Information Services **Mathematics** Nursing, Rural Family **Occupational Safety Management** Physical Education/Exercise & Sport Science Psychology Social Gerontology Speech-Language Pathology and Audiology Technology & Occupational Education

### Master of Science in Education Elementary Education Curriculum & Instruction School Administration K-12 Education Curriculum and Instruction Special Education Literacy Education Secondary Education

Curriculum and Instruction School Administration

### **EDUCATION SPECIALIST DEGREES**-The

University of Central Missouri provides for additional graduate-level study (a minimum of 30 semester hours beyond the master's degree).

### **Education Specialist/School Administration**

Elementary School Principalship Secondary School Principalship Superintendency

### **Education Specialist/Curriculum and Instruction**

Subject matter teaching fields

### **Education Specialist/Human Services**

Guidance and Counseling Learning Resources Special Education Technology and Occupational Education

**DOCTORAL DEGREES**—The University of Central Missouri cooperates with other institutions in offering two doctoral programs. The Ed.D. in Educational Leadership is conferred by the University of Missouri-Columbia. The Ph.D. in Technology Management is conferred by Indiana State University.

### **Doctor of Education**

Educational Leadership

### **Doctor of Philosophy**

Technology Management

Dean's Office • Martin 126 • (660) 543-4364

# Department of Art Art Center 120 • (660) 543-4481

### Art Courses

**ART 4010 Special Projects in Art (1-3)** May be repeated for a maximum of 6 semester hours.

**ART 4020 Studio Seminar (3)** By arrangement, with consent of the instructor involved, and through individual directed study. May be repeated for a maximum of 6 semester hours. Prerequisites: senior year with consent.

**ART 4310 Design Internship (2-3)** An elective course for interior design and commercial art majors operated in conjunction with various business firms, wherein students are afforded the opportunity of working alongside professional designers in the field. May be repeated for a maximum of 6 semester hours. Prerequisites: a major on the undergraduate level of either interior design or commercial art and with approval of departmental committee.

**ART 4324 Papermaking (3)** Introduces the student to western techniques in hand papermaking: sheet forming and two and threedimensional paper structures. May be repeated for a maximum of 9 semester hours. Prerequisites: 20 semester hours of art.

ART 4340 Corporate and Institutional Design (3) Increasing emphasis on space arrangement for commercial and institutional use; introduction to specifications of materials and specification writing; emphasis in office design. May be repeated for a maximum of 6 semester hours. Prerequisites: ART 3330 for art majors; GRAP 3160 or consent of instructor for non-majors.

ART 4412 Ceramics III (3) Production of advanced ceramics projects with emphasis on the search for individual styles and choices of forming methods. Advanced study of glaze chemistry, clay body formulation, and kiln construction. May be repeated for a maximum of 9 semester hours. Prerequisites: ART 3412 or consent of instructor. An additional fee is associated with this course.

**ART 4420 Sculpture III (3)** Advanced individual problems in techniques of sculpture utilizing a variety of media. May be repeated for a maximum of 9 semester hours. Prerequisites: ART 3420. An additional fee is associated with this course.

**ART 4511 Painting III (3)** Application of principles of composition in the medium of oil or acrylic paint. May be repeated for a maximum of 9 semester hours.

**ART 4820 Italian Renaissance Art and Architecture (3)** A history of the visual arts in Italy from 1400 to 1700.

**ART 4850 Twentieth Century Art and Architecture (3)** A history of the visual arts of the world in the twentieth century.

ART 4860 Contemporary Art & Design (3) The exploration of contemporary art and design in a context of art historical style by utilizing specialized information networks which chart and chronicle its development.

ART 5110 Special Problems in Drawing (3) Drawing in all media from models and from imagination leading to finished drawings. Emphasis on composition. Study of old masters and contemporary drawings. May be repeated for a maximum of 9 semester hours. Prerequisites: ART 3110.

ART 5210 Advanced Life Drawing (3) Drawing from the model at rest and in action in all media. Studies in composition and the analysis of the work of the old and modern masters. Special emphasis given to techniques. May be repeated for a maximum of 9 semester hours. Prerequisites: ART 3209. An additional fee is associated with this course. ART 5410 Sculpture Studies (3) Stylistic direction involving preliminary cartoons and scale model forms with an evaluation of the work problems in sculpture. Materials will include clay (terra cotta), plaster, wood, metal, and cast metals with special emphasis placed upon originality, finish, and presentation. The student will be encouraged to select his/her own media. May be repeated for a maximum of 9 semester hours. Prerequisites: ART 2420. An additional fee is associated with this course.

**ART 5412 Ceramics Studio (3)** Encourages the development of stylistic direction and exhibition involvement through the intensive study of student/instructor selected areas of ceramics. May be repeated for a maximum of 9 semester hours. Prerequisites: ART 4412. An additional fee is associated with this course.

**ART 5511 Advanced Oil Painting (3)** Pictorial organization and the methods and techniques of painting in oils. Analysis of subject matter, preliminary sketches, and preparation of frames for exhibitions. May be repeated for a maximum of 9 semester hours. Prerequisites: ART 1325 and ART 4511.

**ART 5520 Advanced Watercolor (3)** The methods and techniques of painting in watercolor and gouache. Special attention to subject matter, preliminary sketches, and composition. May be repeated for a maximum of 9 semester hours. Prerequisites: ART 3510. An additional fee is associated with this course.

**ART 5710 Printmaking Studio (3)** Advanced study in the specialized areas of printmaking. May be repeated for a maximum of 9 semester hours. Prerequisites: ART 3710, ART 3720, ART 3730 and ART 3740, or consent.

Art 6010 Research Problems in Art (3) May be repeated for a maximum of 6 semester hours. Prerequisites: 20 semester hours of graduate credit toward appropriate degree in art including ART 5910.

### Department of Communication Martin 136 • (660) 543-4840

### MASTER OF ARTS

### Communication/Speech Communication 52 000361

### Communication/Mass Communication 52 000350

The department of communication embraces the traditions, study, and practice of symbolic interaction through a variety of communication genres. The graduate program is designed to advance student's preparation for scholarly or professional endeavors.

**Student Learning Outcomes**—The graduate with a Master of Arts, Speech Communication will use the knowledge and skills obtained in the program to:

- Understand the theoretical bases of speech communication.
- Conduct research that contributes to the creation, expansion, and/or application of knowledge in the field of speech communication.
- Demonstrate an understanding of an area of specialization in the field of speech communication.
- Demonstrate creative thinking, problem-solving, and independent study skills.

**Student Learning Outcomes**—The graduate with a Master of Arts, Mass Communication will use the knowledge and skills obtained in the program to:

- Understand the theoretical bases of mass communication.
- Conduct research that contributes to the creation, expansion, and/or application of knowledge in the field of mass communication.
- Demonstrate an understanding of an area of specialization in the field of mass communication.

Art

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• Demonstrate creative thinking, problem-solving, and independent study skills.

To be accepted into this program, a student must have a minimum overall undergraduate grade-point average of 2.50 and a minimum grade-point average of 2.75 in at least 15 hours of undergraduate communication courses. Students with less than 15 hours of course work in communication may be accepted, but before any courses are taken for graduate credit, they must have a minimum of 15 semester hours of approved undergraduate courses in communication with a minimum grade-point average of 3.0.

A student who is required to complete background courses must fulfill this requirement by taking specified courses in an undergraduate area of concentration—either Broadcast Media, Journalism, Corporate Communication, Public Relations, or Speech Communication—to ensure a specialized skill sequence in communication. In addition, international students scoring below 550 paper based (213 electronic based or 79-80 internet based) on the TOEFL will be required to pass the TOEFL Oral English Test (213 for electronic). Students must also complete a research component. There are two research options: thesis (COMM 5890) or non-thesis. Non-thesis students may also be required to take comprehensive exams.

As a part of the admissions process, each student seeking admission to the department as a degree-seeking candidate must complete the following:

- Submit a Statement of Purpose for Graduate Studies —The statement should be 1-2 pages, typed and double-spaced. Please address the following areas in your statement:
- The relationship (if any) between previous training/experience, graduate school, and your professional goals.
- Professional position and career activities you wish to pursue after completing the program.
- Specific goals you wish to achieve in graduate school.
- Planned area(s) of interest in graduate school.
- Additional Information you feel is relevant.
- Submit three Recommendation forms.

A student may be required to demonstrate proficiency in one modern language or statistics, or other approved research tool, depending upon the student's area of interest or completion of the program.

### Master of Arts, Mass Communication

	Sem. Hours
COMM 5800	DUATE COURSES
<b>COMM</b> 5000	Study in Communication
COMM 5810	Theories of Communication
Research	
COMM 5890	Thesis
Two research p	apers
Additional Requ	irements
COMM 4250	Mass Communication Law
COMM 4240	Media Management2 or
COMM 4245	Media Econ. and Sales, 3 2-3
COMM 4260	Comparative Media Systems or
COMM 5260	International Communication2
COMM 4280	Criticism of Mass Media, 2 or
COMM 5280	Effects of Mass Com., 3
Approved Grade	uate Electives In
	Of Communication 3-20
Graduate Electiv	/es 0-6
MINIMUM GRAI	DUATE HOUR TOTAL

#### Master of Arts, Speech Communication

	Sem. Hours
	DUATE COURSES 6-12
COMM 5800	
	Study in Communication
COMM 5810	Theories of Communication
Research	
COMM 5890	Thesis
Two research p	apers
COMM 6771	Graduate Internship in
	Organizational Communication 1-6
ADDITIONAL RE	QUIREMENTS
	Theories of Interpersonal Communication or3
COMM 4345	Modern Rhetorical Theory or
COMM 5330	Group Communication
APPROVED GRA	DUATE ELECTIVES IN THE DEPARTMENT OF
COMMUNICA	TION 3-20
GRADUATE ELE	CTIVES 0-6
MINIMUM GRA	DUATE HOUR TOTAL

#### **Communication Courses**

**COMM 4200 Special Topics in Mass Media (1-9)** Departmentally selected topics of contemporary interest in mass media or specialized areas of the media; variable content. May be repeated for a maximum of 9 semester hours (only 6 hours will apply to the major).

**COMM 4210 Mass Media Practicum II (1)** Provides hands-on experience at the *Muleskinner*. Prerequisites: COMM 3200.

**COMM 4240 Media Management (2)** Elements involved in the organization and successful operation of mass media enterprises; special emphasis upon interpersonal problems.

COMM 4245 Media Economics and Sales (3) Business aspects of mass media in a competitive economy, including techniques for selling advertising space and time.

**COMM 4250 Mass Communication Law (3)** Application of principles of law to the mass communication media, media practice, advertising, and freedom of information, including libel, right of privacy, copyright. Prerequisites: Junior, Senior, or Graduate standing.

**COMM 4260 Comparative Media Systems (2)** Role of mass media in major countries and in developing areas; sociopolitical, economic, cultural and historical perspective.

COMM 4280 Criticism of Mass Media (2) Evaluation of the products of the audiovisual and print media, social effects, and the historical bases of public criticism of the individual media.

COMM 4285 Women and Minorities in Media (3) The study of women and minorities, their contributions and images, in a variety of media. Prerequisites: COMM 1000 or COMM 3000 or consent of instructor.

COMM 4290 Special Projects in Mass Communication (1-3) Individual study/research in mass communication. May be repeated for a maximum of 3 semester hours. Prerequisites: Written consent.

**COMM 4295 Internship (1-6)** A practical training experience for the application of mass media and/or public relations principles. May be repeated for a maxmimum of 6 hours. Prerequisites: completion of the preadmission requirements for internship placement and departmental approval.

**COMM 4300 Special Projects in Speech Communication (1-3)** May be repeated for a maximum of 6 semester hours. Prerequisites: written approval of department chair.

**COMM 4320 Persuasion (2)** Emotive, cognitive, and behavioral sources of persuasive appeal.

**COMM 4330 Theories of Interpersonal Communication (3)** An indepth study of selected theories and supporting research findings of the communication process as it occurs in informal face-to-face situations.

COMM 4335 Gender Communication (3) Gender as it influences communication processes in intrapersonal, interpersonal, group, public and mediated contexts. Prerequisites: COMM 3000 or consent of instructor. **COMM 4340 Classical Rhetorical Theory (3)** Foundations and development of rhetorical theory during the Classical Period with special emphasis given to Plato, Aristotle, Cicero, and Quintilian.

**COMM 4345 Modern Rhetorical Theory (3)** An examination of significant movements in the development of twentieth century rhetorical theory including the contributions of Kenneth Burke, Richard Weaver, and Marshall McLuhan.

**COMM 4390 Contemporary Communication (2)** Public address as it functions in contemporary society in a variety of traditional and mass media settings.

**COMM 4410 Video Production III (3)** Creative elements in television production and direction with emphasis on, dramatic direction, remotes, music programs, and the creative use of special effects. Prerequisites: COMM 3411.

**COMM 4415 Screenplay Writing (3)** Principles, techniques and formats of dramatic screenwriting for film and television.

COMM 4470 Corporate and Organizational Media Production (3) Production of instructional, training and informational videos for use within corporations and other organizations.

COMM 4475 New Media Technologies (2) Technological developments and their uses (existing and potential) as information distribution systems.

**COMM 4490 Senior Capstone Seminar (2)** Preparation of a portfolio representing the student's best work; in addition, students will participate in assisting and tutoring students in lower-level courses in the major. Prerequisites: instructor's permission.

COMM 4510 Magazine Design and Production (3) The magazine process from the collection of raw material through layout and design to the circulation of the finished product. Prerequisites: COMM 2625 and COMM 3625.

COMM 4520 Editorial and Interpretative Writing (3) Principles and techniques of editorial and interpretative article writing; relationship between the news, the editorial and the business aspects of a newspaper. Prerequisites: COMM 3225.

**COMM 4522 Desktop Design for Teachers (3)** Instructs students in the use of Quark Xpress for newspaper design and makeup. Prerequisites: COMM 2220 or newspaper/supervisory experience.

COMM 4535 Advanced News Reporting (3) Problems and techniques of researching and gathering material for in-depth news reporting concerning the political, economic, and social aspects of contemporary society. Prerequisites: COMM 3225.

**COMM 4555 Advanced Editing (3)** Provides advanced editing skills for news media. Emphasis on news judgment, language use, copy improvement, headline and cutline writing, wire services, photo editing, page layout and design. Prerequisites: COMM 2520.

COMM 4571 Methods of Teaching Journalism (3) Practical methods in the teaching of journalism. Prerequisites: Admission to the journalism minor, B.S. in Ed.

**COMM 4680 Publicity (3)** Overview of the publicity process including written, spoken, and/or videotaped messages using the mass media as a public relations tool. Prerequisites: COMM 2220, COMM 2320 and COMM 3620.

COMM 4685 Case Studies in Public Relations (2) Public relations problems of individual business and civic organizations; analysis of actual and proposed solutions. Prerequisites: COMM 2320 and COMM 3620.

**COMM 4690 Campaigns (3)** Overview of the public relations campaign process with actual "hands-on" application. Students will plan, organize and conduct an actual campaign for an organization. Prerequisites: COMM 4380 and COMM 4685.

COMM 4780 Advanced Theories of Organizational Communication (3) A consideration of theories and principles of communication structures and systems within organizations.

COMM 4781 Assessment of Organizational Communication (3) The assessment and measurement of human interaction within professional settings.

**COMM 4783 Communication Training (3)** Communication as the coupling that holds organizations together and the agent of change which ensures health and growth. Students will assess needs and determine communication links; design, develop, and implement learning modules for human resource development; and design and interpret evaluation means to determine the effectiveness of the communicated training. Prerequisites: Consent of instructor.

COMM 4785 Internship in Speech Communication (1-6) The application of speech communication principles and theories in business, industry, and government settings. May be repeated for a maximum of 6 semester hours. Prerequisites: COMM 2330, COMM 2380, COMM 3327, and COMM 4780 with a grade of C or better. COMM 4780 may be taken concurrently with COMM 4785 with permission of the department chair.

**COMM 5230 Seminar in Mass Media (2)** Studies in a specialized area of mass media with emphasis on individual research. May be repeated for a maximum of 6 semester hours.

**COMM 5260 International Communication (2)** The role of mass media as instruments of national policy, stressing physical and psychological factors limiting exchange of information between nations.

COMM 5280 The Effects of Mass Communication (3) Influence of radio, television, and film upon social environment.

**COMM 5300 Seminar in Speech Communication (2-3)** A presentation of topics not included in the regular offering of the department. May be repeated for a maximum of 6 semester hours.

**COMM 5330 Group Communication (3)** Principles of communication within small and large groups emphasizing educational, business, social, and therapeutic group functions with readings, discussions, and research.

COMM 5600 Seminar in Public Relations (2) Guided research in specialized areas of public relations emphasizing historical, descriptive, or experimental studies. May be repeated for a maximum of 6 semester hours.

COMM 5800 Introduction to Graduate Study in Communication (3) Research methods, bibliographical resources, and professional writing in the field of communication.

**COMM 5810 Theories of Communication (3)** Overview of the major theories used to provide a basis for studying the communication process.

**COMM 5890 Thesis (1-6)** Special investigation of an approved problem in communication resulting in a formal thesis or screenplay. May be repeated for a maximum of 6 semester hours.

COMM 6771 Graduate Internship in Organizational

**Communication (1-6)** The application of communication principles in business, industrial and governmental settings through a supervised experience. May be repeated for a maximum of 6 semester hours. Prerequisites: COMM 4780 and approval of department chair.

**COMM 6800 Readings (1-3)** Guided study in the literature of special and related fields of communication. May be repeated for a maximum of 6 semester hours. Prerequisites: 15 semester hours graduate credit.

**COMM 6890 Research Problems (1-6)** Supervised research in contemporary problems in communication. May be repeated for a maximum of 6 semester hours.

# Department of English and Philosophy Martin 336E • (660) 543-4425

### MASTER OF ARTS

### English 52 000308

**Student Learning Outcomes**—The graduate with a Master of Arts in English degree will use the knowledge and skills obtained in the program to:

- Demonstrate general knowledge of the history and variety of literature written in English, primarily British and American.
- Demonstrate in-depth knowledge of a specific literary topic.
- Demonstrate awareness of human diversity as expressed in literature.
- Demonstrate familiarity with scholarly methodologies (historical and contemporary), literary terminology, use of secondary sources, and principles of documentation.
- Formulate original research questions, apply appropriate technologies, and incorporate results into formal oral and written presentations.
- Demonstrate increasing ability to write with clarity, style, and originality.

This program is designed for people who wish to pursue the study of language and literature at an advanced and scholarly level for personal enrichment, career advancement, or further graduate study. Students must have a minimum of 20 credits at the 5000 level and above in their degree program. Two or more advanced undergraduate courses (taken as an undergraduate) in any of the required categories/ historical periods will fulfill (without credit) the graduate requirement in that category. A comprehensive examination OR a three-credit research project, OR thesis is required.

For acceptance into this program, students must have a gradepoint average of 2.75 or above. In addition, international students must score above 575 on the paper version or 90 on the internet based version of the International Test of English as a Foreign Language (TOEFL) or have an equivalent score on the computer version and earn a score of 5 or better on the Test of Written English (TWE). It is strongly recommended that students have completed 18 hours of English language and literature courses at the 2000 level or higher.

Each student seeking admission must send the following materials directly to the Coordinator of the M.A. English program:

- Two confidential letters of reference. The letters should be written by those most able to address the student's academic work, written and verbal skills, and promise of achievement at the graduate level. Referees should send their letters directly to the Graduate Coordinator.
- A writing sample. The writing sample is a one-page typewritten statement of purpose in which the student outlines his/her educational background, teaching and/or research experience (if any), and reasons for pursuing an MA in English.

Sem. Hours
REQUIRED GRADUATE COURSES
Language and Literature
This course must be taken the first semester it is offered during the student's enrollment. See graduate adviser for exception.
English Literature9
Students must take courses from at least three of the following periods, including at least one ENGL 5210 English Literature Before 1500 English Literature from 1500-1640 English Literature from 1640-1800 English Literature from 1800-1900 English Literature from 1900 to the present
American Literature
Students must take courses from at least two of the following periods, including at least one ENGL 5220. American Literature to 1830 American Literature from 1830-1914 American Literature from 1914 to the present
Rhetoric/Linguistics/Theory3
ENGL 5230 or an approved course in this area
Race/Gender/Ethnicity3
Students may choose an approved ENGL 5210, ENGL 5220, or ENGL 5230 seminar on this topic; ENGL 4560, ENGL 4660, ENGL 4670, ENGL 4680, or (on approval) ENGL 4990. A course to satisfy this requirement may simultaneously satisfy another requirement.
Research
ENGL 6940 Thesis or other approved category such
as ENGL 5920 Research Problems.
GRADUATE ELECTIVES
MINIMUM GRADUATE HOUR TOTAL

### MASTER OF ARTS

### Teaching English as a Second Language 52 000473

**Student Learning Outcomes**—The graduate with a Master of Arts degree in Teaching English as a Second Language will use the knowledge and skills obtained in the program to provide instruction to English learners in accordance with the TESOL/NCATE Program Standards:

- **Standard 1: Language**–Candidates know, understand, and use the major concepts, theories, and research related to the nature and acquisition of language to construct learning environments that support ESOL students' language and literacy development and content area achievement.
- **Standard 2: Culture**–Candidates know, understand, and use the major concepts, principles, theories, and research related to the nature and the role of culture and cultural groups to construct learning environments that support ESOL students' cultural identities, language and literacy development, and content area achievement.
- Standard 3: Planning, Implementing, and Managing Instruction–Candidates know, understand, and use standardsbased practices and strategies related to planning, implementing, and managing ESL and content instruction, including classroom organization, teaching strategies for developing and integrating language skills, and choosing and adapting classroom resources.
- Standard 4: Assessment–Candidates understand issues of assessment and use standards-based assessment measures with ESOL students.
- Standard 5: Professionalism–Candidates demonstrate knowledge of the history of ESL teaching, Candidates keep current with new instructional techniques, research results, advances in the ESL field, and public policy issues. Candidates use such information to reflect upon and improve their instructional practices. Candidates

provides support and advocate for ESOL students and their families and work collaboratively to improve the learning environment.

This program is designed to provide professional preparation for individuals who wish to teach English as a second language in the United States and/or abroad. For acceptance into this program, nonnative speakers of English must score above 565 on the paper version of the International Test of English as a Foreign Language (TOEFL) or have an equivalent score above 223 on the computer version of that test or an 86 or higher on the internet based version. Native speakers must have a minimum undergraduate grade-point average of 2.50.

Before completion of the program, all students must fulfill the language requirement. Native speakers must have completed two semesters of a college level foreign language or successfully achieved a Level II on the CLEP Foreign Language Examination. Non-native speakers must successfully complete the university administered exam in spoken and written English. A thesis is optional and requires prior approval from the MA-TESL faculty.

		Sem. Hours
REQUIRE	D GRA	DUATE COURSES
ENGL	5010	Introduction to Graduate Study-TESL
ENGL	4120	Language & Culture
ENGL	5110	Grammar for Teaching
		English as a Second Language
ENGL	5120	Second-Language Acquisition
ENGL	5800	TESL Methods
ENGL	5820	Assessment and Professionalism in TESL 3
ENGL	5860	Teaching English as a Second Language I:
		Spoken Language
ENGL	5870	Teaching English as a Second Language II:
		Written Language
ENGL	5880	TESL Capstone
ENGL	5890	Practicum in English as a Second Language 3
DEPARTA	<b>AENTAL</b>	LY APPROVED GRADUATE ELECTIVES 3

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### GRADUATE CERTIFICATE

#### Teaching English as a Second Language

This program is designed to provide professional preparation at the graduate level for individuals who wish to combine training in teaching English as a second language with studies in another subject area. A maximum of 6 semester hours of approved transfer credit may be applied to the certificate.

		Sem. Hours
REQUIRE	ED GRA	DUATE COURSES
ENGL	4110	Linguistics
ENGL	4120	Language & Culture
ENGL	5110	Grammar for Teaching English as a
		Second Language
ENGL	5120	Second-Language Acquisition
ENGL	5800	TESL Methods
ENGL	5860	Teaching English as a Second Language I:
		Spoken Language
ENGL	5870	Teaching English as a Second Language II:
		Written Language3
MINIMU	M GRA	DUATE HOUR TOTAL

#### English Courses

ENGL 4050 Creative Writing for Publication (3) Poetry and fiction writing at advanced level; research into publishing (markets, agents, contests); oral and written analysis of students' creative work; lecture/ workshop format. May be repeated for a maximum of 6 semester hours. Prerequisites: ENGL 2050 or concurrently or consent of instructor.

ENGL 4051 Writing Poetry for Publication (3) Poetry writing at advanced level; written and oral analysis of published works and of students' submissions; preparation of individualized portfolio, individualized research into publishing. Prerequisites: ENGL 2050, ENGL 3051,3052 or consent of instructor.

ENGL 4052 Writing Fiction for Publication (3) Fiction writing at

advanced level; written and oral analysis of published works and of students' submissions; preparation of individualized portfolio; individualized research into publishing. Prerequisites: ENGL 2050 and one of the following: ENGL 3051 or 3052, or consent of instructor.

**ENGL 4053 Writing Non-fiction for Publication (3)** Nonfiction prose writing at advanced level; written and oral analysis of published works and of students' submissions; preparation of individualized portfolio; individualized research into publishing. Prerequisites: ENGL 2050 and one of the following: ENGL 3051 or 3052, or consent of instructor.

**ENGL 4110 Linguistics (3)** Introduction to the study of language as a system of human communication.

**ENGL 4120 Language and Culture (3)** Exploration of the nature of culture and its impact on perceptions, communication, behavior, and ways of learning with emphasis on it's influence on school achievement.

**ENGL 4310 Chaucer (3)** Life and times of Chaucer with extensive reading in his major works. Prerequisite for English majors: ENGL 2215.

ENGL 4340 Old and Middle English Literature (3) Literary genres and contributions from Beowulf to 1500 (excluding Chaucer). Prerequisite for English majors: ENGL 2215.

**ENGL 4330 Renaissance English Writers (3)** Literary figures of the Elizabethan and Jacobean periods, excluding Shakespeare. Prerequisite for English majors: ENGL 2215.

**ENGL 4360 Shakespeare (3)** Study seven or more Shakespearean plays, including comedies, histories, tragedies and romances, with attention to Renaissance backgrounds, literary analysis, and theatrical traditions. Prerequisite for English majors: ENGL 2210 or ENGL 2215.

**ENGL 4450 The Age of Milton (3)** English poetry, prose, and drama of the Puritan and Restoration times. Prerequisite for English majors: ENGL 2215.

**ENGL 4460 The Age of Pope and Johnson (3)** Fiction, poetry, essays and drama during the times of Pope and Johnson. Prerequisite for English majors: ENGL 2215.

**ENGL 4500 Nineteenth Century English Novel (3)** Representative novels from Austen through Gaskell. Prerequisite for English majors: ENGL 2210.

**ENGL 4510 Romantic Poets and Essayists (3)** Major poets and essayists of the English Romantic period. Prerequisite for English majors: ENGL 2210.

ENGL 4540 The Victorian Poets and Essayists (3) Major poets and essayists of the English Victorian period. Prerequisite for English majors: ENGL 2210.

**ENGL 4560 British Women Writers (3)** Study of major works by British women writers, with an introduction to feminist criticism. Prerequisite for English majors: ENGL 2210.

**ENGL 4610 American Renaissance (3)** The works of Emerson, Hawthorne, Thoreau and Melville. Prerequisite for English majors: ENGL 2205.

**ENGL 4620 Early American Literature (3)** Major figures of colonial, federal, and early 19th century literature. Prerequisite for English majors: ENGL 2205.

ENGL 4640 American Realists and Naturalists (3) Works of Twain, Howells, James, Dreiser, Chopin, and Crane. Prerequisite for English majors: ENGL 2200.

**ENGL 4660 Women Writers of the United States (3)** Prerequisite for English majors: ENGL 2200.

**ENGL 4670 Ethnic American Literature (3)** A survey of America's old and new ethnic writing, with particular emphasis on Native, Asian, Hispanic, and African American writers and a general emphasis on other groups. Prerequisite for English majors: ENGL 2200 or ENGL 2205.

**ENGL 4680 African American Literature (3)** A survey of African American writers from the Colonial period to the present with emphasis on twentieth century writers. Prerequisite for English majors: ENGL 2200 or ENGL 2205.

**ENGL 4700 British Fiction 1890 to Present (3)** Representative fiction by major British authors from 1890 to the present. Prerequisite for English majors: ENGL 2210.

ENGL 4710 Modern American Fiction (3) Prerequisite for English majors: ENGL 2200.

**ENGL 4720 Modern British Poetry (3)** British poetry of the twentieth century. Prerequisite for English majors: ENGL 2210.

ENGL 4730 Modern American Poetry (3) American poetry of the twentieth century. Prerequisite for English majors: ENGL 2210.

**ENGL 4740 Modern Drama (2)** Readings in the significant drama of the Western World from Ibsen and Chekov to the present.

**ENGL 4810 Seminar in Teaching English (2-3)** May be repeated with different offerings, such as Individualizing Instruction, Teaching Traditional Grammar, How to Teach the Novel, Techniques of Theme Grading, Teaching Creative Writing, or Teaching Prosody. May be repeated for a maximum of 6 semester hours of undergraduate credit and 6 semester hours of graduate credit.

**ENGL 4840 Composition and Evaluation (3)** Techniques of writing and evaluating composition for those planning to teach.

**ENGL 4990 Special Projects in English (1-3)** May be repeated for a maximum of 6 semester hours.

ENGL 5000 Introduction to Graduate Study in Language and Literature (3) Research techniques, writing the critical essay, bibliography, research paper format. Required on Masters degree.

ENGL 5010 Introduction to Graduate Study-TESL (3) An introduction to understanding research in the fields of linguistics, applied linguistics, and teaching English to speakers of other languages. Focuses on identifying major research trends, finding articles, and writing essays on research in these fields.

ENGL 5110 Grammar for Teaching English as a Second Language (3) Examination of the morphological and syntactic structures of English and exploration of how to teach them to speakers of other languages. Prerequisites: ENGL 4110 or concurrently or consent of instructor.

**ENGL 5120 Second-Language Acquisition (3)** Survey of secondlanguage acquisition research and theories and their implications for pedagogy.

**ENGL 5150 Topics in Linguistics (3)** Modern approaches to linguistics, including syntactic and semantic models of analysis. May be repeated as areas change for maximum of 9 semester hours.

**ENGL 5210 Studies in English Literature (2-3)** Advanced study and class discussions in a selected area of English literature. Special area of emphasis to be announced each semester. May be repeated as topic areas change for a maximum of 15 semester hours.

**ENGL 5220 Studies in American Literature (2-3)** Advanced study and class discussions in a selected area of American literature. Special area of emphasis to be announced each semester. May be repeated as topic areas change for a maximum of 15 semester hours.

ENGL 5230 Studies in Theory and Criticism (3) Advanced study in selected areas of theory and criticism. Special area to be announced each semester. May be repeated as topic areas change for a maximum of 9 semester hours.

**ENGL 5800 TESL Methods (3)** Exploration of past and current practices in planning, implementing, and managing instruction of second language learners.

ENGL 5810 Computers and Second Language Learning (3) Explores a variety of topics related to using computers to teach second languages. Program design, the evaluation of currently available Computer Assisted Language Learning (CALL) software, strategies for using the software in teaching second languages, and computerized language lab design are explored.

**ENGL 5820 Assessment and Professionalism in TESL (3)** Exploration of guidelines of ESL services, support, and advocacy; standards for achievement; and interpretation of formal and informal assessments of students, courses, and programs.

ENGL 5860 Teaching English as a Second Language I: The Spoken Language (3) Examination of the structures of oral English and the processes involved in its production and comprehension in relationship to the teaching and learning of ESL. Prerequisites: ENGL 5120 and 4110 or both concurrently or consent of the instructor.

ENGL 5870 Teaching English as a Second Language II: The Written Language (3) Examination of the structures of written English and the processes involved in its production and comprehension in relationship to the teaching and learning of ESL. Prerequisites: ENGL 4110 or concurrently or consent of the instructor.

**ENGL 5880 The TESL Capstone (3)** Examination of the history of the field of ESL teaching and the development of a portfolio that will demonstrate the level of mastery of the field of TESL required by the TESOL/NCATE standards.

ENGL 5890 Practicum in English as a Second Language (3) Supervised experience in planning and implementing standardsbased ESL and content instruction under the direction of a TESL faculty member. Prerequisites: ENGL 4110, ENGL 5120, and either ENGL 5860 or ENGL 5870.

**ENGL 5920 Research Problems (3)** Special investigation of a problem in language or literature culminating in a paper of at least 30 pages.

**ENGL 6930 Readings (1-3)** Extensive special reading programs. May be repeated for a maximum of 3 semester hours.

**ENGL 6940 Thesis (3-6)** Special investigation of an approved problem in English resulting in a formal thesis. May be repeated for a maximum of 6 semester hours.

### **Religious Studies Courses**

**Rel 4410 Modern Religious Thought (3)** Selected contemporary religious writers. Topics may include liberation theology, civil religion, feminist criticism, and black theology. Prerequisites: One course in religious studies.

**Rel 4520 Legal Issues and Religion (3)** A survey of historic and recent legal issues dealing with the relationship between religion (church) and the state. Topics will include: Bible reading and curriculum in the schools, conscientious objectors, taxation and the church, prayer and the Pledge of Allegiance. Prerequisites: REL 1510 or PHIL 3710 or equivalent.

### Department of History and Anthropology Wood 136 • (660) 543-4404

### MASTER OF ARTS

### History 52 000423

**Student Learning Outcomes**—The graduate with a Master of Arts in History degree will use knowledge and skills obtained in the program to:

- Demonstrate an understanding of the development of history as a discipline, especially as this applies to major historians and changing interpretations in the student's area of specialization.
- Demonstrate a general grasp of the major issues and events in both United States and world history, and competence with the content of the student's areas of specialization.
- Demonstrate competence in primary research with archival collections, artifacts, and electronic media.
- Develop independent historical analysis based on sound research and present it in writing of professional quality.
- Integrate the perspectives of other disciplines with that of History in analyzing a specific problem.

This program is designed for students seeking advanced study in the field of history. To be accepted into this program, a student must have a minimum overall grade-point average of 2.75 and a minimum grade-point average of 3.0 in at least 20 hours of undergraduate history courses. Students with less than 20 hours of course work in history may be accepted, but before their program of study is approved, they must have completed 20 hours of approved junior and senior-level undergraduate courses in history with a minimum grade point average of 3.0. A student must pass a departmental comprehensive examination before completion of the program.

Sem. Hours
REQUIRED GRADUATE COURSES
HIST 5350 Colloquium
U.S. History
Non-U.S. History
HIST 5400 Historiography3
HIST 6350 Thesis 4-6
Graduate electives in History 7-15
Graduate electives in a related area
MINIMUM GRADUATE HOUR TOTAL

#### Anthropology Courses

ANTH 4815 Special Projects in Anthropology (1-6) Study, interpretation, and discussion of special topics and problems in anthropology. May be repeated for a maximum of 6 semester hours. Prerequisites: Consent of instructor.

ANTH 4820 Sexual Dynamics and Culture (3) Explores cultural factors influencing roles of women and men in a variety of cultures, from small foraging bands to large industrialized states. Topics include cultural influences on sexual equality, sexual hierarchy, heterosexuality, and homosexuality.

ANTH 4830 Archaeological Field Research (3) Field experience in which students learn archaeological methods of surveying, recording, and excavation, as well as how and why we investigate and preserve sites.

ANTH 4840 Historical Archaeology (3) The study of artifacts, architecture, and other material culture to address anthropological topics, such as race, gender, and class, within historic North America.

ANTH 4850 The North American Indian (3) The anthropological study of the native peoples of America north of Mexico; the physical types of American Indian populations; the comparative study of native American languages, North American prehistory, and North American ethnology.

ANTH 4870 Comparative Cultures (3) Compares various aspects of cultures in selected societies and helps students to collect and analyze data on cultural patterns in their own and other societies.

ANTH 4894 Cross-Cultural Aspects of Aging (3) A wide variety of societies, from small hunting and gathering to large industrialized societies, is examined in an attempt to explore probable causes and effects of different patterns of aging.

#### History Courses

HIST 4300 Missouri History (3) Missouri history from earliest times to the present.

HIST 4301 American Historical Biography (3) Biographies of selected American political leaders and molders of opinion and institutions showing the interaction of men/women and their times and the resulting influences on American development.

HIST 4307 American Colonial History 1607-1763 (3) American political, economic, and cultural institutions in the colonial period.

HIST 4309 The African-American in American History (3) Economic, political, and social development of the African-American in the United States.

HIST 4310 Women in America (3) Women in America from colonial times to the present with emphasis upon the nineteenth century feminist movement and the recent twentieth century women's rights movement.

HIST 4311 Revolution and Republic (3) American political, economic, and cultural institutions from 1763 to the War of 1812.

HIST 4314 Jacksonian America (3) Cultural, social, political and economic development of the United States from the War of 1812 to 1848.

**HIST 4315 The Civil War and Reconstruction (3)** The causes of the war, the social, political, economic and military impact of the war; and the post-war reconstruction process.

HIST 4316 The American Military Experience (3) A military history of the American people from colonial times to the present, specifically designed to satisfy the Professional Military Education component of the Military Qualifications Standards required of all candidates for commissioning in the United States Army.

HIST 4317 The Jazz Age and the Great Depression (3) The social, cultural and political trends of the Jazz Age, the social and economic impact of the Great Depression, and the advent of the New Deal.

HIST 4320 History of the Westward Movement (3) Economic, social, cultural, and political contributions to American development by the Westward Movement.

HIST 4321 History of the South (3) Social, economic, and political development of the South from colonial times to the present.

HIST 4322 The United States during the Era of the Cold War (3) Emphasizes political, social, economic, and foreign policy developments from the end of WW II (1945) to the end of the Cold War (1992).

HIST 4324 Truman & Civil Rights (3) This course analyzes the civil rights record of President Harry S. Truman.

**HIST 4325 History of American Diplomacy (3)** Foreign relations of the United States with emphasis on the period since 1900.

HIST 4326 Native American History of the United States (3) A survey of relations between Native Americans and Euro-Americans from colonial times to the present.

HIST 4327 African-American Women, Gender, & Girlhood (3) This course focuses on the history and development of black women and girls from their African origins to present.

HIST 4330 The United States and World War II (3) The rise of totalitarianism in the 1930's, America's reaction to totalitarianism, the war in Europe 1939-41 and America's reaction, America in World War II, the impact of World War II upon American society, and the post-war settlement and the Cold War.

HIST 4331 The Vietnam Era (3) Vietnam in the pre-French (1880's) era, France in Vietnam until 1954, the gradual U.S. involvement in Vietnam 1954-64, the Vietnam War 1964-73, Vietnam of the post-American involvement era to the present and finally an analysis of the impact of the Vietnam War on American society.

HIST 4351 Special Projects in American History (1-6) Study, interpretation, and discussion of special topics and problems in American history. May be repeated for a maximum of 6 semester hours.

**HIST 4402 Ancient Greece (3)** A survey of Greek history from the preclassical Minoan and Mycenaean civilizations, through the classical period, to the Roman conquest.

HIST 4403 Ancient Rome (3) A survey of Roman history from its origins to the decline of the imperial system. Particular emphasis will be placed upon the political, social, and economic developments in the Republic and the factors that led to the fall of the empire.

HIST 4412 Era of Renaissance and Reformation (3) The intellectual and cultural institutions of Europe during the Age of the Renaissance and the Protestant Revolt and Catholic Reformation.

HIST 4413 Europe in the Seventeenth Century (3) Political, social, economic, and cultural history of Europe in the seventeenth century.

HIST 4414 The Age of the French Revolution and Napoleon (3) The origins, development, and consequences of the French Revolution and the Napoleonic Empire in France and in the larger European world, with special reference to the broad transformation of the entire continent during the eighteenth century.

HIST 4415 Revolutionary Europe (3) A survey of the political, social, economic, and cultural transformation of Europe in a century of revolution, from the ancient regime to World War I.

HIST 4416 Europe in Crisis: 1900-1945 (3) Examines the political, diplomatic, and strategic trends of the major European crises up to 1945: the Great War, the Great Depression, and World War II.

HIST 4417 Intellectual History of Modern Europe (3) Political, social, and religious ideas shaping the culture, society, and institutions of Europe.

HIST 4418 War and Modern Society (3) This course will explore the relationship between warfare and society from the advent of gunpowder weaponry to the 21st century.

**HIST 4422 England to 1689 (3)** The history and institutions of England from Anglo-Saxon times to the Glorious Revolution.

HIST 4423 Modern Britain and the Empire (3) Political, economic, and social development of modern England and the empire.

HIST 4431 Modern Germany and the Nazi Experience (3) A political, social, economic and cultural history of Germany from World War I through the post-World War II era with emphasis on the Third Reich.

HIST 4432 The Holocaust (3) Examines the Holocaust within the context of historical anti-Semitism and the chronology of Nazism's rise, World War II, the Final Solution, and the legacy.

HIST 4441 The Rise of Imperial Russia (3) This course will explore the history of imperial Russia from Kievan Rus' through the end of the reign of Tsar Alexander II.

HIST 4442 Modern Russia and the Soviet Union (3) Russia and its place in world affairs since the eighteenth century.

HIST 4451 Imperial Spain 1469-1714 (3) The rise of the Spanish Empire in the Old World and the New from the fifteenth through the seventeenth centuries.

HIST 4452 Modern Latin America (3) Latin American history from the independence movement of the eighteenth century to the present.

HIST 4453 History of Mexico (3) A survey of the political, social, economic and cultural history of Mexico from pre-Columbian civilizations to the present.

HIST 4461 The Rise of Chinese Civilization (3) The origins, development, and transformation of Chinese civilization from ancient to modern times, including China's impact on peripheral nations and the modifications of traditional culture by Western influences until 1949.

HIST 4462 The Rise of Japanese Civilization (3) The origins, development, and transformation of Japanese civilization from ancient to modern times, emphasizing the unique qualities of Japanese history and culture and the role of Japanese leadership in modern East Asia.

HIST 4463 Communist China (3) Communist China since World War II, including the expulsion of the Nationalist government from the mainland, the consolidation of communist power and authority, internal upheavals such as the "Hundred Flowers," the Great Leap Forward, and the Cultural Revolution and Communist China's foreign policies and role in international affairs.

HIST 4471 The African Diaspora (3) Examines the global dispersal of Africans with particular emphasis on the rise and abolition of the Trans-Saharan and Atlantic slave trades.

HIST 4472 African History (3) Examines the African continent, its development and its place in world affairs since prehistory, from complex societies to independence in the twentieth century.

**HIST 4473 History of South Africa (3)** This course is a survey of South African History from the pre1800s to the present.

HIST 4481 Traditional Middle East (3) The History of West Asia and the Eastern Mediterranean from Muhammad to Napoleon, with Special Emphasis on the Rise and Expansion of Islam, Including its Principles, the Arab and Persian Empires, and the Impact of the Mongols, the Turks, and the Crusades.

HIST 4482 The Modern Middle East (3) The course will focus on western Asia, north Africa, and the eastern Mediterranean region since the Napoleonic invasion of Egypt, with special emphasis on the decline of the Ottoman Empire, the impact of the great powers, and the effects of nationalism, oil, and the religious dynamic.

HIST 4491 Special Projects in World History (1-6) Study, interpretation, and discussion of special topics and problems in World History.

HIST 5310 Readings in History (1-6) Independent readings in selected fields of history. Offered only on a limited basis. May be repeated for a maximum of 6 semester hours. Prerequisites: 9 semester hours of history and graduate adviser's consent.

HIST 5350 Colloquium (3) Advanced study and class discussions in selected area of history. Special area of emphasis to be announced each semester by assigned instructor. May be repeated as areas change for a maximum of 12 semester hours. Prerequisites: 9 semester hours of history.

HIST 5400 Historiography (3) Philosophical systems and the contributions of each to the interpretation of history. Famous historians who represent each of the schools of thought will be analyzed. Open only to history and social science majors.

HIST 6305 Studies in History (3) Directed specialized study leading to the completion of a research paper. Periodic arranged class sessions devoted to discussion of historical writing techniques and analysis of individual research projects. May be repeated as areas change for a maximum of 12 semester hours. Prerequisites: 9 semester hours of history.

HIST 6350 Thesis (4-6) Special investigation of problems in historical research and interpretation culminating in the completion of a thesis.

### Women's Studies Courses

WS 4910 Special Projects in Women's Studies (1-6) Extensive reading and discussion of selected topics to integrate the various courses in the women's studies program at the undergraduate and graduate levels.

WS 5225 Feminist Scholarship in the Humanities: Theory and Method (3) Overview of the three women's liberation movements in the United States; examines mainstream historical revisions and interpretations as well as theory and method.

WS 5250 Feminist Scholarship in the Social Sciences: Theory and Method (3) Exploration of the various feminist theories and methodologies that are used in the social sciences.

WS 5450 Colloquium in Women's and Gender Studies (3) Advanced study and class discussions in selected areas of women's and gender studies. Special area of emphasis will be announced each semester by assigned instructor. May be repeated as areas change for a maximum of 6 hours.

### Department of Modern Languages Martin 236 • (660) 543-4780

### Modern Language Courses

ML 4010 Foreign Studies in Language (French) (German) (Spanish) (1-6) Credit granted for study in a UCM approved program in a foreign country. Freshmen and sophomores permitted to enroll with consent of the Chair of the Department of Modern Languages. Available for graduate credit upon approval of student's graduate program adviser. May be repeated for a maximum of 12 semester hours.

ML 4040 Special Projects in Foreign Language (1-3) Individualized and group instruction in foreign and modern languages. May be repeated for a maximum of 6 semester hours. Available for graduate credit upon approval of student's program adviser.

### Department of Music Utt 109 • (660) 543-4530

### MASTER OF ARTS

### Music 52 000438

#### **Student Learning Outcomes**—The graduate with a Master of Arts in Music degree will use the knowledge and skills obtained in the program to:

- Understand and apply advanced elements and structures of music history, theory, and performance literature.
- Engage in research (analysis, interpretation, and reporting of data) within his/her area of emphasis.
- Demonstrate at an advanced level a mastery of tone, technique, and musicality in his/her primary performance medium.

This program is designed for the student who wishes a graduate degree in music with an emphasis in (1) Theory and Composition, (2) History and Literature, (3) Music Education, (4) Performance, (5) Piano Pedagogy, or (6) Conducting.

To be accepted for graduate study in music, a student must have (1) an undergraduate grade-point average of 2.50 in music, (2) completed an undergraduate degree in music or completed the music requirements for a B.A. degree, (3) completed prerequisites for Central graduate courses and (4) successfully completed entrance examinations appropriate to the proposed area of concentration. Successful completion of a comprehensive review and evaluation is required before graduation.

	Sem. Hours
REQUIRED GRADUATE COURSES	
MUS 5105 Analytical Studies	3
Music history and literature	6
Major instrument or voice or conducting, 5000 level	3-6
MUS 5000 Intro. to Graduate Study	3
MUS 5050 Research Problems.	3
Graduate electives in Music	
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\* A listing of specific courses required for each emphasis is available from the Department of Music office.

### **Music Courses**

MUS 4000 Special Projects in Music (1-3) May be repeated for a maximum of 6 semester hours.

MUS 4040 Music Business Practices (3) Covers copyright, performance rights, client management and interaction. Prerequisites: ECON 1010.

MUS 4045 Music Technology IV (3) Advanced digital audio theory, advanced computer-based audio recording and editing, audio-forvideo, electroacoustic composition, and historic origins of computer and electro-acoustic music. Laboratory included. Prerequisites: completion of MUS 3040 and MUS 2122 with a grade of C or better. An additional fee is associated with this course. Note: NOT Available for Graduate Credit.

**MUS 4049 Internship in Music Technology (1-6)** Field application of music industry theories and practices in professional music production or recording arts fields. May be repeated for a maximum of 6 semester hours. Prerequisites: Consent of the music technology coordinator.

MUS 4101 Counterpoint I (3) Eighteenth-century style in two parts: melodic structure, resolution of melodic and harmonic contrapuntal dissonances, canon, and the writing of original two-part inventions. Prerequisites: MUS 2112 and MUS 2122.

MUS 4115 Instrumentation (3) Characteristics of instruments normally found in band and orchestra. Short writing projects for instrumental choirs, full band and orchestra. Score study. Prerequisites: MUS 2112 and MUS 2122.

MUS 4125 Form and Analysis (3) Small song forms, rondos, variations and sonata forms, with emphasis on aural analysis and score readings. Prerequisites: MUS 2112 and MUS 2122 or concurrently.

MUS 4130 Choral Arranging (2) Practical arrangements for various choral ensembles for school organizations and church choirs. Prerequisites: MUS 2112 and MUS 2122 or concurrently.

MUS 4181 Advanced Jazz Improvisation (2) Advanced study of jazz improvisation techniques in applied, private lessons. May be repeated. Prerequisites: MUS 2181 or consent of instructor.

MUS 4185 Jazz-Commercial Arranging (3) Characteristics of instruments normally found in jazz ensemble and commercial performing groups. Emphasis on style and voicing problems in these idioms. Writing projects for combo and jazz ensemble. Score study. Prerequisites: MUS 2112 and MUS 2122.

MUS 4186 Advanced Jazz-Commercial Arranging (2) Private lessons in composition, arranging, score study, and analysis for various jazz or commercial ensembles based on individual student needs and interests. May be repeated. Prerequisites: MUS 4185.

MUS 4190 Electronic Music Composition (3) Composition of electronic music in popular and artistic styles. Technical principles, history of the genre, and aesthetic considerations of electronic music. Prerequisites: MUS 1112.

MUS 4201 Piano Literature Through Beethoven (2) Survey and analysis of music written for clavichord, harpsichord, and piano through the music of Beethoven. Prerequisites: Four semesters of MUS 1510 or equivalent.

MUS 4202 Piano Literature From the Romantic Era to the Present (2) Survey and analysis of music written for piano from the Romantic era through the present. Prerequisites: Four semesters of MUS 1510 or equivalent.

MUS 4230 Choral Literature (2) Music literature for all choral groups with emphasis on the performance style and interpretative problems of the choral conductor. Prerequisites: MUS 2221.

MUS 4235 Vocal Literature (3) A survey of solo literature for all voice classifications with emphasis on the development of art song in the Italian, British, German, French, and American repertories. Prerequisites: MUS 2222 or consent of instructor.

MUS 4240 String Instrument Literature and Pedagogy (2) A survey of literature, instructional materials and pedagogy of the various string instruments. Prerequisites: 12 semester hours credit on major instrument.

MUS 4245 Woodwind Instrument Literature and Pedagogy (2) A survey of literature, instructional materials and pedagogy of woodwind instruments. Prerequisites: 12 semester hours credit on major instrument.

MUS 4250 Brass Instrument Literature and Pedagogy (2) A survey of literature, instructional materials and pedagogy of brass instruments. Prerequisites: 12 semester hours credit on major instrument.

MUS 4255 Percussion Literature and Pedagogy (2) A survey of literature, instructional materials and pedagogy of percussion instruments. Prerequisites: 12 semester hours credit on major instrument.

MUS 4320 Methods of Teaching Middle School Music (2) Objectives, materials, subject matter and problems in the teaching of vocal and general music in the middle school. Prerequisites: MUS 3305 or MUS 3306 or consent of instructor.

MUS 4370 Band Instrument Repair (2) A study and practice of band instrument maintenance and repair techniques. Prerequisites: One semester each of woodwind and brass study, or one year of teaching music in public schools.

MUS 4381 Jazz Pedagogy (2) Techniques, systems and materials for the teaching of jazz ensemble and jazz improvisation. Supervised conducting experience with a University jazz ensemble. Prerequisites: MUS 2400 and successful completion of the piano proficiency requirement.

MUS 4511 Piano Pedagogy I—The Beginner (3) Goals, methods, and materials for individual and class instruction of beginning piano students. Includes practice teaching and observation. Prerequisites: Two semesters of MUS 1510 or equivalent.

MUS 4512 Piano Pedagogy II—The Intermediate Student (3) Goals, methods, and materials for teaching intermediate piano students.

Includes practice teaching and observation. Prerequisites: Two semesters of MUS 1510 or equivalent.

MUS 4513 Piano Pedagogy III—The Advanced Student (3) Goals, methods, and materials of advanced piano teaching. Includes practice teaching and observation. Prerequisites: Two semesters of MUS 1510 or equivalent.

MUS 4514 Piano Pedagogy IV—Seminar (3) Intensive individual study in piano pedagogy designed to improve the student's understanding of a selected area of interest. Prerequisites: MUS 4511 or MUS 4512 or MUS 4513 or the equivalent.

MUS 4515 Practice Teaching in Piano (1.5) Supervised teaching of piano students. Course must be repeated. Prerequisites: MUS 4511 and MUS 4512 or the equivalent.

MUS 4600 Vocal Pedagogy (2) For prospective singing teachers. Includes study of the physiology of the vocal instrument, the techniques of singing production, goals and materials, teaching techniques, and analysis of vocal problems. Observation of master teachers, and supervised teaching will be required. Prerequisites: Three years of vocal training.

MUS 5000 Introduction to Graduate Study (3) Books and periodicals about music and various collections and editions of printed music. Techniques of suitable style in presentation of formal documented papers.

MUS 5020 Advanced Special Projects in Music (1-3) Intensive directed study in music designed to improve the graduate student's understanding of specific areas of interest. May be repeated for a maximum of 6 semester hours.

MUS 5050 Research Problems (3) Special investigation in the major field leading to the writing of the research document or thesis. Prerequisites: 10 semester hours of graduate credit.

**MUS 5051 Thesis (3)** Special Investigation of an approved problem in music resulting in a formal thesis. Prerequisites: 15 semester hours of graduate credit.

MUS 5105 Analytical Studies (3) In-depth analysis of selected masterworks from the Renaissance to the twentieth century to develop musical understanding and its application to performance. Prerequisites: MUS 2112.

MUS 5120 Orchestration (2) Setting complete works for small instrumental ensembles and full orchestra. Orchestration problems of school orchestras. Score study. Prerequisites: MUS 4115.

MUS 5125 Band Arranging (2) Practical arranging and transcribing for various groups including school band and wind ensembles. Prerequisites: MUS 4115.

MUS 5140 Advanced Composition (2) Creative musical composition in applied, private lessons based on the individual student's interest, need, and capacity to develop an individual style. May be repeated. Prerequisites: MUS 4125, MUS 4101 and MUS 4115.

MUS 5205 Music of the Renaissance (3) Music of the era with specific reference to the Flemish school; the Italian motet, mass, and madrigal; the English madrigal and anthem; and the French chanson. Prerequisites: MUS 3211.

MUS 5210 Music of the Baroque (3) The Baroque styles and forms including opera, cantata, and oratorio; keyboard and instrumental music to 1750. Prerequisites: MUS 3211.

MUS 5215 Music of the Classicists and Romanticists (3) Musical forms and styles of Classicism and Romanticism. Prerequisites: MUS 3211 and MUS 3212.

MUS 5220 Music of the Twentieth Century (3) Origins and trends of twentieth-century music. Prerequisites: MUS 3212.

**MUS 5240 Chamber Music Literature (2)** Formal and stylistic study of chamber music from 1600 to the present. Prerequisites: MUS 3211 and MUS 3212.

MUS 5250 American Music (3) American music from colonial days to the present time. Prerequisites: MUS 3212.

MUS 5300 Band and Orchestra Literature (2) A study of music written and arranged for elementary and secondary school bands and

orchestras. Prerequisites: MUS 3306 and MUS 4310.

MUS 5308 Advanced Marching Band Techniques (2) Survey of history and function of the marching band with emphasis on special projects in advanced show design, music arranging and auxiliary units. Prerequisites: MUS 3415, MUS 4115 and marching band teaching experience, or consent of instructor.

MUS 5309 School Music Curriculum (3) Construction, development, current trends, and implementation of a school music curriculum, grades 1 through 12. Prerequisites: EDCL 4495 or MUS 4310.

MUS 5310 Research and Evaluation in Music Education (3) Research methodologies and the measurement techniques used to evaluate all aspects of the elementary and secondary music program. Prerequisites: EDCL 4495 or MUS 4310.

MUS 5312 Elementary Listening Literature (2) Recorded music for presentation in the elementary classroom; themes, form and structure, style, instruments, and mood for primary and intermediate grades. Prerequisites: EDCL 4495 and MUS 4310.

MUS 5330 Music Education Administration and Supervision (3) Factors involved in the administration of a well-rounded school music program. Prerequisites: MUS 4310.

MUS 5350 Kodaly Methods and Materials I (2) Introduction to the philosophical bases of Kodaly curriculum. Curriculum development, teaching techniques, analytical study and collection of music literature/ materials for Kindergarten and Grade I.

MUS 5351 Kodaly Solfege I (2) Learn the tools of Kodaly, concentrating on pentatonic scale and intervals, sight singing, score reading, dictation and analysis.

MUS 5352 Kodaly Choral Techniques I (1) Introduction to the development of choral conducting techniques used in children's choral literature. Performance in a large ensemble is part of this course.

MUS 5360 Kodaly Methods and Materials II (2) Teaching techniques, scope and sequence for spiral-based curricula, lesson planning, analytical study and the collection of music literature needed for students in grade 2-3. Prerequisites: MUS 5350.

MUS 5361 Kodaly Solfege II (2) Using moveable do solfege and rhythm syllables, concentrating on extended pentatonic scale, diatonic scale, modes and intervals through sight singing, score reading and analysis. Prerequisites: MUS 5351.

MUS 5362 Kodaly Choral Techniques II (1) Continuing development of choral conducting techniques used in children's choral literature. Performing in a large ensemble is part of this course. Prerequisites: MUS 5352.

MUS 5370 Kodaly Methods and Materials III (2) Teaching techniques, scope and sequence for spiral-based curricula, lesson planning, analytical study and collection of music literature needed for students in grade 4 and 5. Prerequisites: MUS 5360.

MUS 5371 Kodaly Solfege III (2) Review of Kodaly concept tools. Indepth study of the diatonic and modal scales, including sight singing, score reading, dictation and analysis. Prerequisites: MUS 5361.

MUS 5372 Kodaly Choral Techniques III (1) Continuation of the development of choral conducting techniques used in children's choral literature. Performing in a large ensemble is part of this course. Prerequisites: MUS 5362.

MUS 5380 Kodaly Methods and Materials IV (2) A review of teaching techniques, scope and sequence development for spiralbased curricula, lesson planning and songs for students in grades K-5 and middle school (6-8). Prerequisites: MUS 5370.

MUS 5381 Kodaly Solfege IV (2) Review of melodic, diatonic and modal scales used in the Kodaly concept. Sight reading, score analysis and dictation will emphasize composed music. Prerequisites: MUS 5371.

MUS 5382 Kodaly Choral Techniques IV (1) An examination of development of choral conducting techniques used in children's choral literature. Performing in a large ensemble is part of this course. Prerequisites: MUS 5372.

MUS 5400 Advanced Conducting (2) The development of adequate baton and rehearsal techniques based on practical work with groups

of performers. Prerequisites: MUS 2400 and MUS 4115.

MUS 5507 Graduate Secondary Keyboard Lessons (1.5) Secondary private lesson study in any keyboard instrument listed in this catalog. May be repeated. Prerequisites: Initial enrollment by permission of applied area faculty.

MUS 5510 Piano III (1.5) Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

MUS 5520 Organ III (1.5) Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

MUS 5607 Graduate Secondary Voice Lessons (1.5) Secondary private lesson study in voice. May be repeated. Prerequisites: Initial enrollment by permission of applied area faculty.

**MUS 5610 Voice III (1.5)** Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

MUS 5707 Graduate Secondary String Lessons (1.5) Secondary private lesson study in any string instrument listed in this catalog. May be repeated. Prerequisites: Initial enrollment by permission of applied area faculty.

MUS 5710 Violin III (1.5) Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

MUS 5715 Viola III (1.5) Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

MUS 5720 Cello III (1.5) Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

MUS 5725 String Bass III (1.5) Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

MUS 5807 Graduate Secondary Woodwind Lessons (1.5) Secondary private lesson study in any wood-wind instrument listed in this catalog. May be repeated. Prerequisites: Initial enrollment by permission of applied area faculty.

**MUS 5810 Flute III (1.5)** Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

**MUS 5815 Clarinet III (1.5)** Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

MUS 5820 Oboe III (1.5) Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

MUS 5825 Saxophone III (1.5) Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

MUS 5830 Bassoon III (1.5) Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

MUS 5907 Graduate Secondary Brass and Percussion Lessons (1.5) Secondary private lesson study in any brass instrument listed in this catalog or in percussion. May be repeated. Prerequisites: Initial enrollment by permission of applied area faculty.

MUS 5910 Trumpet III (1.5) Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

**MUS 5915 French Horn III (1.5)** Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

**MUS 5920 Trombone III (1.5)** Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition. **MUS 5925 Baritone Horn III (1.5)** Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

**MUS 5930 Tuba III (1.5)** Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

MUS 5960 Percussion III (1.5) Advanced study in applied music. Technical exercises and music literature adjusted to the needs of the individual. May be repeated. Prerequisites: Approval by audition.

### Department of Political Science and Geography Wood 8 • (660) 543-4048

For information about the Graduate Certificate in Geographic Information Systems, refer to the geography web page http://www.ucmo.edu/geography.

### **Geography Courses**

GEOG 4201 Cartography (3) Techniques and tools of map construction including gathering, manipulation, and representation of geographic data. Emphasis on thematic mapping and maps as communication. Traditional and electronic technologies stressed. Prerequisites: GEOG 2212 or EASC 1004 or consent of instructor.

GEOG 4205 Advanced Cartography (3) Implementation of mapping software, map design, problems and opportunities associated with computer mapping. Content includes obtaining data in a computer context (e.g., Cyberspace). Prerequisites: GEOG 42010r equivalent or consent of instructor.

GEOG 4210 Remote Sensing and Image Interpretation (3) Use of electromagnetic spectrum to obtain information on our environment. Emphasis includes visible spectrum (air photography), thermography, radar, and satellite imagery. Prerequisites: GEOG 2212 or EASC 1004 or consent of instructor.

GEOG 4220 Geographic Information Systems I (3) Automated procedures for storage, analysis, and display of spatial information. Data bases, procurement of spatial information, data manipulation and display techniques, software systems and management issues.

GEOG 4221 Geographic Information Systems II (GIS II) (3) Advanced aspects of spatial analysis and modeling techniques utilizing polygon overlay, network analysis, grid and surface modeling, and programming. Emphasis on research and planning applications. Prerequisites: GEOG 4220 or consent of instructor.

**GEOG 4230 Geography of Asia (3)** A systematic and regional approach to the several Asian landscapes. Emphasis is on physical geography and cultural regions.

**GEOG 4235 Geography of the Former Soviet Union (3)** A regional geography of the F.S.U. The relationship of rigorous physical environment to national problems.

GEOG 4240 Geography of Missouri (3) A description and analysis of the systematic and regional geography of Missouri.

GEOG 4251 Special Projects in Geography (1-6) Study, interpretation, and discussion of special topics and problems in geography. May be repeated for a maximum of 6 semester hours.

GEOG 4260 Historical Geography of the United States (3) Relationship of changing geography to physical environment and developing technology in the United States.

**GEOG 4265 Urban Geography (3)** Location of cities as related to other geographic phenomena. Urban units are analyzed with respect to general location theory.

**GEOG 4270 World Political Geography (3)** The historical development of the political organization of area. Theoretical aspects of political geography are emphasized.

GEOG 4275 Special Topics in Geography (1-3) Directed individual or group research of predetermined problems in geography for more intensive study. May be repeated for a maximum of 3 semester hours. **GEOG 4291 Conservation of Natural Resources (3)** Problems of availability, production, exploitation, appraisal, distribution, and renew ability of natural resources.

GEOG 5200 Readings in Geography (1-3) Selected readings in geography under the guidance of the instructor. Class sessions may be required as part of the program. May be repeated for a maximum of 3 semester hours. Prerequisites: Consent.

**GEOG 5210 Problems in Geography (1-3)** An in-depth study of the major problems in regional and systematic geography. May be repeated for a maximum of 3 semester hours. Prerequisites: Consent.

GEOG 5221 Applications of Geographic Information Systems (GIS) (3) Advanced aspects of GIS including polygon overlay, network analysis, classification of digital data by methods such as Principal Component Analysis, Parallel piped and Minimum Distance to Means Classifiers, Global Positioning Systems (GPS). Introduction to programming in Avenue. Prerequisites: GEOG 4220 or equivalent or consent of instructor.

### **Political Science Courses**

**POLS 4511 Public Policy (3)** The course examines the public policymaking process as well as the forces that shape US policy in the context of globalization. Prerequisites: None. Permission from instructor must be obtained to take this course for graduate credit.

**POLS 4520 Principles of International Development (3)** Problems of development in the developing nations of the world and the concepts and theories for their comparative analysis.

POLS 4521 Culture and Politics of the Middle East (3) The influence of culture on the politics, political systems and issues of the Middle East.

**POLS 4530 International Law (3)** An examination of its nature, history, philosophies, and basic rules as found in treaties, court decisions, customs, and other sources.

**POLS 4531 American Foreign Policy (3)** The foreign policy of the United States with specific focus on the policy authority of the American President, the Congress, the Courts. United States' foreign policies toward Russia, Europe, and the Middle East are also considered.

POLS 4532 International Relations of East Asia (3) Study of contemporary regional politics of East Asia focusing on political culture, nationalism, and the foreign policies of the United States, Russia, China, and Japan as they relate to security issues in East Asia.

**POLS 4550 The European Union (3)** An examination of the theory, history, politics and institutions of the European Union with special emphasis on the socioeconomic factors that influenced the formation and subsequent expansions of the EU, particularly the regional differences and concerns over sovereignty.

POLS 4552 Legislative Politics (3) The major functions, roles, powers, processes and development of the national and state legislatures. Special attention is given to legislative elections, leadership and decision-making.

**POLS 4553 Twentieth Century African-American Politics (3)** Examines the political, economic and social aspects of African-American politics in the 20th Century.

**POLS 4555 The American Presidency (3)** The constitutional origins of the presidency, its powers, selection process, and the presidents' relations with the public, the media, political parties, and the other major institutions of government. Particular emphasis is on the presidency as an institution of leadership. Prerequisites: POLS 1510.

**POLS 4570 Public Administration and Public Policy (3)** The theories, functions, and structure of the public administration in the United States with special attention given to the policy process and the bureaucracy's role in it. Prerequisites: POLS 1510 and junior or senior status unless approved by instructor.

**POLS 4571 Municipal Administration (3)** Principles of municipal administration as they operate in the United States under the various forms of municipal governments. Prerequisites: POLS 1510.

**POLS 4580 American Constitutional Law (3)** An examination of the powers, structure, and limitations of the three major institutions of the U.S. political system, as interpreted by the Supreme Court. The Court's

decisions regarding political parties, voting rights, reapportionment, campaigns and elections, as well as its decisions involving central but implied political concepts (separation of powers and federalism) will also be examined.

**POLS 4581 Constitutional Rights (3)** Except for the First Amendment, this course examines individual rights and liberties found within and outside of the Constitution.

**POLS 4583 First Amendment (3)** This course examines First Amendment controversies, including flag burning, obscenity, libel, hate speech, free press vs. fair trial, and freedom of and from religion. Prerequisites: None

POLS 4590 Special Projects in Political Science (1-6) Study, interpretation, and discussion of special topics and problems in political science. May be repeated for a maximum of 6 semester hours.

**POLS 4591 Internship in Political Science (1-6)** Practical experience with a governmental or political unit. Supervision by professional of unit and by member of University faculty. May be repeated for a maximum of 6 semester hours. Prerequisites: Consent of department.

**POLS 4592 Problems in National, State or Local Government (1-3)** Special problems in government, selected by student and instructor. May be repeated for a maximum of 3 semester hours.

**POLS 5590 Readings in Political Science (1-6)** Selected readings designed to strengthen weak points in student's program as recommended by the student's adviser. May be repeated for a maximum of 6 semester hours.

# Department of Psychology Lovinger 1110 • (660) 543-4185

### MASTER OF SCIENCE

### Psychology 53 000749

**Student Learning Outcomes**—The graduate with a Master of Science Degree in Psychology will use the knowledge and skills obtained in the program to:

- Apply and interpret advanced statistics in research and evaluation of psychological science and practice.
- Apply advanced research designs in research and evaluation of psychological science and practice.
- Apply techniques, procedures, and factors related to individual and cultural differences in research and practice settings.
- Apply ethical problem-solving models and knowledge of legal issues in research and practice settings.
- Apply knowledge of the biological, social, acquired (learned), and cognitive bases of behavior in research and practice settings.
- Apply empirically valid assessment methods and psychological interventions in research and practice settings.
- Apply the language of the science of psychology in technical writing and speaking.
- Use technology skills appropriate to the degree.

This program is designed to prepare students for employment that utilizes acquired psychological knowledge and skills as well as provide a basis for further graduate study. There are two ways to be considered for admission:

The student must be fully admitted to The Graduate School and have a minimum GPA of 3.0 in at least 12 hours of undergraduate Psychology courses at an accredited institution. The applicant must also submit three letters of recommendation; a formal statement of purpose; and an official score report from the Graduate Record Examination (GRE) Verbal, Quantitative, and Analytical Writing sections.

#### - OR -

The student must be fully admitted to The Graduate School. In addition, the applicant must have a minimum GPA of 3.0 in 12 or more credit hours of graduate Psychology courses at an accredited institution. The applicant must also submit three letters of recommendation; a formal statement of purpose; and an official score report from the Graduate Record Examination (GRE) Verbal, Quantitative, and Analytical Writing sections.

Selection will be based on the applicant's GPA, GRE scores, consistency of the statement of purpose with program goals, and letters of recommendation indicating high potential for graduate work in Psychology. There is no minimum score required on the GRE, but preference will be given to applicants with a combined Verbal + Quantitative score of 1000 or higher.

Completed applications will be considered on a space available basis until one week before the first day of classes for the fall and spring semesters. Although admission occurs on a year round basis, the sequence of courses is designed to begin in the Fall semester. Starting in the Spring or Summer may result in an extended time to complete the degree.

No more than 12 graduate hours taken as a non-degree student (i.e., one not officially admitted to the Psychology graduate program) may be applied to the MS in Psychology. The chair of the department must approve these graduate hours. All courses must also meet the time limits established by The Graduate School. Upon acceptance into the MS in Psychology program, the student will be assigned a departmental graduate adviser and will be able to apply for federal financial aid.

Students should be aware that most graduate courses have prerequisites. These prerequisites must be met before enrolling in the courses. In some situations, a prerequisite may be waived with the consent of the course instructor. Each student must pass a writing proficiency exam prior to filing a program of study. A score of 3.5 or higher on the Analytical Writing section of the GRE satisfies the writing proficiency exam requirement. Each student must write and successfully defend masters thesis.

REQUIR	ed gra	Sem. Hours DUATE COURSES
PSY	5130	Psychology of Learning
PSY	5140	Biological Bases of Behavior
PSY	5150	Ethics & Professional Issues in Psychology 3
PSY	5310	Dynamics of Personality
PSY	5340	Social Bases of Behavior
PSY	5410	Adult Psychopathology3
PSY	5520	Advanced Statistics for the Behavioral Sciences 3
PSY	5560	Individual Intelligence Testing 4
PSY	5990	Thesis
Electives from the following		
PSY	4330	Multicultural Psychology
PSY	5420	Behavioral Medicine
PSY	5460	Introduction to Psychotherapy
PSY	5530	Personality Assessment
PSY	5570	Behavioral Assessment
PSY	5580	Clinical Neuropsychology
PSY	5970	Practicum in Psychology
MINIMUM GRADUATE HOUR TOTAL		

#### Psychology Courses

**PSY 4000 Special Projects in Psychology (1-3)** Individual or group study of problems in special areas of interest. May be repeated for a maximum of 5 semester hours. Prerequisites: PSY 1100 and junior standing.

**PSY 4130 Sensation and Perception (3)** Relationship between sensory occurrences and the experiences of the person. Prerequisites: PSY 1100 and junior standing.

**PSY 4150 Cognitive Psychology (3)** An overview of current theories of processes involved in human thinking with emphasis on models of memory, information processing, language and mental representations. Prerequisites: PSY 1100 and junior standing.

**PSY 4180 Seminar in Psychology (1-3)** Selected issues not covered in theory-practicum courses. May be repeated for a maximum of 6 semester hours. Prerequisites: PSY 1100 and junior standing.

**PSY 4200 Psychology of Exceptional Children (2)** The identification, care, treatment, and guidance of exceptional children. Prerequisites: EDCL 2240, PSY 1100 and Junior Standing.

**PSY 4230 Psychology of Adolescence (3)** Developmental factors and problems common to the period from puberty to adulthood with emphasis upon conditions leading to optimal development. Prerequisites: PSY 1100 or 2240; and junior standing.

**PSY 4240 Psychology of Aging (3)** Introduces psychological problems of aged population including: physical functioning, age changes in perception, memory, learning, problem solving, personality, environmental influences, death and dying. Prerequisites: PSY 1100 and junior standing.

**PSY 4310 Theories of Personality (3)** Major theories of personality, past and present. Prerequisites: PSY 1100.

**PSY 4320 Psychology of Women (2)** An overview of the theories of personality as applied to women, biological determinants of feminine behavior, the dynamics of sex-role development, and the psychological implications of traditional versus modern roles for women.

**PSY 4330 Multicultural Psychology (3)** This knowledge-based course is an introduction to cultural and minority status issues in psychology and the role of multicultural issues in mainstream research.

**PSY 4440 Abnormal Psychology (3)** A descriptive course dealing with the etiology, diagnosis, and treatment of mental disorders of functional and organic origin. Prerequisites: PSY 1100.

**PSY 4500 Introduction to Psychological Measurement (3)** An introduction to the basic psychometric theory, concepts, and procedures; familiarization with the major instruments in the field. Course includes scheduled laboratory. Prerequisites: PSY 2110 and junior standing or consent of instructor.

**PSY 4520 Statistics for the Behavioral Sciences (3)** Basic statistical methods. The techniques used to analyze frequency distributions, correlations, and tests of significance. Course includes scheduled laboratory.

**PSY 4600 Industrial Psychology (3)** Application of psychological principles and methods to the industrial setting. Prerequisites: PSY 1100.

**PSY 4730 Cognitive-Behavioral Interventions (3)** The application of cognitive-behavioral principles and procedures to human problems, including interviewing and observational skills. Prerequisites: PSY 1100 and junior standing.

**PSY 4740 Assessment and Interventions with Law Offenders (3)** History and philosophy of penology, theories of criminal personality, and rehabilitation procedures; course will include theory and practical work experience. Prerequisites: PSY 4701, or CJ 1000 or Soc 3890.

**PSY 4770 Medical Aspects of Disability (3)** A basic medical information course which examines various disabling conditions as they relate to vocational placement and the rehabilitation process.

**PSY 5000 Special Projects in Psychology (1-3)** Individual or group study of problems in special areas of need or interest. May be repeated for a maximum of 3 semester hours. Prerequisites: Consent of department.

**PSY 5130 Psychology of Learning (3)** The nine traditional theories of learning are emphasized with an introduction to the recent neurological and mathematical theories. For advanced psychology students. Prerequisites: PSY 2130 and PSY 2120 or equivalent.

**PSY 5140 Biological Bases of Behavior (3)** Survey of recent research in fields of biology, physiology, pharmacology, and medicine that influences the psychological aspects of human behavior. Prerequisites: PSY 3130. **PSY 5150 Ethics and Professional Issues in Psychology (3)** Introduces the student to ethical issues in psychology. Explores dilemmas and professional issues in practice, and ethical concerns in research, education/training, consultation, and supervision. Prerequisites: Consent of instructor.

**PSY 5220 Advanced Child Psychology (3)** Development of the child with emphasis on the scientific viewpoint and theoretical conceptualization of child behavior. Prerequisites: EDCL 2240 or PSY 2220.

**PSY 5310 Dynamics of Personality (3)** Contemporary, theoretical personality structures and their motivational systems. Prerequisites: PSY 4310 and full admission to psychology graduate program or consent of instructor.

**PSY 5320 Advanced Mental Health (3)** Introduces students to mental health issues and topics. Historical, philosophical, theoretical issues of mental health and mental illness are discussed along with a survey of mental health topics that represent the myriad of ways in which persons cope with and adjust to life stress and challenges.

**PSY 5340 Social Bases of Behavior (3)** Includes contemporary theory and research in several areas of social psychology (e.g., social cognition, social influence, aggression, social exchange and systems theory). Application to clinical settings is of special interest. Prerequisites: 15 semester hours of psychology or consent of instructor.

**PSY 5410 Adult Psychopathology (3)** Discusses etiology, course, and treatment of psychiatric and neurological disorders. Includes the language modern psychodiagnosis. Phenomenologic principles, mental status examination, and DSM-IVTR are covered. Prerequisites: PSY 4440.

**PSY 5420 Behavioral Medicine (3)** Discuss bio-behavioral aspects of health-related conditions and the application of principles of behavior used in the prevention, treatment, and rehabilitation of biomedical disorders. Prerequisites: PSY 5130.

**PSY 5460 Introduction to Psychotherapy (3)** Designed to provide the student with an academic background from which to understand the dimensions, systems, and methods. Prerequisites: PSY 5310 and full admission to psychology graduate program or consent of instructor.

**PSY 5470 Marriage and Family Therapy (3)** An overview of the theory and practice of marital and family therapy concentrating on systems theory and interventional strategies. Practical applications are made through the use of role playing and demonstrations. Prerequisites: PSY 5460 or consent of instructor.

PSY 5520 Advanced Statistics for the Behavioral Sciences (3) Inferential statistics, probability, and tests of the significance of difference will be introduced. Prerequisites: PSY 4520 or PSY 2120.

**PSY 5530 Personality Assessment (3)** Making tentative diagnoses based on case histories, interviews, behavior observations and test data, including selecting, administering, scoring, and interpreting tests. Prerequisites: PSY 5310, PSY 5520, and full admission to psychology graduate program or consent of instructor.

**PSY 5550 Advanced Psychological Test Interpretation (2)** Interpreting batteries of psychological tests and other relevant data sources as modality for teaching the clinician to make inferences about personality structure and adaptive function. Prerequisites: PSY 5530.

**PSY 5560 Individual Intelligence Testing (4: 3 lecture, 1 lab)** Administration, scoring, and interpretation of major individual intelligence scales. Students may rent kits and purchase protocols from the department. Students must provide their own examinees. Prerequisites: Consent of Instructor.

**PSY 5570 Behavioral Assessment (3)** Conceptual and philosophical foundations of behavioral assessment, reliability and validity, targeting, observational recording procedures, and self-report measures are presented. Multibehavior-multimethod procedures are addressed. Prerequisites: PSY 2130 or equivalent.

**PSY 5580 Clinical Neuropsychology (3)** An introduction to adult clinical neuropsychology that includes history, techniques, practical applications, neurobehavioral anatomy, neuropathology, syndrome identification and training, credentialing, and forensic practice issues. Prerequisites: PSY 5560.

**PSY 5970 Practicum in Psychology (3)** Supervised practice in psychological testing, personality assessment and treatment. May be repeated for a maximum of 6 semester hours. Prerequisites: PSY 5530 and consent of department chair.

**PSY 5980 Internship (6)** Consists of 500 clock hours in a facility that provides opportunities for practical experience in the student's area of emphasis. Supervised jointly by a member of the University faculty and a member of the facility staff. May be repeated for a maximum of 12 semester hours. Prerequisites: Recommendation of Internship Committee and approval by department chair.

**PSY 5990 Thesis (6)** Special investigation of an approved problem in the area of psychology resulting in a formal thesis. A prospectus is required. Prerequisites: PSY 5520.

## Department of Theatre Martin 113 • (660) 543-4020

## MASTER OF ARTS

## Theatre 52 000367

**Student Learning Outcomes**—The graduate with a Master of Arts in Theatre will use the knowledge and skills obtained in the program to:

- Communicate and collaborate effectively in the interactive and creative process of theatre.
- Form, communicate, and defend written and oral value judgments about quality and aesthetics in works of theatre.
- Communicate complex concepts regarding theatre in both written and oral form.
- Demonstrate a knowledge of bibliographical resources appropriate to critical, historical, and empirical research in theatre.
- Undertake independent research in theatre-related topics.

This program is designed for students seeking advanced study, scholarly research, and production experience in theatre arts for the purposes of career advancement, increased professional competence, personal enrichment, and preparation for further study toward a Ph.D. in Theatre.

To be accepted into this program, a student must have a minimum grade-point average of 2.50 in the undergraduate major. A student not meeting this requirement may consult the Theatre Department for possible acceptance on a conditional basis. Before filing a Program of Study, a student must have taken a departmental qualifying examination.

A student is required to complete either a thesis or two research papers as a part of this program. These can be in the area of theatre history/literature or related to the design or direction of a production. A student must pass both a written and an oral comprehensive examination before completion of the program.

	Sem. Hours	
REQUIRED GR	ADUATE COURSES	
THEA 5310	Modern Theatrical Styles	
THEA 5400	Development of American Theatre	
THEA 5990	D Introduction to Graduate Study in Theatre3	
Elect from the	following	
THEA 4310	Principles of Theatre Management	
THEA 4500	O Advanced Acting	
THEA 4710	Advanced Directing	
Elect from the	following	
THEA 4600	Advanced Technical Theatre	
	Advanced Stage Lighting & Sound	
GRADUATE EL	ECTIVES IN THEATRE	
GRADUATE EL	ECTIVES0-12	
MINIMUM GRADUATE HOUR TOTAL		

### **Theatre Courses**

THEA 4300 Professional Practices (1-6) Extended, supervised experiences in any phase of theatre production. Credit allowed will depend upon the nature and scope of the assignment. May be repeated for a maximum of 10 semester hours. Prerequisites: Consent. THEA 4310 Principles of Theatre Management (3) An in-depth examination of the business theories and practices in the modern educational, community, and professional theatre. Box office and publicity work are required.

**THEA 4400 Literature and History of the Theatre I (3)** Works and writers for the stage from the beginning to 1700. The development of theatrical modes and presentation and their influences upon the drama of each period.

THEA 4420 Literature and History of the Theatre II (3) Works, writers for the stage from 1700 to the present. Development of theatrical modes, presentation and their influences upon the drama of each period.

THEA 4500 Advanced Acting (3) An intensified study of characterization centering around the study of difficult roles, and the adaptation of acting techniques to various styles of acting. May be repeated for a maximum of six credit hours. Prerequisites: THEA 1500.

THEA 4510 Period Acting Styles (3) Examines the craft, methodology, resources and practice of acting in non-realistic (classical and contemporary) dramatic literature. Emphasis on analysis of stylistic determinants in dramatic literature. May be repeated up to six hours.

THEA 4600 Advanced Technical Theatre (3) Advanced techniques in scenery construction and painting, plastics, and selection of stage equipment. Laboratory exercises will be required. Prerequisites: THEA 1600.

THEA 4610 Advanced Stage Lighting and Sound (3) Extensive investigation of stage lighting history and practices in the modern theatre and the study and use of live and recorded sound as a theatrical art. Prerequisites: THEA 1600.

THEA 4710 Advanced Directing (3) Extensive examination of special directing problems with comedy, tragedy, period drama, and the musical show in arena and proscenium theatres. May be repeated for a maximum of six credit hours. Prerequisites: THEA 3700.

**THEA 4800 Playwriting (1-3)** Dramatic writing, dramatic theory, style dialogue exercises, characterization, with opportunity for the production of student plays. May be repeated for a maximum of 3 semester hours.

THEA 4900 Repertory Theatre (3) Practical experience in theatre through participation in a summer repertory season of plays as an actor, a technician, or management personnel. May be repeated for a maximum of 6 semester hours. Prerequisites: Enrollment by department approval only.

THEA 5310 Modern Theatrical Styles (3) The origin and development of modern production practices with special attention to their use in the contemporary theatre.

THEA 5400 Development of the American Theatre (3) Plays and playwrights of the American theatre and of the evolution of the physical theatre, acting, staging, and production practices.

THEA 5410 Contemporary Theatre and Drama (3) Twentieth century plays, playwrights, and theatre artists with particular emphasis on the period since 1960.

**THEA 5420 Dramatic Theory and Criticism (3)** Dramatic theory and criticism of the Western World from Aristotle to modern critics and theorists.

**THEA 5900 Seminar in Theatre (1-3)** Studies in a specialized area of theatre, with emphasis on individual research. May be repeated for a maximum of 12 semester hours.

**THEA 5910 Thesis (1-5)** Special Investigation of an approved problem in theatre resulting in a formal thesis. Prerequisites: 15 hours of graduate credit. May be repeated for a maximum of 5 semester hours.

THEA 5920 Theatre Architecture (2) Analysis of and practice in modern theatre architectural design.

THEA 5990 Introduction to Graduate Study in Theatre (3) Recent theatre research and research methods, professional organizations, and employment.

Guided study in the literature of special and related fields of theatre. May be repeated for a maximum of 12 semester hours.

## Harmon College of Business Administration

## Dean's Office Ward Edwards 1600 • (660) 543-4560

The Adrian and Margaret Harmon College of Business Administration (HCBA) offers three master's degree programs: The Master of Business Administration degree (MBA), the Master of Arts degree in Accountancy, and the Master of Science degree in Information Technology. The MBA degree may be earned in one of four concentration areas: Accounting, Finance, Information Systems, or Marketing.

**College Admission Policies**—The HCBA admits students to graduate programs based on evidence of adequate academic preparation and potential to perform high-quality graduate work. To be accepted into any HCBA graduate program, an applicant must hold a baccalaureate degree from an accredited institution recognized by University of Central Missouri. Each HCBA graduate program has other specific requirements that must be satisfied prior to program admission. Admission to the University in a graduate student, non-degree status does not constitute admission to any HCBA graduate program. Students must be admitted to a specific HCBA program in order to ensure that graduate work will be accepted for program completion.

In exceptional cases, the HCBA may extend either full or conditional admission to students who demonstrate potential to do high-quality graduate work and who have satisfied most but not all requirements for admission to a particular degree program. Students who are admitted on a conditional basis must satisfy all admission requirements by the end of the first semester of enrollment in graduate courses. Failure to meet all admission requirements by the end of one semester of graduate study will result in reclassification as a non-degree graduate student. In no case will a student be allowed to apply more than 9 graduate credit hours earned while in a conditional admission and/or non-degree status toward a HCBA degree program.

International graduate students applying for admission to a degree program offered by the HCBA must achieve a score of 550 or higher (213 or higher if computer based or 79-80 or higher if internet based) on the Test of English as a Foreign Language (TOEFL) with minimally established scores on each sub test. Alternative English language requirements are stated in the Admission to Graduate School section of this Catalog.

Students who are admitted to HCBA graduate programs must enroll in program courses within an 18-month period following the program admission date. After 18 months, the admission is invalid and the student must reapply. All provisions of the Graduate Catalog in effect at the time of subsequent application for admission will apply.

## MASTER OF BUSINESS ADMINISTRATION

#### 55 000505

**Student Learning Outcomes**—The graduate with a Master of Business Administration (MBA) degree will use the knowledge and skills obtained in the program to:

- Apply a common body of knowledge to the management of organizations.
- Identify problems and opportunities, obtain relevant information, analyze and evaluate alternative courses of action, and operationalize a selected course of action.
- Understand the problems and opportunities resulting from environmental, multicultural, and global forces impacting management.
- Integrate the concepts and techniques from the functional areas of business.

The Master of Business Administration (MBA) is a professional degree that is offered as an interdisciplinary program through the five departments of the Harmon College of Business Administration (HCBA). The MBA program prepares students to assume positions of leadership and responsibility by providing:

- A common body of knowledge that is applicable to the management of organizations.
- Skills and abilities to identify problems and opportunities, obtain relevant information, analyze and evaluate alternative courses of action, and operationalize a selected course of action.
- Simulation and practice needed to experience and integrate the concepts and techniques from the functional areas of business.
- An understanding of the problems and opportunities resulting from environmental, multicultural and global forces impacting management.

Comprehensive examinations are not required in the MBA program. During the MBA program, students are required to demonstrate competency in knowledge, skills and abilities requisite to success as a practicing manager. Each MBA course includes a significant written and oral presentation component. A thesis is not required.

**MBA Admission Requirements**—Beyond the University and College admission requirements, applicants for the MBA program must meet the following additional admission requirements:

- A minimum undergraduate grade point average of 2.50.
   A minimum score of 400 on the Graduate Management Admission Test (GMAT)
- A minimum "admission score" based on one of the following criteria: (200 X undergraduate cumulative grade point average) + GMAT score 1000 OR (200 X grade point average on last 60 hours of undergraduate credit) + GMAT score 1050.

**Note:** If the student has received an undergraduate degree in business from an institution accredited by The Association to Advance Collegiate Schools of Business (AACSB) International with a cumulative undergraduate GPA of 3.75 or higher, the above requirements are waived.

Admission to the MBA (Information Systems Concentration) is competitive. Successful candidates will be selected from the current year's pool of applicants based on GMAT scores, undergraduate GPA, significant professional Information Systems experience, and professional and academic honors and awards. A minimum GMAT score of 500 is required.

Sem. Hours

#### REQUIRED UNDERGRADUATE BACKGROUND COURSES .....\*0-31

The following undergraduate courses (or equivalents) are required for all MBA degree concentrations. Undergraduate work already completed may be used to satisfy undergraduate background requirements.

	, , ,
ACCT 2100	Survey of Accounting
BLAW 2720	Legal Environment of Business
CIS 1605	Microcomputer Application Software 2
BE&O 1210	Essentials of Managing Info
ECON 1010	Principles of Macroeconomics
ECON 1011	Principles of Microeconomics
FIN 2801	Business Statistics I
FIN 3801	Business Statistics II
FIN 3850	Principles of Finance
MGT 3310	Principles of Management or
MGT 3315	Management of Organizations
MKT 3400	Principles of Marketing or
MKT 3405	Marketing Policy3

\*In addition to the 21 hours of undergraduate credit listed above, the MBA (Accounting Concentration) requires 15 semester hours of undergraduate credit beyond ACCT 2100, including at least one course in auditing. At least 6 of the additional hours in accounting must be earned at the upper division (junior/senior) level.

\*In addition to the 31 hours of undergraduate credit listed above, the MBA (Information Systems Concentration) requires 15 semester hours

of undergraduate credit in information systems, including at least one course in the following areas: COBOL or Visual Basic or Java, Networking, Database Management, Analysis and Design, and Client Server.

		Sem. Hours		
	The following six courses are required for the MBA degree			
	•			
(all concen		,		
ACCT 5	5105	Controllership & the Treasury Function3		
CIS 5	5605	Technology Based Research &		
		Quantitative Tools		
ECON 5	5005	Technology Based Research &		
		Quantitative Tools		
FIN 5	5805	Controllership & the Treasury Function3		
MGT 5	5305	Strategic Management & Marketing3		
MKT 5	5405	Strategic Management & Marketing3		
MBA CON	ICENT	RATION		
Students must complete all requirements in one of the following				
concentrati	ion are	eas.		

concentration dreas.		
Accounti		centration
ACCT	5120	Seminar in Accounting Theory
ACCT	5150	Advanced Auditing
**Accour	nting Ele	ctives
Finance	Concer	Itration
FIN	5800	Managerial Finance
FIN	5830	Advanced Financial Institutions & Markets 3
FIN	5840	Investment Analysis & Practice
Informat	ion Sys	tems Concentration
CIS	4655	Software Engineering
CIS	5675	Project Management
CIS	5650	Managing Corporate Information Systems3
CIS	5660	Legal Environment of Information Systems3
CIS	5669	Communications Network Management 3
Marketir	ng Conc	entration
MKT	4420	Sales Management
MKT	4440	Seminar in Marketing3
MKT	5400	Marketing Strategy
MKT	5480	Applications in Marketing
**GRADUATE ELECTIVES		

## Department of Accounting Dockery 400 •(660) 543-4631

## MASTER OF ARTS

#### Accountancy 52 000504

**Student Learning Outcomes**—The graduate holding a Master of Arts in Accountancy degree will use the knowledge and skills obtained in the program to:

- Immediately add value to their initial employing entity.
- Research accounting and tax issues more effectively and efficiently than the bachelor's degree holder.
- Perform as an entry-level specialist in a chosen area of professional accounting.
- Communicate well enough to progress in the graduate's chosen field.
- Approach and examine accounting issues and real-world problems with an informed, critical frame of reference.
- Work and lead in a team environment.

The MA in Accountancy program is designed to provide advanced level study in accounting. The program provides graduate exposure to the traditional areas of accounting (financial accounting, income tax, and auditing) through the accounting core. The specialization allows sufficient flexibility in course work to permit advanced study in specific areas such as tax, financial planning, auditing or accounting systems. Completion of the program qualifies the graduate to sit for the CPA examination in Missouri.

**MA in Accountancy Admission Requirements**—Beyond the University and College admission requirements, applicants for the Accountancy program must meet the following additional admission requirements:

- A student who has earned a BSBA degree (any major) from an AACSB-International accredited school with a GPA of 3.50 or higher is automatically eligible for admission.
- 2. If the criteria for admission (in No. 1 above) is not met, the following criteria apply:
  - A. A minimum undergraduate grade point average of 2.50.B. A minimum score of 400 on the Graduate Management Admission Test (GMAT).
  - C. A minimum "admission score" based on one of the following criteria (200 x undergraduate cumulative grade point average)
     + GMAT score 1000 OR (200 x grade point average on last 60 hours of undergraduate credit) + GMAT score 1050.

Sem. Hours

Undergro	aduate	Background0-44
ACCT	2100	Survey of Accounting
BE&O	1210	Essentials of Managing Info
ECON	1010	Principles Macroeconomics
ECON	1011	Principles Microeconomics
FIN	2801	Business Statistics I
FIN	3801	Business Statistics II
FIN	3850	Principles of Finance
MGT	3310	Principles of Management or
MGT	3315	Management of Organizations
MKT	3400	Principles of Marketing or
MKT	3405	Marketing Policy
BLAW	2720	Legal Environment of Business
Accounting courses beyond ACCT 210015		
ACCOUNTING CORE9		
ACCT	5120	Seminar in Accounting Theory
ACCT	4130	Advanced Income Tax
ACCT	5150	Advanced Auditing
SPECIALIZATION24		
To be selected with approval of the accounting. (Twelve of the 24		

To be selected with approval of the accounting. (Twelve of the 24 hours must be at the 5000 or 6000 level. At least 9 hours must be in Accounting, of which 6 hours must be at the 5000 or 6000 level. At least 9 hours must be outside of accounting.

#### Accounting Courses

ACCT 4115 Financial Statement Analysis (3) Allows students to gain financial statement analytical perspectives required of credit and equity analysts and others impacted by financial statements. Prerequisites: FIN 3850.

ACCT 4120 Advanced Managerial Accounting (3) An in-depth analysis of advanced managerial accounting topics and literature. Prerequisites: ACCT 3120.

ACCT 4130 Advanced Income Tax (3) Continuation of the study of Federal Income Tax. Consideration of the special treatment received by the various business entities, including a study of partnerships, corporations, estates, and trusts. Prerequisites: ACCT 3130.

ACCT 4136 Estate Planning (3) Provides students with the knowledge base and analytical skills needed for effective planning and administration. Prerequisites: ACCT 3130.

ACCT 4165 Special Projects in Accounting (1-3) Individualized or group study under the supervision of departmental faculty. May be repeated for a maximum of 6 semester hours. Prerequisites: Consent of instructor. ACCT 5105 Controllership and the Treasury Function (3) Advanced managerial accounting and finance topics necessary to compete in a global market place. Prerequisites: Undergraduate MBA background and admission to MBA program; must be taken concurrently with FIN 5805.

ACCT 5120 Seminar in Accounting Theory (3) The development and application of current accounting theory. Prerequisites: ACCT 4105.

ACCT 5130 Seminar in Tax Research and Planning (3) Graduate course in federal income taxes. The obtaining of tax information from its various sources and using it to make important management and financial decisions. Prerequisites: ACCT 4130.

ACCT 5132 Interjurisdictional Tax (3) Provides students with the knowledge base and analytical skills to provide tax planning for interstate and international commerce. Prerequisites: Consent of the instructor.

ACCT 5134 Specialized Industries Tax Topics (3) Provides students with the skills and knowledge needed to plan property transactions and perform both investment and financial planning within specialized industries. Prerequisites: Consent of the instructor.

ACCT 5140 Advanced Accounting II (3) In-depth study of preparation of consolidated financial statements. Prerequisites: ACCT 3112.

ACCT 5150 Advanced Auditing (3) An in-depth study of external and internal auditing including the theory and application of auditing standards, authoritative literature, statistical techniques, the attest function and audit reports, and current topics in auditing. Prerequisites: ACCT 3160.

ACCT 5191 International Accounting (3) Accounting for international transactions, the operations of international firms, foreign exchange markets, comparisons of accounting standards in foreign countries and the procedures by which they and international standards are established. Integrates financial, managerial, and tax accounting in the conduct of international business. Prerequisites: ACCT 4100, ACCT 3120 and ACCT 4130.

ACCT 6160 Readings in Accounting (1-3) A directed study of selected accounting literature. May be repeated for a maximum of 6 semester hours. Prerequisites: ACCT 3112.

## Department of Computer Information Systems Dockery 300 • (660) 543-4767

## MASTER OF SCIENCE

## Information Technology 53 000547

**Student Learning Outcomes**—The graduate with a Master of Science degree in Information Technology will use the knowledge and skills obtained in the program to:

- Understand systems architecture and systems development strategies.
- Be familiar with tools to develop quality software.
- Be familiar with the fundamental aspects of creating, executing, and monitoring an IS project plan.
- Understand current Software Engineering estimation techniques related to project planning.
- Understand significant personnel issues involving IS personnel at the corporate level.
- Familiarize the student with financial considerations used in the Information Systems area.
- Understand the legal theory behind contract and warranty issues in the IS area.
- Understand the circumstance under which a lawsuit could be brought, and what steps a practicing manager could take to avoid such incidences.
- Discuss and apply strategic telecommunications planning tools and techniques.
- Discuss and understand the factors involved in selecting data communications equipment and services.

## MSIT Track Objectives and student outcomes—

- Software Engineering Track:
- To understand systems architecture and systems development strategies.
- To be familiar with tools to develop quality software.
- To have in-depth knowledge of active directory design, installation and configuration.
- To be familiar with TCP/IP.
- To understand concepts of OO Design.
- To understand standard systems design strategies.
- To understand OO/COM implementation in Visual Basic.
- To be familiar with development of enterprise wide distributed systems in Visual Basic using DCOM.
- E-commerce/Internet Technologies Track:
- Develop client-based, multi-platform, dynamic web content following a strong web design philosophy.
- Develop server-based, dynamic web content and in managing a web server resources with consideration for organizational and technical issues.
- To have in-depth knowledge of active directory design, installation and configuration.
- To be familiar with TCP/IP.

The Information Technology program is designed to serve two types of students. First, those who have an undergraduate degree and would like to make a career change to computer information technology, and second, those who are already in the information technology workforce and would like to enhance their career growth in a specialized area. Students may choose from three areas:

Software Engineering

E-commerce/ Internet Technologies

Geographic Information Systems.

To be admitted to the program, a student must have a minimum undergraduate grade point average of 2.5. Candidates must complete the Graduate Record Examination (GRE) with a minimum score of 1000 in any 2 areas or Graduate Management Admission Test (GMAT) with a minimum score of 500. Courses completed prior to receipt of an undergraduate degree can not be used toward this program. A thesis is not required.

## 

Sem. Hours

#### BACKGROUND COURSES . . . . . . . 0-15

The following undergraduate courses (or equivalents) are required. Some of the requirements may be waived on the basis of the student's prior work experience. Undergraduate work already completed may be used to satisfy these requirements.

CIS	2605	Applications Development Using Visual Basic	
CIS	2615	Intro to Java	3
CIS	3605	Principles of Data Communications &	
		Local Area Networking	3
CIS	3650	Database Management Systems	3
CIS	3660	Analysis & Design of Computer	
		Information Systems	3
REQUIR	ED GRA	DUATE COURSES	
(elect fro	om the f	ollowing)	
CIS	4655	Software Engineering	3
CIS	5675	Project Management	3
CIS	5690	Advanced Systems Project	3
CIS	5650	Managing Corporate Information Systems	
CIS	5660	Legal Environment of Information Systems	3
CIS	5669	Communications Network Management	3
CIS	5670	Internship in CIS	3
CONCENTRATION			
Students must complete all requirements in one of the following concentration areas.			
Software Engineering Concentration 12			

Sottware	e Engine	ering Concentration	
CIS	4660	Applications Development Using JAVA	3
CIS	4665	Data Communication	
		and Distributed Data Processing	3

### HARMON COLLEGE OF BUSINESS ADMINISTRATION

CIS	5606	Advanced Applications	2
CIS CIS	5655 5661	Development Using Visual Basic Advanced Client Server Concepts Advanced Analysis & Design of Computer Information Systems	3
E-Comm	erce/In	ternet Technologies Concentration	. 12
CIS	4665	Data Communication and Distributed Data Processing	3
CIS	5610	Internet for the Enterprise	
CIS	5611	Client-side Internet Resources	
CIS	5612	Server-side Internet Resources	
Geograp	hic Info	ormation Systems Concentration	. 12
GEOG GEOG GEOG GEOG	4210 4220	Cartography	3 3
GRADUATE ELECTIVES			
CIS CIS CIS CIS CIS GEOG	4680 5607 5610 5630 6610 4205	Data Resource Management	
AAINIIAALI			

### Computer Information Systems Courses

**CIS 4610 Special Projects (1-3)** Special projects offerings in computer information systems. May be repeated for a maximum of 6 semester hours. Prerequisites: Consent of instructor.

**CIS 4620 Microcomputer Applications (3)** Emphasis will be on current microcomputer hardware, operating system, and database management software. Applications will be developed using the operating system and the database software. Prerequisites: CIS 1610; and MATH 11111 or a high school program including one unit of advanced algebra and one unit of geometry.

CIS 4635 Seminar in Business Computer Applications (2-3) Business applications and programming techniques will be studied and prepared for presentation and discussion. Prerequisites: CIS 4630 or at least one programming course.

CIS 4640 Contemporary Computer Programming and Business Systems (3) Comparison and application of two or three popular programming languages; systems analysis and procedure writing, flowcharting, designing, and maintaining business applications. Not open to computer information systems majors or minors.

CIS 4655 Software Engineering (3) An advanced course in the systematic approach to the specification, development, operation, maintenance, and retirement of software. Topics include formal specification tools, developmental strategies, software metrics, verification and validation techniques. Prerequisites: CIS 3660.

**CIS 4660 Applications Development Using JAVA (3)** Develop objectoriented web-based Graphical User Interface (GUI) applications for business using JAVA as the programming language. Prerequisites: CIS 2615 (minimum 'C' grade), CIS 3605, CIS 3650.

CIS 4665 Data Communication and Distributed Data Processing (3) A comprehensive introduction to the field of digital data communications. It provides an understanding of terminology, topology, protocol, and available systems network architecture. Prerequisites: CIS 2665.

**CIS 4680 Data Resource Management (3)** Designing and administering data resources with consideration of transaction management, distributed systems, security, object-oriented databases, data mining, data warehousing and alternative data structures (XML) Prerequisites: CIS 2665 and CIS 3650 or admission to the MSIT or Information Systems concentration in the MBA.

**CIS 4685 Network Planning, Design and Security (3)** Essential theoretical concepts behind network planning, design, and security. Use of network planning tools to design networks, configure firewalls

and other security measures. Prerequisites: CIS 3660, CIS 3665 and CIS 4665.

CIS 5605 Technology Based Research and Quantitative Tools (3) Information gathering, storage, analysis, and communication as it relates to decision making in today's business environment. Prerequisites: Undergraduate MBA background and admission to MBA program; must be taken concurrently with ECON 5005.

**CIS 5606 Advanced Applications Development Using VB.NET** (3) Developing GUI based applications for business problems in a distributed environment. Prerequisites: CIS 2605 or equivalent.

CIS 5607 Data Communications and LAN (3) Fundamental concepts needed to develop and work with data communication systems, including hardware, software, LANS, and network topology.

**CIS 5610 Internet for the Enterprise (3)** Seminar on internet from both a technical and organizational/managerial viewpoint. Prerequisites: CIS 1605.

**CIS 5611 Client-side Internet Resources (3)** Developing client based, multi-platform, dynamic web content in support of strong web design. A variety of tools and standards such as XML, DHTML, Flash, and AJAX will be considered along with emphasis on robust web design philosophy. Prerequisites: CIS 5610.

**CIS 5612 Server-side Internet Resources (3)** Develop server-based dynamic web content and manage web server resources. Emphasis will be placed on technical aspects such as web server performance, security and effective use of web services. Prerequisites: CIS 5611 or concurrently.

**CIS 5630 Management Information Systems (3)** Use of information technology for decision making and formulation of long- and short-term information systems plans. Working knowledge of systems analysis, design and development, understanding of conceptual and technical foundations and recent research issues. Prerequisites: Admission to MBA program and consent of graduate adviser.

**CIS 5650 Managing Corporate Information Systems (3)** The principles and practice of managing corporate information systems, including acquisition, budgeting, development, and personnel issues.

**CIS 5655 Advanced Client Server Concepts (3)** Advanced Data Base Management Systems and network topics in client server systems. Prerequisites: CIS 4680 or equivalent.

**CIS 5660 Legal Environment of Information Systems (3)** An examination of jurisprudence influence and processes on contracts, acquisitions, and security in information systems area. Prerequisites: Admission to MS degree in Information Technology or Information Systems concentration in MBA program.

CIS 5661 Advanced Analysis and Design of Computer Information Systems (3) Advanced coverage of systems analysis and design topics, including objected oriented analysis and design. Uses XML. Prerequisites: CIS 3660 or equivalent.

**CIS 5669 Communications Network Management (3)** In-depth treatment of planning, designing and managing communications networks; includes feasibility analysis, forecasting, optimizing using network management software. Prerequisites: CIS 3605 and admission to MS degree in Information Technology or Information Systems concentration in MBA program.

**CIS 5670 Internship in CIS (3)** Graduate-level internship giving practical higher-level work experience in the CIS career area. Research component required. Prerequisites: Approval of Program Adviser, Internship Director, and HCBA Director of Graduate Programs.

**CIS 5675 Project Management (3)** An advanced course in the planning and management of all phases of the computer information systems project, including the creation, execution, and monitoring of system project plans. Prerequisites: CIS 3660 and admission to BS in Business Administration, MS degree in Information Technology, or Information Systems concentration in MBA program.

**CIS 5690 Advanced Systems Project (2-3)** Independent study, analysis and development of a specific business computer application. Research component required. May be repeated for a maximum of 6 semester hours. Prerequisites: CIS 4630 or at least one programming course. **CIS 6610 Readings in Computer Information Systems (1-3)** Selected readings in data processing to extend student's understanding of the use of the computer in various business areas and his/her knowledge of current hardware and software in the field. May be repeated for a maximum of 6 semester hours. Prerequisites: CIS 4630 or equivalent.

## Department of Economics and Finance Dockery 300A • (660) 543-4246

### **Economics Courses**

ECON 4010 International Economics (3) Principles underlying international trade and finance and analysis of current problems and related policies. Prerequisites: ECON 1010 and ECON 1011.

ECON 4015 Mathematical Economics I (3) A survey of mathematics including theory of sets, calculus, differential and difference equations, linear programming, matrices, and their application in economics. Prerequisites: ECON 1011 and FIN 2801 or MATH 1131 or MATH 1151.

ECON 4016 Mathematical Economics II (2) A continuation and more advanced study in the application of mathematical tools in economics. Prerequisites: ECON 4015.

ECON 4020 Natural Resource Economics (3) Nature of natural resources; economic efficiency as basis for natural resource use; externalities in natural resource use; factors influencing environmental quality; alternate public policy tools for influencing natural resource use. Prerequisites: ECON 1010 and ECON 1011.

ECON 4030 Directed Studies in Economics (1-3) Intensive study of significant economic topics. May be repeated for a maximum of 9 semester hours.

ECON 4040 History of Economic Thought (3) Classical economists and the development of economic thought from the mercantilist period through the development of present thought. The course aims at establishing a synthesis of evolving doctrines which have become the basis of currently accepted economic theory. Prerequisites: ECON 1011.

ECON 4050 Comparative Economic Systems (3) Analysis of alternate patterns of economic control, planning, and market structures. The experience of British socialism, American capitalism, and Soviet-type central planning is emphasized.

ECON 4052 Regional and Urban Economics (3) Geographic regions and urban areas as economic systems with emphasis on location theory and economic policy in the regional/urban environments. Prerequisites: ECON 1011 or ECON 2000.

ECON 4060 Game Theory Applications (3) Provides game theoretical tools used widely in economics to study situations in which various decision-makers interact. Applications include political science and biology. Prerequisites: ECON 1011 and MATH 1111.

ECON 4070 Industrial Organization (3) An analysis of selected economic problems of current interest dealing primarily with the structure of American industry, with emphasis on the conduct and performance of large firms. Prerequisites: ECON 1011.

ECON 4080 Econometrics I (3) Mathematical techniques and problems used in the quantitative approach to economic theory. Prerequisites: ECON 3030, ECON 3010 and statistics.

### **Finance Courses**

FIN 4803 Principles of Insurance (3) Study of importance of risk in personal matters and various methods of treating risk. Includes property/liability insurance, life/health insurance, and insurance regulation. Prerequisites: FIN 3850, or a declared major in Actuarial Science and Mathematics with completion of MATH 4510, or concurrently FIN 3811.

FIN 4804 Employee Benefits and Retirement Planning (3) A planning perspective is developed for major employee benefit arrangements, retirement plan provisions, pension design, tax implications and suitability for different businesses.

FIN 4805 Advanced Personal Financial Planning (3) Develops ability to synthesize financial planning knowledge in order to analyze complex client case scenarios. Emphasis on characteristics of the financial planning profession. Prerequisites: ACCT 4136, FIN 3811, FIN 4802 and FIN 4804; or concurrently.

FIN 4815 Investment Portfolio Administration (3) Application of security analysis and investment decision concepts to case problems and computer simulated investment situations. Additional readings in selected portfolio management theories. Prerequisites: FIN 4813.

FIN 4817 Managing Financial Derivatives (3) Applied analysis of pricing and hedging techniques for managing investments in derivative contracts (forward, futures, options, and swap contracts) involving the application of concepts and strategies to case problems and computer simulations. Prerequisites: FIN 3850, or a declared major in Actuarial Science and Mathematics with completion of MATH 4510.

FIN 4820 International Finance (3) An intensified study of international banking and finance as it relates to international trade and the multinational corporation and the financing of imports and exports. Prerequisites: FIN 3850 or equivalent.

FIN 4830 Directed Readings in Finance (3) Intensive study of significant financial topics.

FIN 4880 Bank Management (3) Study and analysis of the problems of management of commercial banks with an emphasis on investment and loan portfolios. Prerequisites: FIN 3881 or concurrently.

FIN 5800 Managerial Finance (3) Topics covered will include capital expenditures, capital structure, cost of capital, dividends, mergers, concept of income maintenance, and, working capital. Cases in managerial finance and individual readings will supplement textbook learning. Prerequisites: MATH 1131, FIN 2801, admission to MBA program and consent of graduate adviser.

FIN 5805 Controllership and the Treasury Function (3) Advanced managerial accounting and finance topics necessary to compete in a global market place. Prerequisites: Undergraduate MBA background and admission to MBA program; must be taken concurrently with ACCT 5105.

FIN 5820 Seminar in Finance (3) The financial problems of profit seeking corporations are examined. Consideration of such matters as operations, obtaining capital, and reorganization. Prerequisites: 6 semester hours credit in finance.

FIN 5830 Advanced Financial Institutions and Markets (3) Indepth study of managing risk and return in contemporary financial institutions with special emphasis on methods and markets through which these risks are managed. Prerequisites: FIN 3801 and either FIN 3850 or FIN 5800.

FIN 5840 Investment Analysis and Practice (3) Theoretical and applied analysis of securities and derivatives, and valuation, construction and risk hedging of portfolios. Involves use of computer software, supplemental readings, and cases. Prerequisites: FIN 3801 and either FIN 3850 or FIN 5800.

FIN 6860 Readings in Finance (1-3) Selected readings in finance; e.g., financial management, commercial banking, investment banking, or investment. May be repeated for a maximum of 6 semester hours. Prerequisites: 6 semester hours credit in finance.

## Department of Management and Business Communication Dockery 400 • (660) 543-4026

### Human Resource Management Courses

HRM 4930 Compensation and Benefits (3) Concepts, models, theories, and application of processes and systems of employee compensation and benefits within organizations. Prerequisites: HRM 3920.

HRM 4960 Employment and Development (3) Concepts, models, theories, and application of human resource planning, employment, and training and development. Prerequisites: HRM 3920.

HRM 4990 Problems in Human Resource Management (3) An integrated approach to the administration of the human resource function in various types of organization settings through the use of the case and incident methods. Prerequisites: HRM 3920.

### Management Courses

MGT 4300 Health Care Administration (3) Management concepts, tools, and techniques for effective administration of all types of health care facilities. Prerequisites: MGT 3310 or MGT 3315 or graduate standing.

MGT 4310 Total Quality Management (3) Basic principles and methods associated with Total Quality Management. Relationships between TQM theories and models studied in management. Prerequisites: MGT 3360 and admission to the Harmon College of Business Administration or admission to the graduate school.

MGT 4350 Special Projects in Management (1-3) Advanced course in management theory, practice, methods, and strategies taught on an individual or group basis to advanced management students and graduate students. May be repeated for a maximum of 6 semester hours. Prerequisites: all preadmission courses or MBA background requirements, MGT 3315, and Department Chair's approval with adequate preparation in area to be studied.

MGT 4370 Supply Chain Management (3) Examines supply chain, materials and logistics management and their role in competitive advantage. Investigates techniques for acquiring, storing, processing and moving materials inventory. In addition to regular course content, graduate students will conduct a special supply chain project for the UCM purchasing department or another organization's purchasing department. Prerequisites: MGT 3360 and admission to the Harmon College of Business Administration or admission to the graduate school.

MGT 5305 Strategic Management and Marketing (3) Value based integrated working knowledge of strategic management and marketing processes with emphasis on development of thinking, communicating and interacting skills in a global market place. Prerequisites: MKT 5405.

MGT 5310 Seminar in Management (3) Advanced problems in managerial functions, organizational theory, and group dynamics.

MGT 5320 Organization Theory and Behavior (3) An analysis of managerial functions and processes and their cause/effect relationship to organizational theory and behavior. Assigned readings, case analysis and selected research projects under the instructor's guidance and supervision. Descriptive literature search and prescriptive project presentation. Prerequisites: Admission to MBA program.

MGT 5325 Managerial Communication (3) Communication in managerial situations, including ethics, oral presentations, written messages and reports, communication audits, group dynamics and organizational communication. Prerequisites: Admission to MBA program.

MGT 5340 Research Methods (3) Develops the student's ability to use analytic (qualitative and quantitative) and writing skills in applying the scientific method of behavioral theory and research. Research project requires selection of research question, literature review, design, primary data collection and analysis, inference, implications, and written and oral presentation of results. Prerequisites: MATH 1131 and FIN 2801 (or background in inferential statistics and regression analysis).

MGT 5350 Special Problems in Management (1-3) Individual work under supervision of a staff member. Problems may be undertaken in any phase of business. Prerequisites: Adequate preparation in the area to be studied.

MGT 5360 Operations Management (3) Investigates: relationships between supply chain decisions, quality, productivity, flexibility, justin-time, social responsibility, manufacturing technology, role in organizational strategy. Assigned readings, cases, research projects. Prerequisites: admission to MBA program and consent of graduate adviser.

MGT 5390 Internship in Business (3, 6) Opportunity for students to gain theoretical knowledge and practical application in the student's field of specialization. Employment must be above entry level for graduate credit and must be approved by the Harmon College of Business Administration Director of Graduate Programs. May be repeated for a maximum of 6 semester hours. Prerequisites: Overall graduate GPA 3.0.

MGT 6330 Readings in Management (1-3) Selected readings in group dynamics, communications, decision-making theory, and managerialism and its economic justification. May be repeated for a maximum of 6 semester hours. Prerequisites: MGT 3315 or equivalent.

## Department of Marketing and Legal Studies Dockery 200 • (660) 543-4815

## Legal Studies Courses

BLAW 4740 Employment Law (3) Policy and legal problems arising in an area of acute social and economic conflict.

**BLAW 4750 Collective Bargaining (3)** Roles and strategies of labor, management, and the government as the active participants in the negotiation and performance of the labor contract. Prerequisites: BLAW 4740.

**BLAW 5700 Legal Aspects of Business Decisions (3)** An examination of the external influences on business in the jurisprudential context and emanating from political, global, economics, ethical, technological and social forces.

## **Marketing Courses**

MKT 4420 Sales Management (3) Management aspects of selling with emphasis on the role of the supervisor in the sales field. Prerequisites: MKT 3405; admission to BS in Business Administration for undergraduate students or department chair approval for graduate students.

MKT 4430 Marketing Distribution (3) Methods and strategies used in distributing products including the design of channels and the activity performed by channel members to facilitate efficient movement of goods. Prerequisites: MKT 3405; admission to BS in Business Administration for undergraduate students or department chair approval for graduate students.

MKT 4440 Seminar in Marketing (3) Analysis of current issues and problems in marketing with emphasis on new theoretical and methodological developments. Prerequisites: MKT 3405; admission to B.S. in Business Administration for undergraduate students or department chair approval for graduate students.

MKT 4450 Integrated Marketing Communication (3) The determination of the correct blend of advertising, personal selling, sales promotion, reseller support, and publicity. Prerequisites: MKT 3405; admission to BS in Business Administration for undergraduate students or department chair approval for graduate students.

MKT 4460 International Marketing (3) Marketing policies and practices in foreign trade. Prerequisites: MKT 3405; admission to BS in Business Administration for undergraduate students or department chair approval for graduate students. MKT 4470 Marketing Research (3) Applications of research methods to the problems of marketing. Prerequisites: MKT 3405; admission to BS in Business Administration for undergraduate students or department chair approval for graduate students.

MKT 4480 Special Projects in Marketing (1-3) Individualized or group study under supervision of department faculty. May be repeated for a maximum of 6 semester hours. Prerequisites: Department chair approval.

MKT 5400 Marketing Strategy (3) Managerial techniques applied to the marketing functions of organizations; strategic implications of decision making with case study applications. Prerequisites: admission to MBA program and consent of graduate adviser.

MKT 5405 Strategic Management and Marketing (3) Valuebased integrated working knowledge of strategic management and marketing processes with emphasis on development of thinking, communicating and interacting skills in a global market place. Prerequisites: ACCT 5105 and FIN 5805.

MKT 5480 Applications in Marketing (3) Specific marketing applications within the business-to-business environment, including areas of career applications and interests. Prerequisites: MKT 4420 and MKT 4440.

MKT 6410 Readings in Marketing (1-3) Selected readings in diverse areas of marketing designed to complement and extend the student's program in marketing. May be repeated for a maximum of 6 semester hours. Prerequisites: MKT 3405.

## **College of Education**

Dean's Office • Lovinger 2190 • (660) 543-4272

## Department of Career and Technology Education Grinstead 120 • (660) 543-4452

## MASTER OF SCIENCE

### Technology Education 53 000245

### Occupational Education 53 000246

**Student Learning Outcomes**—The graduate with a Master of Science degree in Technology and Occupational Education will use the knowledge and skills obtained in the program to:

- Communicate effectively orally and in writing.
- Develop a personal philosophy statement related to the student's discipline/career field.
- Recognize, investigate, and discuss current issues related to the student's discipline/career field.
- Solve problems related to the student's discipline/career field.
- Practice life-long learning as it relates to the student's professional responsibilities.
- Read, interpret, and conduct scholarly research consistent with department, university, state, and federal practices.
- Interact with and contribute to professional, government, and other leadership organizations in the student's discipline/career field.

This program is designed to strengthen the preparation of persons to administer or teach, 1) career education (agriculture education, business education, family and consumer sciences education, health sciences education, marketing education, technology education, and trade and industrial education) in middle schools, high schools, career centers, or community colleges; 2) technical subjects in industry.

To be accepted into this program, students must have no fewer than 15 approved undergraduate or graduate hours in the major field of study, equivalent work experience, or a combination of both. Students must also have a minimum grade point average of 2.5 in the undergraduate major or a 3.0 grade point average during the last 60 semester hours of undergraduate study. Applicants who do not meet any of the preceding criteria must achieve a 3.5 graduate grade point average during their first 12 semester hours of graduate study which must include required degree courses. In addition, applicants must submit two professional letters of recommendation and a personal letter of intent describing how this degree will assist them in meeting their career goals.

Graduation requirements include one of the following four options: (1) a Thesis; (2) two research papers consistent with University requirements; (3) a comprehensive examination; or (4) successfully complete the Missouri Assessment Center Examination for their content area.

	Sem. Hours
REQUIRED GRA	DUATE COURSES
INDM 4210	Industrial Management
T&OE 5120	Prep. of Instructional Materials
T&OE 5130	
	Sciences & Technology
ELECT FROM O	NE OF THE FOLLOWING OPTIONS 6
Technology Edu	cation Option 000245
T&OE 5110	Development of the Industrial
	Education Program
T&OE 5140	Organization & Administration of
	Industrial Education
T&OE 6120	Current Issues & Topics in Technology &
	Occupational Ed
Occupational E	ducation Option 000246
CTE 4110	Foundations of Career & Technical Education 3
T&OE 4180	Adult Programs in Career Education
	Introduction to Career Administration
	CTIVES FROM CAST PROGRAM AREAS 5
	CTIVES12
MINIMUM GRA	DUATE HOUR TOTAL

## EDUCATION SPECIALIST - HUMAN SERVICES

### Technology and Occupational Education 61 000247

**Student Learning Outcomes**—The graduate with an Educational Specialist degree in Technology and Occupational Education will use the knowledge and skills obtained in the program to:

- Lead others to effectively communicate orally and in writing.
- Refine one's personal philosophy statement related to their discipline/career field.
- Analyze and lead discussions on current issues related to the student's discipline/career field.
- Solve problems related to the student's discipline/career field.
- Practice and lead life-long learning activities as they relate to professional responsibilities.
- Read, interpret, conduct, and contribute scholarly research consistent with department, university, state, and federal practices.
- Apply statistical methods to interpret, describe, and infer from existing or newly generated data.
- Interact with, contribute to, and lead professional, government, and other stakeholder organizations in the student's discipline/career field.

This advanced program is designed for individuals who are currently involved in or planning careers in the administration and/or teaching Career and Technical education programs.

To be accepted into this program, students must: (1) have earned a masters degree in the area of specialization or have completed 15 semester hours of appropriate background courses at either the undergraduate or graduate level; and (2) have achieved a cumulative grade point average of 3.25 in the masters degree. In addition, applicants must submit two professional letters of recommendation and a personal letter of intent describing how this degree will assist them in meeting their career goals.

Applicants who do not meet the above criteria will be classified as a "no-degree student" until they: (1) provide evidence of having completed 15 semester hours of appropriate background courses; and (2) obtain a 3.5 GPA during the first 12 hours of graduate study in courses appropriate to the degree program.

Graduation requirements include one of the following four options: (1) a Thesis (unless completed for a Master's Degree) ; (2) two scholarly research papers consistent with University requirements to be submitted for publication; (3) a comprehensive examination; or (4) successfully complete the Missouri Assessment Center Examination for their content area.

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### **Business Education and Office Administration Courses**

**BE&O 4243 Curriculum Construction for Business and Distributive Education (2)** Development of vocational curriculum and teaching materials. Majors in business and office education are not to take the course BE&O 4243 except as part of their graduate program.

### **Business Teacher Education Courses**

**BTE 4210 Methods of Teaching Business Education (3)** Prepares student as teachers of business education by assisting in the development of instructional methods and techniques for studentoriented classroom instruction. Prerequisites: Acceptance to the Teacher Education program, Senior or Graduate Status.

**BTE 4241 Coordination of Career and Technical Education Programs (2)** Organizing and implementing cooperative career and technical education programs.

**BTE 4250 Business/Marketing Education Practicum (1-3)** May be repeated for a maximum of 6 semester hours.

**BTE 4260 Special Topics in Business Teacher Education (1-3)** Topics will be listed in appropriate course schedules. May be used to teach specific microcomputer software or to cover other critical topics in business teacher education as new technologies develop. Prerequisites: senior or graduate status.

**BTE 4280 Implementing Business Education (3)** This course addresses information needed to plan, implement, and maintain business education programs.

**BTE 4501 Managing Classroom Technologies (3)** Students will work with current electronic media management tools that enhance classroom instruction in career education. Emphasizes resources to manage a multimedia-rich educational environment. Prerequisites: BTE 1210 essentials of Managing Information with C grade or higher or consent of the Instructor.

**BTE 4510 Desktop Publishing for Business (3)** This course includes business publishing concepts that utilize basic to intermediate design principles for creating comprehensive document layouts with polished professional-looking images. Prerequisites: BTE 3536 or consent of the Instructor.

**BTE 4550 Web Communications for Business (3)** Includes effective business web design concepts, application tools, and production fundamentals such as working with text and graphics, links and tables, animation and special effects. Prerequisites: BTE 3536 or consent of Instructor.

**BTE 4560 Presentations and Information Management (3)** Focuses on solving business problems using technology tools available for information management. Uses case study design to create solutions for business and business education. Prerequisites: BTE 4510 and BTE 4550, or consent of Instructor.

**BTE 5200 Improvement of Instruction (2)** Designed for teachers and prospective teachers of business and distributive education. Present methods of teaching leading to better organization and presentation of these courses in the secondary school. Will be offered on alternate years with subtitles—skills, basic business, and distributive education. Prerequisites: departmental consent.

**BTE 5231 Special Problems Business/Distributive Education (1-3)** Designed to develop some aspect of business education or distributive education.

**BTE 5232 Adult Programs Business/Distributive Education (3)** Overview of adult education; the curriculum; selecting, training and supervising adult teachers; counseling; preparing to teach adult classes; public relations and advisery committees.

BTE 5235 Business, Distributive and Industrial Occupational Analysis (3) The techniques of job analysis and community occupational surveys to aid in developing supervisory and training techniques.

BTE 5240 Seminar in Business Education (1-3).

#### Career and Technology Education Courses

**CTE 4110 Foundations of Career and Technical Education (3)** Synthesizes Career and Technical Education's history, past and current issues, legislation, and philosophical foundations.

CTE 4145 Curriculum Construction in Career and Technical Education (3) Assist new and practicing educators in selecting and organizing course content for their career and technical education courses.

CTE 4160 Methods of Teaching Career and Technical Education (3) Principles and techniques of presenting information, giving demonstrations, and facilitating student learning including managing the learning environment. Prerequisites: CTE 4145, admission to Teacher Education Program (BSE), or instructor approval.

CTE 4242 Philosophy of Career and Technical Education (2) Past and current philosophy of career and technical education.

### Technology and Occupational Education Courses

T&OE 4000 Special Projects in Technology and Occupational Education (1-3) Investigation of contemporary problems and issues in technology and occupational education by selected individuals or groups. May be repeated for a maximum of 6 semester hours. Prerequisites: written contract/proposal with objectives and written department consent.

**T&OE 4020 Technology Education for Elementary Schools** (3) Students will design, construct, and finish inexpensive threedimensional projects for the purpose of developing skills and understandings in the use of tools, materials and processes as they relate to the integration of constructional activities in the elementary school.

**T&OE 4022 Occupational Administration/Teaching Internship** (1-3) Provides a mentored administration/teaching experience at the secondary/postsecondary level. Evaluation by on-site mentor and Department Internship Coordinator. May be repeated for a maximum of 6 semester hours. Prerequisites: CTE 4145, T&OE 4160, and permission of the Department Chair.

T&OE 4090 Special Problems in Technology and Occupational Education (1-3) Meets student needs for additional research and/or laboratory experience in the development of technical knowledge and skills in the areas of technology and occupational education. May be repeated for a maximum of 6 semester hours. Prerequisites: written contract/proposal with objectives and written department consent.

**T&OE 4140 New Teacher Institute (3)** Develop teaching/instructional management skills needed to perform effectively in classrooms/ laboratories. Includes structured activities designed to assist beginning vocational-technical teachers during their first teaching years.

**T&OE 4150 Vocational Guidance (3)** Facilitate awareness and ability in vocational guidance. Includes problems, methods, and procedures for assisting individuals in choosing, preparing for, entering, and progressing in their vocation.

**T&OE 4180 Adult Programs in Career Education (3)** Principles, objectives, philosophies, organization, administration, and supervision of adult health, agricultural, industrial, and homemaking occupations.

T&OE 5022 Internship in Applied Sciences (1-6) Provides experience for students in cooperating industries. Students rotate assignment. Written reports are required. May be repeated for a maximum of 6 semester hours. Prerequisites: approval of graduate adviser and Technology Internship Coordinator; graduate GPA 3.0 or above; minimum of one semester graduate work completed.

T&OE 5110 Development of the Industrial Education Program (3) Objectives and changes in philosophy and their significance; interpretation of technology education, vocational, industrial, and technical education in the modern school.

T&OE 5120 Preparation of Instructional Materials (3) Organization of instructional materials including outlines, courses of study, and visual aids.

T&OE 5130 Research Methods in Applied Sciences and Technology (3) Research methodology with emphasis on research design, data interpretation and techniques of developing research proposals, and report writing.

T&OE 5140 Organization and Administration of Industrial Education (3) Organizing and administering various types of industrial schools and classes. Federal laws, state administration and local practices will be considered.

T&OE 5150 Introduction to Career Administration (3) Role, responsibilities, and activities associated with the administration of secondary and post-secondary vocational programs.

T&OE 5160 Legal Issues in Career Education (2) Current and existing legislation which form the statutory basis of school law affecting vocational education through a study of case law and the Carl Perkins Reauthorization Act.

T&OE 5170 Financing Career Education (2) Analyze and develop a financial plan for obtaining, managing and administering vocational resources.

T&OE 6120 Current Issues and Topics in Industrial Arts and Technology and Occupational Education (3) A seminar type course dealing with philosophy, new issues and recent literature, and research in the field. May be repeated for a maximum of six semester hours.

T&OE 6130 Special Investigations in Technology and Occupational Education (2-3) Advanced and specialized problems in technology and occupational education selected with approval of department advisers and graduate committees. May be repeated for a maximum of 8 semester hours. Prerequisites: written contract/proposal with objectives and written department consent.

T&OE 6132 Research in Technology and Occupational Education (2-3) Special investigations and the completion of a major research problem or thesis in technology and occupational education. May be repeated for a maximum of 6 semester hours. Prerequisites: Must have instructor consent.

## **Department of Curriculum and** Instruction Lovinger 3300 • (660) 543-4235

## MASTER OF ARTS IN TEACHING 52 000800

Student Learning Outcomes—The graduate with a Master of Arts in Teaching will use the knowledge and skills obtained in the program to:

- Demonstrate a commitment to students and their learning.
- Understand the subjects he/she teaches and how to teach those subjects.
- Be responsible for managing and monitoring student learning.
- Think systematically about his/her practice and learn from experience.
- Demonstrate his/her commitment as a member of learning communities.

To be accepted into the Master of Arts in Teaching (MAT) degree program in the Department of Curriculum and Instruction, students must: (a) have a minimum undergraduate grade-point average of 2.5; (b) be admitted into the Teacher Alternative-Certification Program; and (c) develop a certification plan with The Director of Certification. Discipline-specific content requirements per each discipline are determined by the Director of Certification and may require additional course work. A portfolio is required. To complete the MAT, students must: (a) complete EDCI 5900 or an adviser-approved alternative research course within the first 12 hours of their program, (b) complete 24 hours of their MAT Program of study prior to enrolling in EDCI 5110 - Internship II; must be taken during Fall or Spring semesters (EDCI 5110 is not offered during summer sessions) and should be the last course taken for the MAT degree, (c) provide evidence of successfully passing Praxis II, and (d) show evidence of completing all certification requirements in their chosen discipline. There are two options available for the MAT, Secondary and Middle School.

## Secondary Option

	Sem. Hours	
REQUIRED GRADUATE COURSES		
EDCI 5208	Content Area Literacy	
EDCI 5300	Advanced Assessment and Evaluation2	
EDCI 5100	Internship I	
EDCI 5110	Internship II	
EDCI 5120	Advanced Foundations of Education	
EDCI 5320	Curriculum Development and Assessment 3	
EDCI 5200	Advanced Educational Psychology	
EDCI 5330	Classroom Discipline and Motivation	
EDCI 5340	Contemporary Instruction:	
	Theory and Practice	
EDCI 5900	Introduction to Research	
PSY 4200	Psychology of Exceptional Children2	
PSY 4230	Psych of the Adolescent	
MINIMUM GRADUÁTE HOUR TOTAL		

### **Middle School Option**

		Sem. Hours
REQUIRE	ED GRA	DUATE COURSES
EDCI	5130	Middle School Foundations
EDCI	5208	Content Area Literacy
EDCI	5300	Advanced Assessment and Evaluation
EDCI	5440	Middle School Curriculum and Instruction 3
EDCI	5100	Internship I
EDCI	5110	Internship II
EDCI	5120	Advanced Foundations of Education
EDCI	5200	Advanced Educational Psychology3
EDCI	5210	Assessment of Literacy Development
EDCI	5320	Curriculum Development and Assessment 3
EDCI	5900	Introduction to Research
PSY	4200	Psychology of Exceptional Children2
PSY	4230	Psych of the Adolescent
MINIMU	M GRAI	DUATE HOUR TOTAL

## MASTER OF SCIENCE IN EDUCATION

Elementary Education/Curriculum and Instruction 51 000721

K-12 Education/Curriculum and Instruction 51 000725

## Literacy Education 51 000836

## Secondary Education/Curriculum and Instruction 51 000727

Student Learning Outcomes-The graduate with a Master of Science in Education (MSE) will use the knowledge and skills obtained in the program to:

- Demonstrate a commitment to students and their learning.
- Understand the subjects he/she teaches and how to teach those subjects to students.
- Be responsible for managing and monitoring student learning.
- Think systematically about his/her practice and learn from experience.
- Demonstrate his/her commitment as a member of learning communities.

## COLLEGE OF EDUCATION

Master of Science in Education-The Department of Curriculum and Instruction's Master of Science in Education Degrees are designed to address the five propositions of accomplished teaching as prescribed by the National Board for Professional Teaching Standards (NBPTS). There are four MSE degree programs available from the Department of Curriculum and Instruction. All MSE degrees require a minimum of 32 hours. To be accepted into a Master of Science in Education degree program in the Department of Curriculum and Instruction, a student must: (a) have a minimum undergraduate grade-point average of 2.5; (b) submit proof of teacher certification or professional endorsement from any of the 50 states or territories and have graduated from an NCATE or regionally accredited university; (c) submit a copy of his/her last summative teaching evaluation (i.e., a PBTE or similar evaluation form), or a letter from a school superintendent, principal or professor attesting to teaching skills and/ or graduate school potential.

Applicants who do not meet these criteria must design, with a department adviser or graduate coordinator, a conditional program and complete the first 12 hours of that program (including the department's research course) with a minimum grade-point average of 3.50. International applicants should meet these requirements in comparable ways.

The following requirements apply to MSE degree programs listed above— A student may apply a maximum of six hours of graduate study in EDCI Special Projects courses. (Students must consult and get approval from their graduate adviser for exceptions). A maximum of 12 graduate semester hours taken prior to the development of a program of study at Central and approved by the student's graduate program adviser may be accepted on a program of study. EDCI 5900 or an adviser-approved alternative research course must be taken within the first 12 hours of a program.

#### Elementary Education/Curriculum and Instruction Sem. Hours

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EDCI	5120	Advanced Foundations of Education
EDCI	5320	Curriculum Development and Assessment 3
EDCI	5340	Contemporary Instruction: Theory into Practice 3
EDCI	5900	Introduction to Research
EDCI	6100	MSE Internship
EDCI	6110	Capstone
		CTIVES
MINIMU	M GRA	DUATE HOUR TOTAL

#### K-12 Education/Curriculum and Instruction

#### Sem. Hours

	Sem. Hours
REQUIRED GRA	DUATE COURSES
EDCI 5120	Advanced Foundations of Education
EDCI 5320	Curriculum Development and Assessment 3
EDCI 5340	Contemporary Instruction:
	Theory into Practice
EDCI 5900	Introduction to Research
EDCI 6100	MSE Internship
EDCI 6110	Capstone
GRADUATE Cou	urses in Discipline
	DUATE HOUR TOTAL

#### **Literacy Education**

		Sem. Hours
REQUIRE	ED GRA	DUATE COURSES
EDCI	5900	Introduction to Research
EDCI	5120	Advanced Foundations of Education
EDCI	5340	Contemporary Instruction: Theory & Practice 3
REQUIRE	ED GRA	DUATE COURSES IN
		LITERACY EDUCATION
EDCI	4210	Teaching of Reading in Secondary Schools 2
EDCI	5205	Methods and Materials for
		Literacy Enhancement
EDCI	5210	Assessment of Literacy Development
EDCI	5220	Practicum in Literacy Assessment
EDCI	5230	Practicum in Instructional Techniques for Literacy
		Enhancement

EDCI	5250	Language Development in Literacy Program 3
EDCI	5260	Eval of Abilities and Ach In the Lit Prog
EDCI	6240	Supervision of Literacy Program (capstone) 2
EDSP	4140	Collaborating with Families of
		Exceptional Children
MINIMU	IM GRAI	DUATE HOUR TOTAL

## Secondary Education/Curriculum and Instruction

#### Sem. Hours EDCI FDCL 5320 Curriculum Development and Assessment. . . . . . 3 EDCI 5340 Contemporary Instruction: Theory into Practice ... 3

EDCI EDCI 

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## **Education Specialist**

#### Curriculum and Instruction 61 000835

Student Learning Outcomes—The graduate with an Education Specialist in Curriculum and Instruction will use the knowledge and skills obtained in the program to:

- Demonstrate a commitment to students and their learning.
- Understand the subjects he/she teaches and how to teach those subjects
- Be responsible for managing and monitoring student learning.
- Think systematically about his/her practice and learn from experience.
- Demonstrate his/her commitment as a member of learning communities.
- Develop a research agenda in his/her content field.
- Utilize research to improve instruction.
- Become a teacher leader.

This advanced program is designed for individuals planning careers in teaching and curriculum development. Most teaching certification specializations are included in the scope of this program. The student has a choice of approved areas of specialization.

To be accepted into this program, students must: (a) have achieved a cumulative graduate grade-point average of 3.25 on the master's degree or a combined score of 1000 on the verbal and quantitative portions of the Graduate Record Examination; (b) submit proof of teacher certification, or professional endorsement from any of the 50 states or territories, (c) have graduated from an NCATE or regionally accredited university, and (d) have had two years of successful teaching. Applicants must submit a copy of their last summative teaching evaluation, i.e., PBTE or similar evaluation form, or a letter from a superintendent, principal or professor attesting to their teaching ability and graduate study potential. A thesis is required. Sem. Hours

Aided by an adviser in the student's area of specialization and in consultation with the other members of the student's advisery committee, each student shall select courses in the area of specialization. To be accepted into this program, a student must present a masters degree in the area of teaching or with appropriate background courses.

## 

### Child and Family Development Courses

CFD 4250 Selected Issues in Child and Family Development (3) In-depth study of selected issues in child and family development. Each offering covers distinct issues. For CFD Majors, must be taken for 6 credit hours. May be repeated for a maximum of nine semester hours. Prerequisites: Junior standing or consent of instructor.

**CFD 4710 Internship (3)** Provides experience for students in cooperating business, agencies and organizations. May be repeated for a maximum of 12 semester hours. Prerequisites: CFD 2240 and departmental consent.

CFD 5236 Current Issues in Family Development (2) Study of current issues to assist in understanding family development. May be repeated for a total of 4 semester hours. Prerequisites: CFD 3230 or equivalent.

**CFD 5250 Special Problems in Lifespan of the Family (2)** Study of a variety of topics dealing with the development of families through the life cycle. May be repeated for a maximum of 6 semester hours. Prerequisites: 6 semester hours in family/individual development or consent.

CFD 5280 Professional Issues in Sexuality Education (3) Examination of issues related to sexuality education including program models, role of parents, research, and resource development with an emphasis on preparation for certification by the American Association of Sex Educators, Counselors and Therapists. Prerequisites: NUR 4030 or departmental approval.

CFD 6260 Seminar in Family and Individual Development (2-3) Intensive investigation and discussion of particular problems with family and individual development. Students may carry on minor research studies of a professional nature which may lead to a thesis. May be repeated for a maximum of 6 semester hours. Prerequisites: background in child development and family living.

### Curriculum and Instruction Courses

**EDCI 4000 Special Projects in Education (1-6)** Individual or group study of problems in special areas of interest. May be repeated for a maximum of 6 semester hours.

**EDCI 4130 The Middle School (3)** An exploratory course that includes an introduction to philosophy, organization, curriculum and instructional strategies appropriate to the middle school learner. Field experience in a middle school is required for initial certification students.

EDCI 4210 The Teaching of Reading in the Secondary School (2) Designed to prepare both the regular secondary teacher to handle reading problems common to his/her special subject matter area and the reading teacher to carry out a general reading program in the high school. Prerequisites: admission to Teacher Education Program; EDCI 2100 and PSY 2240, or equivalent.

**EDCI 4300 Educational Measurement and Evaluation (2)** Instruction in the use and interpretation of standardized tests, the construction of classroom tests, and the interpretation of test results.

EDCI 4314 Integration of Technology in Instruction (3) establishes and advances the use of computer technology for both teacher productivity and instructional integration into P-12 classrooms. Prerequisites: EDCI 2310 or consent of instructor.

EDCI 4340 Middle School Curriculum and Instruction (3) Middle school teaching strategies building upon middle level organization and curriculum, with particular emphasis on integration and interdisciplinary teaming. Prerequisites: admission to Teacher Education Program, PSY 4230 and EDCI 4130.

EDCI 4350 Elementary Science Teaching Strategies (3) Science concepts commonly developed in the elementary grades, with special emphasis on objective materials, field trips, experiments, laboratory and other activities. Enrollment is limited to students preparing to become elementary teachers. Prerequisites: admission to Teacher Education Program; completion of a physical science and biological science, each with labs, (EDCI 1310 and BIOL 1004) or (EDCI 1320 and EASC 1004 or CHEM 1104 or PHYS 1104).

EDCI 4830 Early Childhood Curriculum (3) Provides students with the theories and principles of curriculum development, knowledge, and skills of implementing integrated (developmentally and culturally appropriate) curriculum in early childhood (birth-8). Prerequisites: admission to Teacher Education Program and EDCI 2830 and 3850 for undergraduate students seeking certification in early childhood education.

**EDCI 5000 Special Projects (1-6)** Opportunities for individual or groups of students to pursue an emerging or special professional topic or issue. May be repeated for a maximum of 6 semester hours.

Prerequisites: consent of instructor.

**EDCI 5100 MAT Internship I (3)** Designed to provide relevant and practical application of the teaching/learning process within the actual classroom. Prerequisites: Admission to MAT program and evidence of a current, clear, State Highway Patrol and FBI criminal background check prior to beginning EDCI 5100.

**EDCI 5110 MAT Internship II (2)** Designed to provide relevant and practical application of the teaching/learning process within the actual classroom. Prerequisites: Admission to the MAT program and EDCI 5100. Must be the last course taken in the MAT program.

**EDCI 5120 Advanced Foundations of Education (3)** Focuses on legal issues, school funding, educational delivery systems, societal influences, philosophy, and history of education.

EDCI 5130 Middle School Foundations (3) A graduate course designed to acquaint middle school teachers with the underlying philosophy and tenants of the middle school organization. Prerequisites: Admission to Teacher Education, Admission to the Master of Arts in Teaching program.

**EDCI 5200 Advanced Educational Psychology (3)** Provides the graduate student in education with Psychological principles, processes, theories, and research from learning, development, motivation, and measurements as they relate to the educative process.

EDCI 5205 Methods and Materials for Literacy Enhancement (3) Examination, comparison and evaluation of recent and traditional methods and materials for literacy development, with an emphasis on language and literature.

EDCI 5208 Content Area Literacy (2) Prepare teachers to address reading/literacy needs common to middle and high school, focusing on promoting basic and higher-order literacy within the content areas. Prerequisites: Admission to the Master of Arts in Teaching program.

EDCI 5210 Assessment of Literacy Development (3) Prepare the graduate learner with theories, materials, and procedures of formal and informal assessment of student development in literacy for curricular decisions.

EDCI 5220 Practicum in Literacy Assessment (3) Provides the graduate student with a clinical experience in formal and informal literacy assessments for K through 12th grade students. Prerequisites: EDCI 5210; must be taken concurrently with EDCI 5230; UCM graduate students who have an approved program of study or consent of department chair.

EDCI 5230 Practicum in Instructional Techniques for Literacy Enhancement (3) Provides the graduate student with a clinical experience in curricular planning for literacy instruction for K through 12th grade students. Prerequisites: EDCI 5210; must be taken concurrently with EDCI 5220; UCM graduate students who have an approved program of study or consent of department chairperson.

EDCI 5250 Language Development in the Literacy Program (3) This course supports graduates studies in reading education by focusing on the subjects of language acquisition and curriculum development to enhance literacy for all students.

EDCI 5260 Evaluation of Abilities and Achievement in the Literacy Program (3) This course examines the capacity and achievement assessment processes implemented in schools and their effects on curricular decisions in literacy education.

EDCI 5300 Advanced Assessment and Evaluation (2) Provides instruction in the use and interpretation of standardized testing, the construction of formal and informal classroom assessment tools, and the interpretation of assessment results. Prerequisites: Admission to Master of Arts in Teaching program, or admission to Teacher Education program.

EDCI 5310 Advanced Educational Psychology: Classroom Behavior (2) An application of psychological principles and experimental findings to the behavioral problems involved in teaching and learning.

EDCI 5320 Curriculum Development and Assessment (3) Examines curriculum, its development, and how to assess curriculum and learning.

EDCI 5330 Classroom Discipline and Motivation (3) Designed to

help teachers advance their knowledge and skills in general classroom management and in helping the apathetic and/or behaviorally troubled student.

**EDCI 5340 Contemporary Instruction: Theory and Practice (3)** Foundations of the most recent research on instructional theory and practices.

**EDCI 5350 Supervision of Student Teaching (2)** Designed to meet the practical needs of elementary and secondary teachers who are responsible for the supervision of student teachers.

EDCI 5440 Middle School Curriculum and Instruction (3) A graduate course designed to introduce middle school teachers to effective teaching strategies and best practices found in exemplary middle schools. Prerequisites: Admission to MAT program or Admission to Teacher Education Program; and EDCI 5130.

EDCI 5850 The Child's Physical and Social World (3) Experiences with materials, techniques, and resources for broadening the child's awareness and understanding of his/her physical and social environment. Prerequisites: Admission to Teacher Education Program; PSY 2240 or equivalent.

EDCI 5900 Introduction to Research (3) Overview and planning for graduate school with an introduction and study of the major principles, tools, and techniques employed in educational research, including the development of a research prospectus.

**EDCI 6100 MSE Internship (3)** Designed to provide relevant and practical application of the teaching/learning process within the actual classroom. Prerequisites: EDCI 5900; Taken during the last 12 hours of the Program of Study, but prior to the Capstone (EDCI 6110).

**EDCI 6110 Capstone (2)** Designed to synthesize information from MSE coursework and classroom experiences. Culminates with a summative portfolio assignment reflecting NBPT Standards. Prerequisites: EDCI 6100.

**EDCI 6240 Supervision of the Literacy Program (2)** Examination of the supervisory problems concerned with literacy programs including program planning, program assessment, and effective instruction.

**EDCI 6340 Curriculum Design and Construction (3)** Designed to survey the theory and practice of curriculum development as determined by social and cultural change, learning theory, and the nature of knowledge. The processes of curriculum design and construction receive major emphasis. Prerequisites: EDCI 5320.

EDCI 6900 Readings in Education (1-5) For advanced students in education. Individual study and research regarding problems or areas of particular interest in education. A written report or reports will be required. May be repeated for a maximum of 5 semester hours.

**EDCI 6960 Research Problems (2)** Special investigation of an approved problem in the major field. A prospectus is required. May be repeated for a maximum of 6 semester hours. Prerequisites: EDCI 5900.

**EDCI 6990 Thesis (3)** Special investigation of an approved problem in classroom teaching resulting in a formal thesis. A prospectus is required. May be repeated for a maximum of 6 semester hours.

## Department of Educational Leadership and Human Development Lovinger 4101 •(660) 543-4341

## MASTER OF SCIENCE

## Counseling 53 000820

**Student Learning Outcomes**—The graduate with a Master of Science Degree in Counseling will use the knowledge and skills obtained in the program to:

- Know and understand human and personality development and how these domains affect individuals, and to apply this knowledge in his or her work with counselees.
- Know and understand how human diversity affects learning and development within the context of a global society and a diverse community of families.
- Know and understand the principles of measurement and assessment, for both individual and group approaches and to apply this knowledge in his/her professional work.
- Understand career development and planning processes across the life-span, and assist individuals in their career exploration, decision-making and planning.
- Know, understand, and use both PSYcho-educational and interactive group methods and techniques.
- Know, understand, and use planning and goal setting for the personal, social, educational, and career development of the individual.
- Know, understand, and use various methods for delivering responsive counseling services to individuals and groups in school and community settings.
- Know, understand, and use various methods to develop and maintain comprehensive school counseling programs for all students in schools and prevention program services for the broader community.
- Know, understand, and use technology as a management and counseling tool in promoting the personal, educational, social and career development of individuals.
- Understand, develop, and use professional relationships in the school, family and community, through consultation and collaboration to promote development of all individuals.
- Know, understand, and practice in accord with the ethical principles of the counseling profession.
- Know, understand, and adhere to the legal aspects of the role of the counselor in the school and community.
- Know, understand, and implement methods to promote his or her professional development and well-being.

The Counselor Education Program offers two degrees, the Master of Science in Counseling and the Education Specialist Degree in Human Services, Guidance and Counseling. The program is designed to provide academic preparation for students who desire to work as professional counselors in elementary and secondary schools and in community settings. The program is approved for the school counselor certificate issued by the Department of Elementary and Secondary Education (DESE). The Counselor Education Program also provides assistance to students who desire a planned program leading to renewal of or change in certification as school counselors and school Psychological examiners (SPE). Students may also select courses that fulfill academic requirements for registered play therapists (RPT) and licensed professional counselors (LPC). All students, including those seeking additional certification and licensure must apply to and be accepted by the graduate school and the Counselor Education program.

The Counselor Education Program operates within the framework of the American Counseling Association (ACA) Code of Ethics and Standards of Practice and the most current American School Counselor Association (ASCA) Code of Ethics. Students are expected to comply with the ACA and ASCA Codes of Ethics and all applicable University and Department rules, policies and bulletins, which are subject to change from time to time. **Admissions Criteria**—To be considered for admission to the Counselor Education Program, applicants must first be admitted to the Graduate School and provide the Counselor Education Admissions and Standards Committee with a completed application file that contains:

- 1. A completed Counselor Education Application Form.
- 2. Official transcripts of all undergraduate and graduate course work from any post secondary educational or professional institution or any other school experience following high school. To be considered for eligibility, the applicant's GPA must be 2.50 or higher in the total undergraduate course work, 2.75 or higher in the last 60 hours of undergraduate course work and 3.0 or higher for graduate course work. It is the applicant's responsibility to request and ensure that all official transcripts are on file.
- 3. An official report of the results for the student's Graduate Record Examination (GRE) taken during the last three years. To be considered for eligibility, a minimum combined score of 900 on the verbal and quantitative portions of the examination and 3.5 or greater on the analytical writing measure are required. Applicants who have completed a graduate degree from a regionally accredited institution may petition the Admissions and Standards Committee for an exception to the GRE requirement. (See Requirements for Progression in the Program, item 2.)
- 4. A resume with complete listing of previous educational and employment experiences.
- 5. Three recommendations, prepared within the last three years, on the Counselor Education Program Recommendation Form. One recommendation should be from a certified or licensed mental health professional, or counselor educator. All recommendations must be from non-relative individuals who have direct knowledge of the applicant's professional experience and can attest to the individual's potential to work effectively as a counselor.
- 6. An articulate and satisfactory essay explaining the impact of previous employment and professional experiences upon the decision to apply to the counselor education program, reasons for seeking the Master of Science Degree or Education Specialist Degree and appropriate future professional goals in counseling.
- 7. Such other information as deemed necessary and requested of the applicant by the Admissions and Standards Committee.
- 8. To be eligible for consideration, the applicant must also meet all other requirements for admission to graduate study as outlined in the general requirements for graduate school and all applicable department rules, policies and bulletins, which may be subject to change.

Admissions Process—Complete application files as described above must be submitted to the Counselor Education Admissions and Standards Committee. When the file is complete, the applicant must submit a written request for the Admissions and Standards Committee to review the file. Files are typically reviewed within two weeks from the date of request. Applicants with permission from the program coordinator may enroll in COUN 5110 Orientation to the Counseling Profession and/or COUN 4120 Foundations of Program Services as non-degree seeking students. Contact the Department of Educational Leadership and Human Development-Counselor Education Program for further information.

- Application files will be carefully reviewed for eligibility by the Admissions and Standards Committee. No student will be considered for admission unless the application file is complete as described above at the date of review. Applicants who do not meet admission criteria within two semesters of department course work will be considered ineligible for admission and will be denied admission on that basis. Applicants who are denied admission may appeal the decision to the Admissions and Standards Committee (see Appeals Process in student handbook).
- 2. If, in the best professional judgment of the Admissions and Standards Committee, the applicant meets the standards for eligibility and his/her file demonstrates the professional attitudes necessary to function effectively and within the current Codes of Ethics of the American Counseling Association and the American School Counselor Association, an interview may be scheduled with the counselor education program faculty.

3. At any time during the review process, should any information come to light which in the best professional judgment of the committee requires additional information, further follow-up or investigation, the applicant will be notified. Applicants whose records indicate an inability to conform to the professional and ethical standards will be denied admission. Applicants who are denied admission may appeal the decision to the Admissions and Standards Committee (See Appeal Process in Student Handbook)

The applicant is considered to be admissible and is rank ordered by the Admissions and Standards Committee if, in the best professional judgment of the Admissions and Standards Committee:

- a. the applicant meets all criteria stated herein,
- b. the interview confirms the individual's professional attitudes required to function effectively and ethically as a counselor, and
- c. the applicant has no impediment that would render him/ her ineligible for department endorsement on the school counseling certificate or recommendation for the LPC.
- 4. Admission is competitive among all applicants and admission is granted as class size permits according to rank.

#### **Requirements for Progression in the Program**

- Students must take COUN 5110 Orientation to the Counseling Profession as the first course in Counselor Education. The required Psychology classes and/or COUN 4120 Foundations of Program Services may be taken concurrently with COUN 5110. Course work completed prior to admission to the Counselor Education Program may not be accepted toward a program of study in Counselor Education.
- 2. Students who score lower than 3.5 on the GRE Analytical Writing must seek assistance for improvement of their writing skills and must demonstrate satisfactory improvement before seeking advanced status. Participation in the Learning Center at the Department of Academic Enrichment or equivalent remedial services is required.
- 3. A satisfactory program of study approved by the student's adviser, Chair of the Department of Educational Leadership and Human Development and the Dean of the Graduate School must be filed within one month after completion of 12 semester hours of graduate study. University and Counselor Education Program policies will govern the appropriate application of previously completed coursework.
- 4. After completion of the foundation courses students must meet requirements for advanced status. Advanced status requires a GPA of 3.0, an approved program of study, and demonstration of competencies in all foundation courses. They are then eligible to enroll in advanced courses. If in the best professional judgment of the Admissions and Standards Committee, an oral examination is necessary to establish competency to undertake advanced course activities, the student will be notified.
- 5. Advanced courses require graduate students to have direct contact with counselees in the school or community setting. Each graduate student is responsible for obtaining pre-approved written agreements with counselees and parents of minor children to observe, administer tests, conduct case studies, engage in counseling and other such activities to meet course requirements.
- 6. In clinical courses (practica and internships) the graduate student is responsible for obtaining a standard written agreement with a school district or a community setting to perform the activities required by the clinical courses and to establish a written plan with a certificated school counselor or licensed professional counselor who is approved by the counselor education faculty and willing to serve as a site supervisor. Students are required to complete a total of six (6) semester hours in COUN 6910 Internship in Counselor Education. The six (6) semester hours may be completed in either one or two semesters. Documentation of a total of 600 clock hours is required.
- 7. During one of the last two semesters before graduation, students are required to pass the comprehensive exit examination.
- Students are required to submit, one month before graduation, a complete and satisfactory portfolio detailing accomplishment of the program's student learning outcomes as related to MoSTEP and CACREP standards.

9. Students admitted to the program are expected to comply at all times with the current Codes of Ethics as set forth by ACA and ASCA. Students who choose to accept professional counseling positions prior to attaining full certification or licensure must agree to use the title, "Professional School Counselor in Training" or "Professional Counselor in Training", to practice within the boundaries of their competence, to work under the supervision of a fully certified or licensed counselor, and to secure, maintain and provide documentation of professional counselor liability insurance. Students must also comply with all current DESE regulations governing certification. Violation of the ACA or ASCA Codes of Ethics by a student may lead to disciplinary action, up to and including dismissal from the program. Students who are dismissed may appeal the decision through the regular appeal process as described in the policies of University of Central Missouri.

		UATE COURSES	Sem. Hours
FOUNDATIO			
COUNDAIN			. ว
COUN 51 COUN 41		Orientation to the Counseling Profession	
		Foundations of Program Services	
COUN 56		Introduction to Group Work	
COUN 55 PSY 45		Counseling Theories	3
	900 I	Introduction to Research	2
ADVANCED	o cou	IRSES (Require achievement of Advanc	ed Status)
COUN 51	130 <i>I</i>	Management of Program Services	3
COUN 52		Counseling Diverse Populations	3
COUN 53		Mental Health Issues in Counseling	
COUN 54		Career Development and Counseling	
COUN 57	720 /	Analysis and Diagnosis of the Individual	3
COUN 59		Practicum in Counseling	
COUN 69		Internship in Counselor Education	
CONCENT	RATIO	N - Students must complete all require	
		one of the following concentration	areas.
Elementary	Schoo	ol Counseling Concentration	9
PSY 52	220 /	Advanced Child Psychology	3
COUN 55	520 I	Introduction to Play Therapy	3
COUN 57		ntroduction to Assessment or	
EDSP 53	350 E	Evaluation of Students with Disabilities .	3
Secondary S	School	Counseling Concentration	9
PSY 42	230 F	Psychology of Adolescence	3
COUN 65	540 F	Parent and Family Counseling	3
COUN 57		Introduction to Assessment or	
EDSP 53	350 E	Evaluation of Students with Disabilities .	3
Community	Coun	seling Concentration	9
PSY 52	220	Advanced Child Psychology or	
PSY 42	230 F	Psychology of Adolescence	3
PSY 54		Marriage and Family Therapy or	
COUN 65		Parent and Family Counseling	3
PSY 45		Introduction to Psychological Measureme	
COUN 57		Introduction to Assessment	
MINIMUM		UATE HOUR TOTAL	

#### Certification Requirements for School Counselors—To

qualify for the Missouri Elementary Counselor Certificate, Grades K-8; Missouri School Counselor, Grades K-12; Missouri Secondary Counselor, Grades 7-12, persons must meet the following requirements: (1) A valid Missouri teaching certificate (elementary or secondary) as required to teach in the public schools of Missouri; or completion of an approved curriculum in teaching methods and practices and classroom management \* (2) Completion of a course in Psychology or Education of the Exceptional Child for two or more semester hours; (3) Achieve the qualifying score on the Praxis Examination for school counseling; (4) Completion of a master's or higher degree in school counseling, counseling or counseling psychology; (5) Completion of the following program of required courses or equivalent.

\*Individuals who do not possess a bachelor's degree in education from a state-approved teacher preparation program or hold a certificate to teach will need to take the following additional courses for certification as a school counselor in Missouri:

EDCI5330Classroom Discipline and Motivation (3 hrs.)EDCI5340Contemporary Instruction: Theory into Practice<br/>(3 hrs.)

License Requirements for Community Counselors-To qualify for the Missouri LPC persons must meet the following requirements: (1) Complete a master's or higher degree in counseling; (2) Achieve the qualifying score on the National Counselor Examination; and (3) Successfully complete a post degree supervision plan approved by the Missouri Committee for Professional Counselors.

Certification Requirements for School Psychological Examiners (SPE)-To qualify for the Missouri School Psychological Examiner Certificate, persons must meet the following requirements: (1) Complete a master's degree or higher in Counseling Psychology, Educational Psychology, Education of Counseling, (2) Completion of a DESE approved SPE certification program consisting of a minimum of twenty-four (24) semester hours of specific professional preparation coursework at the graduate level, and (3) Achievement of a qualifying score on the assessments designated by the State Board of Education.

### EDUCATION SPECIALIST

#### Human Services/Guidance & Counseling 61 000754

Applicants who hold a master's degree from an accredited institution are eligible to apply to The Graduate School for admission to the Education Specialist degree programs. Individuals interested in this degree should review the appropriate section of the graduate catalog for the general policies and requirements for this degree. To be accepted into the Guidance and Counseling Education Specialist program, students must have achieved a cumulative graduate GPA of 3.25 on the master's degree, a combined score of 900 on the verbal and quantitative portions, and 3.5 or greater on the analytical writing measure of the Graduate Record Examination. If an applicant has not achieved the admission criteria, a written request documenting evidence of potential success may be submitted to the Admissions and Standards Committee for consideration. All other application procedures for admittance to the Counselor Education Program apply to admission for the Education Specialist Degree

Students who desire to complete requirements for the elementary or secondary school counselor certificate in an education specialist program of study must satisfy requirements for the provisional school counselor certificate and the developmental Psychology courses prior to beginning the education specialist degree program of study. The remaining requirements for certification may be fulfilled as part of the education specialist degree.

Working with a program adviser, each student will develop an individualized program of study that is appropriate to career objectives, certification, or licensure goals. Currently, courses are available for specialization in school counseling, licensed professional counseling, play therapy, and psychological examiner. School counselors may want to customize their programs of study to become eligible for the school counselor's advanced certificate offered by the Missouri Department of Elementary and Secondary Education. An approved post-degree supervision plan is required for the Licensed Professional Counselor by the Missouri licensure committee. Candidates applying for licensure on the basis of a master's degree must have a minimum of 3,000 hours of post-degree supervised experience. Candidates applying for licensure on the basis of an education specialist's degree must document a minimum of 1,500 hours of post-degree supervised experience. Sem. Hours

## **Counseling Courses**

COUN 4000 Special Projects in Counselor Education (1-5) Individual or group study of complex problems or issues in special areas of interest. May be repeated for a maximum of 5 semester hours. Prerequisites: Consent of program coordinator.

COUN 4120 Foundations of Program Services (3) An overview of school guidance programs and counseling services in community settings. History, philosophy, leadership/management skills, program planning, implementation, and collaboration are studied.

COUN 5110 Orientation to the Counseling Profession (3) Includes professional ethics, legal issues, organizations, and areas of specialization. Introduction to the work of counselors, impact of experiences on counseling and professional development. Required first course in program.

COUN 5130 Management of Program Services (3) An in-depth study of program management skills in school and community settings including job descriptions, programs, facilities, funding, evaluation and program revision in settings of professional counselors. Prerequisites: COUN 5510, COUN 5610 and PSY 4520 or EDCI 5900, and Advanced Status.

COUN 5230 Counseling Diverse Populations (3) Explores race, ethnicity, gender, sexual orientation, socio economic class and ability as characteristics of diversity. Counseling skills will be refined to reflect understanding of impact of diversity. Prerequisites: COUN 5510, COUN 5610 and PSY 4520 or EDCI 5900, and Advanced Status.

COUN 5320 Mental Health Issues in Counseling (3) Use modern technology and other resources to explore mental health issues relevant to professional counselors who work with youth in an educational or therapeutic environment. Prerequisites: COUN 5510, COUN 5610 and PSY 4520 or EDCI 5900.

COUN 5410 Career Development and Counseling (3) Career development and counseling models and the delivery of educational and career information in school and community settings. Prerequisites: COUN 5510, COUN 5610 and PSY 4520 or EDCI 5900.

**COUN 5510 Counseling Theories (3)** An overview of counseling theories that provides a consistent model(s) to conceptualize client presentation. Essential interviewing skills and selection of appropriate counseling interventions are included. Prerequisites: COUN 5110 and COUN 4120.

COUN 5520 Introduction to Play Therapy (3) Provides an overview of play therapy, exploring play behavior as a language used by children. Major theories and associated techniques will be presented. Prerequisites: PSY 5220, COUN 5510, COUN 5610 and PSY 4520 or EDCI 5900, Advanced Status and consent of instructor.

COUN 5610 Introduction to Group Work (3) Provides students with an understanding of the dynamics of group interaction and the role of the counselor in helping individuals achieve self-direction. Prerequisites: COUN 5110, COUN 4120, or concurrently and interview with instructor before class begins.

COUN 5710 Introduction to Assessment (3) Commonly used standardized tests, including use, administration, scoring, recording, interpretation, and technology. A charge is made for use of testing materials. Prerequisites: COUN 4120 and PSY 4520 or EDCI 5900.

COUN 5720 Analysis and Diagnosis of the Individual (3) Application of basic principles and methods of case conceptualization, assessment, and identification of PSYchoeducational status and related ethical and legal considerations. Testing materials fee applies. Prerequisites: COUN 5510, COUN 5610 and PSY 4520 or EDCI 5900; Advanced Status is also required.

COUN 5900 Practicum in Counseling (3) Supervised practice of counseling in an approved setting appropriate to the student's program of study. Both individual and group supervision are provided. Prerequisites: COUN 5510, COUN 5610 and PSY 4520 or EDCI 5900; Advanced Status, and consent of Program Coordinator. COUN 5520 is also required for students with area of concentration in Elementary School Counseling.

COUN 6000 Special Projects in Counseling (1-3) Individual or

group study of complex problems or issues in special areas of interest. May be repeated as appropriate for an approved program of study. Prerequisites: consent of program coordinator.

COUN 6540 Parent and Family Counseling (3) An introduction to parent education and family counseling theories as applied in school and community settings. Prerequisites: COUN 5510, COUN 5610 and PSY 4520 or EDCI 5900, and Advanced Status.

COUN 6550 Advanced Counseling Theories (3) An in-depth study of selected counseling models and practices and integration with the individual student's counseling model. Prerequisites: COUN 5510 or permission of instructor.

COUN 6620 Advanced Group Work (3) Under close supervision of instructor, co-facilitates a laboratory group including pre- and postgroup planning. Prerequisites: COUN 5900 and screening interview with and consent of instructor.

COUN 6800 Readings in Counselor Education (1-5) Individual study and research regarding areas of particular interest in counselor education. May be repeated for a maximum of 5 semester hours. Prerequisites: consent of program coordinator.

**COUN 6890 Thesis (3-6)** Special investigation of an approved problem in counselor education resulting in a formal thesis. A prospectus is required.

COUN 6910 Internship in Counselor Education (3-6) Supervised practice at an approved, specialty-related site. Students are expected to fulfill professional roles and functions under supervision of a certificated or licensed counselor. Prerequisites: COUN 5130, COUN 5510, COUN 5610 and PSY 4520 or EDCI 5900, Advanced Status, Grade of A or B in COUN 5900; and consent of program coordinator.

COUN 6920 Advanced Practicum in Counselor Education (3) Individual or group supervised practice in a specified area of counselor education in an approved setting appropriate to the student's program of study. Prerequisites: Consent of program coordinator.

## MASTER OF SCIENCE IN EDUCATION

## Elementary School Administration 51 000764

## Secondary School Administration 51 000765

The graduate with the Master of Science in Education degree in School Administration will use the knowledge and skills obtained in the program to:

- Promote the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community.
- Promote the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.
- Promote the success of all students by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.
- Promote the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.
- Promote the success of all students by acting with integrity, fairness, and in an ethical manner.
- Promote the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.

A student may pursue the Master of Science in Education Degree in Elementary School Administration or Secondary School Administration. To be accepted into either of these options, a student must have a minimum overall undergraduate grade-point average of 2.75 or a 3.0 grade-point average during the last 60 semester hours of undergraduate study. Applicants who do not meet any of the above criteria must achieve a minimum of a 3.50 graduate gradepoint average during their first 12 hours of graduate study which must include required degree courses before being accepted into the program. Students must also submit proof of teacher certification. GRE results are required of all candidates for advising purposes.

A student's program must be planned with the advice and consent of a department adviser. The MSE in School Administration requires that a minimum of 24 semester hours be taken in school administration, with additional courses to include a minimum total of 32 semester hours. An internship is required and represents a significant research component within the program. Graduation requirements also include the satisfactory completion of a program portfolio demonstrating competency in meeting program standards.

For information concerning specific course requirements contact the Department of Educational Leadership and Human Development (School Administration) in Lovinger 4101. Prior to filing a Program of Study, a student must hold a valid teaching certificated and have completed a minimum of two years of appropriate teaching experience.

The MSE in School Administration includes the course requirements for initial certification as an Elementary or Secondary Principal by the Missouri Department of Elementary and Secondary Education. Initial certification requirements include the completion of a masters degree in educational leadership; completion of a course in Psychology and Education of the Exceptional Child; a valid Missouri certificate to teach; a minimum of two years of teaching experience; and the satisfactory completion of the School Leaders Licensure Assessment designated by the Missouri State Board of Education.

An applicant for an initial principal's certificate must receive a recommendation for certification from the Director of Clinical Services and Certification. Recommendation will be based upon the completion of all requirements established by the Missouri Department of Elementary and Secondary Education, including an approved program of at least 24 semester hours of graduate credit focused upon administration and supervision of either the elementary or secondary school.

A program may be planned which could lead to endorsement and certification as a middle school principal, a vocational school director, or a special education administrator. All of these endorsements require satisfactory completion of the School Leaders Licensure Assessment. Inquiries regarding certification in school administration can be directed to the Director of Clinical Services and Certification at (660) 543-8441 or to the Department of Educational Leadership and Human Development (660) 543-4341.

#### **Elementary School Administration**

	- / -	Sem. Hours
REQUIRE		DUATE COURSES
	-	Foundations of Ed. Admin
		in first 6 hours of program)
FDCI		Introduction to Research
(should	be take	en in first 12 hours of the program) 3
EDAD	5120	School Law
EDAD	5130	School Supervision
EDAD	5710	Public School Finance
EDAD	5720	Administration of the Middle Grades
EDAD	5730	School Personnel Admin
EDCI	5320	Curriculum Development and Assessment 3
EDAD	5420	Elementary School Administration
EDAD	6971	Spring Internship in School Admin *
EDAD	6969	Fall Internship in School Admin.* or
EDAD	6972	Summer Internship in School Admin *2
Departm	ent app	proved graduate electives
		DUATE HOUR TOTAL

\* A student must take 4 hours of internship in the following combinations only: Fall/Spring, Spring/Fall or Spring/Summer.

## Secondary School Administration

REQUIRE	D GRA	DUATE COURSES
EDAD	5110	Foundations of Ed. Admin
(must b	e taken	in first 6 hours of program)
EDCI	5900	Introduction to Research
(should	be take	en in first 12 hours of the program
EDAD	5120	School Law
EDAD	5130	School Supervision
EDAD	5710	Public School Finance

EDAD	5720	Administration of the Middle Grades
EDAD	5730	School Personnel Admin
EDCI	5320	Curriculum Development and Assessment 3
EDAD		Secondary School Administration
EDAD	6971	Spring Internship in School Admin *
EDAD	6969	Fall Internship in School Admin.* or
EDAD	6972	Summer Internship in School Admin *2
		roved graduate electives
MINIMU	M GRAE	DUATE HOUR TOTAL

\* A student must take 4 hours of internship in the following combinations only: Fall/Spring, Spring/Fall or Spring/Summer.

#### MASTER OF SCIENCE

#### College Student Personnel Administration 53 000770

The mission of the Master of Science degree program in College Student Personnel Administration is to prepare outstanding generalists for a broad range of entry-level positions in higher education. The curriculum emphasizes the integration of theory and practice in both classroom and field-based settings in order to graduate professionals with the necessary knowledge, skills, dispositions, commitment to ethics, respect for diversity, and caring to enrich the lives of students with whom they work. The curriculum meets the standards set forth by the Council for the Advancement of Standards in Higher Education for Student Affairs graduate preparation programs.

The program consists of 39 credit hours and is designed to be completed within two academic years and the intervening summer. Required courses comprise 33 hours and six are elective. Three hundred hours of supervised practice comprise the three credits of internship which are required for graduation.

The strength of the CSPA program is the close relationship and partnership that exists between the program and student affairs professionals on the campus. Practitioners in student life, housing, student activities, the campus union, and a variety of other settings are very involved in mentoring and teaching students in the program. Students benefit from working closely with active practitioners who are recognized leaders in their areas of expertise.

**Admission**—Applicants should submit a transcript showing an earned bachelor's degree from an accredited institution with an overall undergraduate grade-point average of at least 2.70, or a 3.0 in the final 60 hours (requirements for those receiving a graduate assistantship may be higher). Candidates must also submit a writing sample describing his or her career goal and how the academic program fits with that goal. Lastly, two letters of recommendation are required. One letter should come from a former professor, while the second should be completed by a work supervisor.

**Student Learning Outcomes**—Learning objectives have been set forth, and are revised periodically, for students preparing to practice as university administrators. These objectives include:

### **General Objectives:**

- Students will learn to interact with others with sensitivity and understanding, to listen effectively to the words and ideas of others, to communicate orally and in writing with appropriateness and precision, to be able to examine their own personal values and issues that impact their relationships.
- Students will learn to conduct themselves professionally and in compliance with NASPA (2004) and/or ACPA (1992) ethical standards.

Further, upon completion of the program, students are expected to demonstrate mastery and/or satisfactory attainment of the following topics:

#### **Student Affairs Administration**

- Higher education culture, governance structures, and politics.
- Leadership and organizational theories.
- Higher education law.
- Higher education finance.
- Student affairs functions and roles.
- History of higher education.
- Staff selection, development, and retention.
  - Professional standards and benchmarks.

Sem. Hours

## COLLEGE OF EDUCATION

#### • Professional ethics.

Consultation skills.

#### Student Development

- Knowledge of student development theory and its application.
- Characteristics of college students including subcultures.
- Knowledge of effective college environments and learning communities.
- Assessment instruments relevant to college students.
- Techniques to construct programs and events.

#### Assessment

- Research design and data analysis.
- Skill in statistics sufficient to interpret research reports and to participate in research projects
- Skill in selecting, administering, and interpreting standardized group assessments.
- Competence in determining the effectiveness of programs and policy.

#### **Professional Development**

- Knowledge of professional issues and trends.
- Involvement in professional organizations.
- Writing skill sufficient to prepare clear and understandable reports. and descriptions of programs and services.
- Commitment to life-long professional development.
- Strong interpersonal communication skills.

**Program of Study**—A candidate's program must be planned with the advice and consent of the program coordinator. Requests for exceptions to admission or program requirements may be made to the program coordinator. For information about specific course requirements, candidates should contact the Department of Educational Leadership and Human Development, College Student Personnel Administration program, in Lovinger 4101.

		Sem. Hours
REQUIRE	D GRA	DUATE COURSES
EDAD	5811	History of Higher Education
EDAD	5812	College Student Personnel Administration 3
EDAD	5813	Assessment and Program Evaluation
		in Student Affairs
EDAD	5821	The College Student
EDAD	5822	Student Development Theories
EDAD	5823	Team Development and Group Dynamics 3
EDAD	5831	The Law in Higher Education
EDAD	5832	Governance & Finance in Higher Education3
EDAD	5833	Leadership and Organizational Development
		in Student Affairs
EDAD	5841	Seminar in Higher Education
EDAD	5899	Internship in Student Affairs
GRADUA	TE ELEC	CTIVES IN RELATED AREAS 6
MINIMU	M GRAI	DUATE HOUR TOTAL

## EDUCATION SPECIALIST SCHOOL ADMINISTRATION

Elementary School Principalship 61 000766

## Secondary School Principalship 61 000768

## Superintendency 61 000767

The graduate with the Education Specialist degree in School Administration will use the knowledge and skills obtained in the program to:

- Promote the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community.
- Promote the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.
- Promote the success of all students by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.
- Promote the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.
- Promote the success of all students by acting with integrity, fairness,

and in an ethical manner.

• Promote the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.

This advanced program is designed to prepare students for a career in administration. The student has a choice of areas specialization from one of the following areas: Elementary School Principalship, Secondary School Principalship, and Superintendency.

If one's interest is certification in school administration, the student must have a master's degree in educational administration, or in a certifiable area recognized in Missouri, from a college or university meeting approval of the Missouri Department of Elementary and Secondary Education. If the student does not have initial school administrator's certification, the program will be developed to include required courses.

To be accepted into any one of the above options the student must have a minimum overall graduate grade point average of 3.25. Candidates for all options must submit GRE results for advisery purposes. Applicants who do not meet any of the above criteria will be classified as a "non-degree student" until achieving a minimum graduate grade-point average of 3.50 during their first nine hours of graduate study in courses appropriate to the degree program and prior to being accepted into the program.

The program includes a formal research component consisting of a three-hour research problem. Upon completion of the program, satisfactory completion of the School Superintendent Assessment or School Leader Licensure Assessment is required for candidates pursuing superintendency certification or initial principal's certification.

## Education Specialist degree program for students who currently hold or are eligible for principal's certification.

		Sem. Hours
REQUIRED	) grai	DUATE COURSE
EDAD :	5730	School Personnel Administration *
EDAD :	5760	School and Community Relations
EDAD :	5770	Instructional Leadership and
		School Improvement
EDAD	6120	Advanced School Law
EDAD	6720	School Facilities
EDAD	6960	Research Problems
EDCI	6340	Curriculum Design and Construction
PSY 4	4520	Statistics for the Behavioral Sciences

\* Only required if course was not taken in the Master's program.

#### Option: Elementary School Principalship,

	Second	ary School Principalship
EDAD	5420	Elementary School Administration *
EDAD	5520	Secondary School Administration *
EDAD	6969	Fall Internship in School Administration * or
EDAD	6971	Spring Internship in School Administration * or
EDAD	6972	Summer Internship in School Administration * 2
EDAD	5740	Administration of Support Services
EDSP	4700	IEP and the law
INST	5390	Educational Technology Leadership2
* Only re	equired i	f course was not taken in the Master's program or if
needed f	for addit	ional certification electives (if necessary).
MINIMU	M GRA	DUATE HOUR TOTAL
Option:	Superin	tendency
Option: EDAD	Superin 6700	tendency
ÉDAD EDAD	6700	School District Administration
ÉDAD EDAD EDAD	6700 6710	School District Administration
ÉDAD EDAD EDAD EDAD	6700 6710 6971	School District Administration       3         Adv. School Finance.       3         Spring Internship in School Admin.**       2
ÈDAD EDAD EDAD EDAD EDAD	6700 6710 6971 6969	School District Administration3Adv. School Finance.3Spring Internship in School Admin.**2Fall Internship in School Admin** orSummer Internship in School admin.**2
ÉDAD EDAD EDAD EDAD EDAD Elective	6700 6710 6971 6969 6972 es (if nec	School District Administration3Adv. School Finance.3Spring Internship in School Admin.**2Fall Internship in School Admin** orSummer Internship in School admin.**2
ÉDAD EDAD EDAD EDAD Elective MINIMU ** Studer	6700 6710 6971 6969 6972 es (if nec M <b>GRA</b>	School District Administration       3         Adv. School Finance.       3         Spring Internship in School Admin.**       2         Fall Internship in School Admin** or       2         Summer Internship in School admin.**       2         essary)       2

# Education Specialist degree program for students without an MSE in School Administration.

		Sem. Hours
REQUIRE	D GRA	DUATE COURSES
EDAD	5110	Foundations of Educational Administration (This
course	must be	taken in the first semester of the program.) $\ldots$
EDAD	5120	School Law
EDAD	5130	School Supervision
EDAD	5710	Public School Finance
EDAD	5730	School Personnel Administration
EDAD	5760	School and Community Relations
EDAD	5770	Instructional Leadership and
		School Improvement
EDAD	6960	Research Problems
PSY	4520	Stat. Behavioral Sciences
OPTION	: Eleme	ntary School Principalship 61 000766 13
EDAD	5420	Elementary School Admin
EDAD	5720	Administration of the Middle Grades
EDCI	5320	Curriculum Development and Assessment3
EDAD	6971	Spring Internship in School Admin**
EDAD	6969	Fall Internship in School Admin.** or
EDAD	6972	Summer Internship in School admin.**2
		DUATE HOUR TOTAL
OPTION	: Secon	dary School Principalship 61 00076813
EDAD	5520	Secondary School Admin
EDAD	5720	Administration of the Middle Grades
EDCI	5320	Curriculum Development and Assessment
EDAD	6971	Spring Internship in School Admin**
EDAD	6969	Fall Internship in School Admin.** or
EDAD	6972	Summer Internship in School admin.**
//		
OPTION	: Superi	ntendency 61 00076716
EDAD	6700	School District Administration
EDAD	6710	Adv. School Finance
EDAD	6720	School Facilities
EDAD	6971	Spring Internship in School Admin**
EDAD	6969	Fall Internship in School Admin.** or
EDAD	6972	Summer Internship in School admin.**
EDCI	6340	Curriculum Design and Construction
MINIMU	M GRAI	DUATE HOUR TOTAL
** Students must take 4 hours of internships in the following		
		only: Fall/Spring, Spring/Fall, or Spring/Summer.
, , , , , , , , , , , , , , , , , , , ,		

## DOCTOR OF EDUCATION

Students may pursue a Doctor of Education (Ed.D.) in Educational Leadership at the University of Central Missouri. The degree is conferred by the University of Missouri-Columbia. The program uses a cohort format that requires the student to complete required course work in two years. A dissertation follows the coursework. Students are accepted into the cohort group very two years by meeting entrance requirements which include a Master's or Education Specialist Degree, a substantiated goal of Educational Leadership, GRE scores, undergraduate and graduate GPA, evaluation of a writing assessment and a personal interview. The curriculum includes the following broad themes:

Leadership Theory & Practice, Organizational Analysis, Analyzing Educational Policy, Content & Context of Learning, and Research, Inquiry & Evaluation.

Study commences with a summer schedule on the University of Missouri-Columbia campus. Fall and Spring semester courses are taught at UCM by Central Missouri faculty. Following a second summer of study in Columbia and Fall and Spring study at UCM, students enter the dissertation stage of the degree. For more information contact the Department of Educational Leadership and Human Development: Educational Administration program in Lovinger 4101 or call (660) 543-4341.

### Education Administration Courses

**EDAD 5000 Special Projects (1-5)** Individual or group study of selected problems/issues in special areas of interest. May be repeated for a maximum of 5 semester hours.

EDAD 5110 Foundations of Education Administration (3) An introductory course in school administration.

EDAD 5120 School Law (3) An introductory class in school law for teachers and administrators with a special emphasis upon Missouri school law. Prerequisites: EDAD 5110 or concurrently for School Administration majors only.

EDAD 5130 School Supervision (3) An intensive study of the problems, processes and techniques in the evaluation, supervision, and improvement of the institutional programs at the elementary and secondary levels of the school. Prerequisites: EDAD 5110 or concurrently for School Administration majors only.

EDAD 5150 Ethical Systems in Social Foundations (3) This course provides advanced study in ethical systems of decision-making in educational leadership through philosophic/social theories and case studies.

**EDAD 5420 Elementary School Administration (3)** The organization, administration and problems relating to elementary school administration. Prerequisites: EDAD 5110 or concurrently for School Administration majors only.

**EDAD 5520 Secondary School Administration (3)** The organization, administration and problems relating to secondary school administration. Prerequisites: EDAD 5110 or concurrently for School Administration majors only.

**EDAD 5710 Public School Finance (3)** A basic course in theory and practice of public school finance. Prerequisites: EDAD 5110 or concurrently for School Administration majors only.

EDAD 5720 Administration of the Middle Grades (3) This course addresses organizational and educational issues relevant to the administration of the middle (5-9) grades.

EDAD 5730 School Personnel Administration (3) The organization and administration of school personnel activities and related problems. Prerequisites: EDAD 5110 or concurrently for School Administration majors only.

EDAD 5740 Administration of Student Support Services (3) An exploration of the support services within school districts as well as outside services available to school districts.

EDAD 5760 School and Community Relations (3) Communication and related problems in education.

EDAD 5770 Instructional Leadership and School Improvement (3) This course will focus on the leader's role in creating a positive learning climate that maximizes teacher and student performance.

EDAD 5811 Higher Education (3) History of higher education and student affairs in America. Focus on development of policies, practices, and culture of colleges and universities.

EDAD 5812 College Student Personnel Administration (3) Organization and administration of student personnel services in higher education.

EDAD 5813 Assessment and Program Evaluation in Student Affairs (3) Assessment and program evaluation models/techniques designed to address college environments, students' needs, developmental levels, and learning outcomes, as well as organization and program effectiveness. Prerequisites: none.

EDAD 5821 The College Student (3) The college student in contemporary society; characteristics, attitudes, values, needs, pressures, and concerns.

**EDAD 5822 Student Development Theories and Practice (3)** An in-depth examination of major theoretical models and their application. Prerequisites: EDAD 5812 or consent of program coordinator.

EDAD 5823 Team Development and Group Dynamics (3) Application of team development research, theories, and constructs to various higher education contexts. Emphasis on the study of teams through the lens of organizational dynamics. Prerequisites: none. EDAD 5830 The Junior/Community College (3) History, development, and current concerns of the junior/community college.

EDAD 5831 The Law in Higher Education (3) Sensitizes students to a variety of legal issues in higher education and creates an awareness of areas within the student personnel field where potential litigation could result.

EDAD 5832 Governance and Finance in Higher Education (3) Introduction to the entities involved in campus governance on a college campus. Focus on the budget process and dilemmas that colleges and universities face. Prerequisites: none.

EDAD 5833 Leadership and Organizational Development in Student Affairs (3) Important leadership and organizational theories and constructs and their application to various higher education contexts. Prerequisites: none.

EDAD 5841 Seminar in Higher Education (3) An overview and critical analysis of issues and concerns common to higher education institutions.

EDAD 5851 Enrollment Management Theory and Practice (3) Principles and practices of enrollment management focusing on the core functions of marketing, recruitment, retention, service and enrollment manager role in the college setting. Prerequisites: Admission to the College Personnel Services program or consent of instructor.

EDAD 5880 Practica in College Student Personnel (2) A supervised work experience in college student personnel. May be repeated with no more than 2 semester hours in a single student personnel functional area for a maximum of 8 semester hours. Prerequisites: Consent of instructor.

EDAD 5899 Internship in Student Affairs (1-3) Direct work experience in a student affairs functional area. May be repeated for credit. Three credits are required for graduation from the program. Prerequisites: Consent of the Instructor.

EDAD 6120 Advanced School Law (3) School law for teachers and administrators plus a study of function and structure of courts and legal problems involving school finance, school property, and school board policy. Prerequisites: EDAD 5120.

EDAD 6140 Seminar in Educational Administration (2) An overview and critical analysis of problems common to educational administration. Prerequisites: 15 semester hours in school administration.

EDAD 6700 School District Administration (3) The administrative and related functions of the school superintendency. Prerequisites: EDAD 5420 or EDAD 5520.

EDAD 6710 Advanced School Finance (3) An advanced course in school finance and business management. Prerequisites: EDAD 5710.

EDAD 6720 School Facilities (3) School facilities: planning, construction, operation and maintenance. Prerequisites: EDAD 5420 or EDAD 5520.

**EDAD 6900 Readings in Higher Education** (1-5) Individual study and research in higher education. May be repeated for a maximum of 5 semester hours.

EDAD 6960 Research Problems (3) A research investigation of an approved problem in school administration resulting in a research paper. A prospectus is required. Prerequisites: EDCI 5900.

**EDAD 6969 Fall Internship in School Administration (2)** The fall course of a year-long internship designed to provide practical experience in school administration. May be repeated for additional certification. Prerequisites: EDAD 5110 or concurrently for Education Administration majors only.

**EDAD 6971 Spring Internship in School Administration (2)** The spring course of a year long internship designed to provide practical experience in school administration. May be repeated for additional certification. Prerequisites: EDAD 5110 or concurrently for Education Administration majors only.

EDAD 6972 Summer Internship in School Administration (2) A field experienced based course that occurs over the summer semester. Designed to provide practical experience in school administration. Prerequisites: EDAD 6971 and departmental approval.

EDAD 6980 Internship in Higher Education (1-6) Practical experience in student personnel administration and/or other administrative experience in an institution of higher education. May be repeated for a maximum of 6 semester hours. Prerequisites: EDAD 5800 or EDAD 5830.

**EDAD 6990 Thesis (3-6)** Special investigation of approved problem in school administration resulting in a thesis. A prospectus is required. Prerequisites: EDCI 5900 and PSY 4520.

## MASTER OF SCIENCE

### Educational Technology 53 000846

**Student Learning Outcomes**—The graduate with a Masters of Science in Educational Technology degree will use the knowledge and skills obtained in the program to:

- Demonstrate the use of various forms of technology integration in the classroom environment including word-processing, databases, spreadsheets, educational applications, presentation programs and the Internet.
- Demonstrate the ability to teach with and about technology.
- Apply appropriate theories and reflective models in educational technology settings.
- Exhibit professionalism and ethical behavior.
- Provide leadership in the field of educational technology.
- Actively participate in the educational process by applying cuttingedge technologies that infuse the most current and effective strategies into the learning process.
- Develop capabilities for applying technologies as a tool in the learning environments and designing materials for the classroom.

Professional studies in educational technology provide individuals desiring to become teachers, educational technology coordinators, and school administrators with technological concepts and skills, field experiences, instructional technology leadership skills, and a foundation in educational research related to the application of technologies in education.

Acceptance into the program requires three letters from references who can attest to the applicant's professional and academic abilities, a personal interview, a demonstrated working knowledge of computers, and one of the following: a 2.75 or higher cumulative GPA or a GPA of 3.0 on the last 60 undergraduate hours. Applicants who do not meet one of the above must work with a departmental adviser or graduate coordinator to design a program and must complete the first 12 hours of that program (including the research course) with a minimum GPA of 3.5 to be accepted. Students without background courses in Education and Educational Technology may be required to complete up to 15 hours of coursework or present a desirable portfolio prior to taking graduate-level courses. A Bachelor of Science in Education is strongly recommended. If students wish to work in a school teaching environment, copies of their last summative teaching evaluations, i.e., PBTE or similar evaluation form or a letter from a school superintendent, principal or professor attesting to teaching ability and graduate school potential must be submitted. Principles of Instructional Development, INST 4300, is required prior to admission to the program or in the first semester of enrollment. Som Hours

		Sem. Hours	
REQUIRED GRADUATE COURSES			
INST	5130	Foundations of Educational Technology 3	
INST	5330	Educational Product Development	
INST	5340	Teaching with Tele-Learning Technologies 3	
INST	5360	Educational Computing Systems	
INST	5390	Educational Technology Leadership2	
INST	5400	Advanced Production of	
		Educational Multimedia	
INST	6930	Internship in Educational Technology	
EDCI	5900	Introduction to Research	
GRADUATE ELECTIVES IN RELATED AREAS			
MINIMUM GRADUATE HOUR TOTAL			

#### Instructional Technology Courses

INST 4400 Design and Production of Media for Instruction (3) Design and production of print-based, computer-based, and videobased instructional materials that are related to subject areas or grade levels. Includes application of hypermedia and multimedia technology to the design and production of educational materials. A charge is made for expendable materials. Prerequisites: INST 4300 (Instructional Technology minors) or LIS 4200 (Library Science majors) or consent of instructor.

**INST 4005 Special Projects in Instructional Technology (1-5)** Individual or group study of problems in special areas of interest. May be repeated for a maximum of 5 semester hours.

**INST 4330 Technology Troubleshooting for Educators (2)** Provides pre-service and in-service educators with the knowledge and skill to operate, maintain and troubleshoot (service) the various hardware devices and software found in schools. Prerequisites: EDCI 2310 or consent of the instructor.

INST 4300 Principles of Instructional Development (3) Analysis and application of systematic approaches to the development of technology-based instruction. Includes the development of knowledge and skill in using hypermedia and multimedia technology. Prerequisites: INST 3100 or consent of instructor.

**INST 4310 Fund Development for Educational Technology (1)** Practical understanding and skills related to the creating fundable ideas, locating funding sources, writing competitive proposals, and manage funded educational technology projects.

**INST 4318 Telecommunications in Education (3)** Provides students in education with the concepts and skills needed in using telecommunications networks for instructional purposes, research, and information access and delivery. Prerequisites: EDCI 2310 or equivalent experience.

**INST 4920 Practicum in Instructional Technology (1)** Participation in field experiences that provide practice with teaching methodology applicable specifically to the problems and procedures encountered when working with instructional technology. May be repeated for a maximum of 4 semester hours. Prerequisites: INST 4400 and LIS 4740.

**INST 5130 Foundations of Educational Technology (3)** Provides historical, sociological, philosophical, and research foundations for applying computer-related technologies in educational settings. Prerequisites: Admission to Educational Technology, MS Degree or consent.

**INST 5330 Educational Product Development (3)** Evaluation of computer authoring and scripting environments and their application to the design of interactive multimedia educational products. Prerequisites: INST 4300 or consent of instructor.

**INST 5340 Teaching with Tele-Learning Technologies (3)** Provides technology specialists and teachers with methods and strategies for teaching lessons using telelearning technologies. Prerequisites: INST 5130 or consent of instructor.

**INST 5360 Educational Computing Systems (3)** Provides knowledge and experience in setting up educational computing systems, implementing software usage, and managing related activities. Prerequisites: INST 5130.

**INST 5390 Educational Technology Leadership (2)** Provides educational technology coordinators with knowledge for managing the change process in schools; leadership in staff development, facilities and resource management. Prerequisites: INST 5130.

**INST 5400 Advanced Production of Educational Multimedia (3)** Provides advanced techniques for the development of educational multimedia products and the methods and strategies for teaching the use of technology tools. Prerequisites: INST 5330.

**INST 6920 Advanced Practicum in Instructional Technology (2)** Practical experience in appropriate areas of instructional technology. May be repeated for a maximum of 6 semester hours. Prerequisites: INST 4920.

**INST 6930 Internship in Educational Technology (3)** Practical experience in the use, management, evaluation, and application of

technology resources to support instruction in classroom settings. Prerequisites: Consent of instructor.

**INST 6960 Research Problems in Instructional Technology (2)** Special investigation of an approved problem in the major field resulting in a research paper. A prospectus is required. May be repeated for a maximum of 6 semester hours. Prerequisites: EDCI 5900 or LIS 5610.

## MASTER OF SCIENCE

### Library Science and Information Services 53 000775

The emphasis of the Library Science and Information Services program is the education of school library media specialists. It is the only graduate program in Missouri that exclusively targets education for school librarians. The program is organized around the philosophy that the role of the school library media specialist is that of a teacher and a generalist with specialization in information services for schoolage audiences. The curriculum is designed with the basic assumption that active learning is more effective than passive learning and that hands-on and inquiry methodologies are pedagogically sound. Students are expected to seek information; analyze, compare, and evaluate research findings; critique the literature; and apply their skills and competencies.

Communication skills (oral, nonverbal, written, and graphic) are competencies each student must develop to function effectively as a school library media specialist. Integration of current technologies into course work is modeled in the instructional environment and practiced by students. The courses of study available through the program include the Master of Science in Library Science and Information Services and the Education Specialist in Human Services (Learning Resources).

**Student Learning Outcomes**—The graduate with a Master of Science degree in Library Science and Information Services will use the knowledge and skills obtained in the program to:

- Apply strategies to ensure access to resources and information in a variety of formats to all members of the learning community.
- Encourage reading and lifelong learning by stimulating interests and fostering competencies in the effective use of ideas and information.
- Promote efficient and ethical information-seeking behavior as part of the school library media program and its services.
- Demonstrate the ability to create a positive educational environment in a literate, technology-rich, and inviting library media center atmosphere.
- Design and implement instruction that engages the student's interests, passions, and needs.
- Model and promote collaborative planning with classroom teachers in order to teach concepts and skills of information processes integrated with classroom content.
- Partner with other education professionals to develop and deliver an integrated information skills curriculum.
- Provide leadership and establish connections with the greater library and education community.
- Demonstrate effective leadership principles and work with the learning community to create a productive educational environment.
- Create school library media programs that focus on student learning and achievement; and encourage the personal and professional growth of teachers and other educators.
- Apply knowledge and skills in building, managing, and providing free and equitable access to resource collections to enhance the school curriculum and offer leisure reading materials for the school community.
- Administer the library media program according to the principles of best practice in library science and program administration to support the mission of the school.
- Apply leadership, collaboration, and technology skills to design and manage library media programs that are up-to-date, comprehensive, and integrated within the school.

To be accepted into the program, the applicant must have a minimum GPA of 2.75, three letters from references who can attest to the applicant's professional and academic abilities, and a personal interview. Prerequisite coursework:

		Sem. Hours	
REQUIRED GRADUATE COURSES			
LIS	4200	Libraries and Librarianship	
LIS	4230	Selection & Acquisition	
LIS	4740	Administration of the Library Media Center 3	
LIS	5220	Introduction to Reference	
LIS	5640	Library Materials for Children and Youth3	
LIS	5712	Integration & Utilization	
LIS	5760	Information Technologies for	
		Library Media Centers	
INST	4400	Design & Production of Media for Instruction or	
LIS	5850	Using Online Resources	
LIS	5829	Cataloging and Classification I	
LIS	5920	Practicum in Library Media Centers	
Research	n		
LIS	5610	Research Theory & Practice	
LIS	6960	Research Problem, or	
LIS	6990	Thesis	
GRADUATE ELECTIVES IN LIBRARY SCIENCE 0-4			
MINIMUM GRADUATE HOUR TOTAL			

Students who seek Missouri School Library Media Specialist PK-12 certification are advised to consult with the Director of Clinical Services and Certification, University of Central Missouri, Warrensburg, MO 64093.

## EDUCATION SPECIALIST

#### Human Services/Learning Resources 61 000776

**Student Learning Outcomes**—The graduate with the Education Specialist Degree in Human Services will use the knowledge and skills obtained in the program to:

- Promote the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community.
- Promote the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.
- Promote the success of all students by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.
- Promote the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.
- Promote the success of all students by acting with integrity, fairness, and in an ethical manner.
- Promote the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.

Students who have already earned their master's degree in library science or education may pursue an Education Specialist degree in Human Services with an option in Learning Resources. This program prepares students for advanced positions in learning resource centers at the building or district level. Students may complete the requirements for certification while pursuing this degree. Those who already have certification may pursue a widen variety of educational goals.

To be accepted into the program, applicants must have a minimum GPA of 3.25, an earned master's degree, three letters from references who can attest to the applicant's professional and academic abilities, and a personal interview. An applicant who does not meet the overall graduate grade point average must be classified as "a nondegree seeking student" until achieving a minimum graduate grade point average of 3.25 during the first nine hours of graduate study in the courses appropriate to the degree program.

Students will earn a minimum of 30 semester hours of graduate credit within an approved program of study beyond a master's degree.

At least 18 semester hours of this program must be 5000 and 6000 level courses. A minimum of 6 semester hours must be 6000 level courses. Aided by an adviser in the student's area of specialization and in consultation with the other members of the student's advisery committee, each student shall select between 24 and 26 credit hours of courses which may be from the required courses for the Master's degree in Library Science and Information Services. The program concludes with a formal research component consisting of a 3- to 6-hour thesis.

	Sem. Hours	
REQUIRED GRA	DUATE COURSES	
RESEARCH COMPONENT		
LIS 5610	Research Theory and Practice or	
EDCI 5900	Introduction to Research	
LIS 6990	Thesis	
MINIMUM GRADUATE HOUR TOTAL		

#### Library Science and Information Services Courses

LIS 4000 Special Projects in Library Science (1-5) Individual or group study of problems in special areas of interest. May be repeated for a maximum of 5 semester hours.

LIS 4200 Libraries and Librarianship (2) Introduces the student to the development of the library as an institution and to the role of the library and the librarian in today's society. Prerequisites: Undergraduates require the consent of Program Coordinator.

**LIS 4230 Selection and Acquisition of Materials (3)** Critical analysis of selection tools in developing a comprehensive media collection with emphasis on selection for small- to medium-sized libraries and media centers.

LIS 4300 Introduction to the Internet Via Internet (3) An examination and evaluation of the structure and function of the Internet and its use as a tool for communication, collaboration, and commerce.

LIS 4320 Creating Web-Based Internet Sources (3) An in-depth examination and evaluation of theoretical and practical principles, along with the development of skills necessary to create and provide resources on the Internet.

LIS 4740 Administration of the Library Media Center (3) Principles of organization and administration of the library and media center and its relationship to its many publics.

LIS 5000 Special Projects in Learning Resources (1-5) Directed individual study to address current issues in and/or special interests of the student. May be repeated for a maximum of 5 semester hours.

LIS 5200 Introduction to Electronic Information Resources (3) Survey of electronic resources and information science with an emphasis on information databases; includes online information services, digital libraries, and emerging technologies.

LIS 5210 Information and Society (2) Introduces issues related to information in society as well as concepts, methods and techniques of retrieval and use of information resources.

LIS 5220 Introduction to Reference (3) The selection, evaluation and use of traditional and electronic reference sources for school library media centers.

LIS 5230 History of Books and Libraries (3) The development of books and libraries from the ancient world to the present and the effects of printed information on communication and cultural development in societies.

LIS 5320 Web Site Management (3) Principles of organization and management of HTML and computer servers on the World Wide Web.

LIS 5610 Research Theory and Practice (2) Research methodology applicable to librarianship and instructional media technology.

LIS 5640 Library Materials for Children and Youth (3) An examination and evaluation of books and non-book materials with emphasis on informational materials.

LIS 5660 Government Publications (2) Explores government information resources and how to locate, retrieve and use them.

LIS 5710 Legal and Ethical Issues of Library Resources (3) Introduces issues related to ethics of information resource management including privacy, reliability, electronic crime, workplace impacts, intellectual property, freedom of speech and codes of ethics for users and developers.

LIS 5712 Integration and Utilization (3) The integration of information literacy skills and current technologies into K-12 instructional strategies. Prerequisites: LIS 4230 and either INST 4400 or LIS 5850.

LIS 5740 Management and Administration of Information Agencies (3) Foundation for management, including leadership styles and organizational planning to meet the special needs of information resources.

LIS 5760 Information Technologies for Library Media Centers (3) Investigation, manipulation, and evaluation of current technologies that affect the production, storage, dissemination, retrieval, and use of information. Prerequisites: LIS 4200.

LIS 5829 Cataloging and Classification I (3) Principles and practices of organizing information and creating bibliographic records including MARC formats. Prerequisites: LIS 4200.

LIS 5840 Microcomputers in Libraries (3) The application of small computers in the collection, organization, and dissemination of information including the evaluation of hardware and software applicable to library functions.

LIS 5850 Using Online Resources (3) This course provides practical experience with information databases and other Internet resources available in K-12 settings, focusing on how, when and why to use them. Prerequisites: LIS 5220.

LIS 5920 Practicum in Library Media Centers (1-4) Involves practical experience in processes of library media centers. May be repeated for a maximum of 4 semester hours. Prerequisites: LIS 4230, LIS 5220, LIS 4740 and LIS 5829.

LIS 6730 Seminar (2) A seminar designed to address various current topics in libraries and information services. Topics will be announced annually. May be repeated for a maximum of 6 semester hours.

LIS 6920 Advanced Practicum in Library Media Centers (2) Practical experience in an appropriate library or information agency. May be repeated for a maximum of 4 semester hours. Prerequisites: LIS 5920.

LIS 6930 Internship in School Libraries (3-8) The internship is a postpracticum clinical experience designed to place the student in a school library with the support of university faculty. Prerequisites: LIS 5920 or LIS 6920.

LIS 6960 Research Problem (2) Special investigation of an approved problem in the field resulting in a research paper. A prospectus is required. May be repeated for a maximum of 4 semester hours. Prerequisites: LIS 5610 or equivalent with consent.

LIS 6990 Thesis (3-6) Investigation of an approved topic in library or information service resulting in a formal thesis. A prospectus is required. Prerequisites: LIS 5610 or equivalent with consent.

## MASTER OF SCIENCE IN EDUCATION

## K-12 Special Education 51 000834

**Student Learning Outcomes**—The graduate with a MSE in Special Education degree will use the knowledge and skills obtained in the program to:

- Understand the relationship between assessment and instruction through written commentary and supporting documents.
- Develop the ability to answer essential questions they may have about a student's development and learning.
- Involve parents and colleagues in their efforts to grow as teachers.
- Design instruction based upon deep knowledge of the student, the curricular area, and effective instructional practices.
- Link assessment and instruction to continually further the student's learning and development.
- Design meaningful instruction for communication development and literacy learning.
- Evaluate instructional decisions and their implementation with

students who present communication or literacy learning challenges to their teaching practice.

 Design responsive and meaningful instruction to further the individual student's social development and participation within a group or environment.

The Special Education Program considers the National Board of Professional Teaching Standards and assists those graduate students who wish to pursue this level of professional recognition. Students interested in a Master of Science in Education degree program with courses in special education (behavioral and/or emotional disorders, learning disabilities, mental retardation, severely developmentally disabled or early childhood special education) should refer to the K-12 program and degree description.

Provisional admission requirements include a valid teaching certificate or a degree in Speech-Language Pathology, and a minimum overall undergraduate grade-point average of 2.75 or a gradepoint average of 3.0 in the last 60 undergraduate credit hours. Applicants must submit official Graduate Record Exam (GRE) scores to be analyzed by Special Education Program Faculty. A minimum of 3.0 on the Analytical Writing section of the GRE is required. Full admission to program requires that student successfully complete EDSP 5100 Introduction to Graduate Study in Special Education and the development of a formal program of study with departmental graduate adviser.

The Master of Science in Education degree program with courses in special education may not include more than one third of the course requirements to be met by courses which are open to both graduate and undergraduate students. The Master of Science in Education degree program in special education is a minimum 32 hour program. For additional details, consult with the Chair or the Special Education Coordinator of the Department of Educational Leadership and Human Development.

		Sem. Hours	
REQUIRE	D GRA	DUATE COURSES	
EDSP	5100	Introduction to Graduate Study	
		in Special Education	
EDSP	6970	Methods of Research in Special Education or	
EDCI	5900	Introduction to Research	
EDAD	5120	School Law	
PSY	5220	Advanced Child Psychology or	
EDCI	5200	Advanced Educational Psychology	
EDSP	5700	Advanced Org. & Adm. of Special Education 3	
EDCI	5320	Curriculum Development and Assessment 3	
EDSP	5350	Evaluation of Students with Disabilities	
EDSP	6980	Internship in Special Education 1-3	
GRADUA	TE ELEC	CTIVES	
MINIMUM GRADUATE HOUR TOTAL			

Aided by an adviser in the student's area of specialization, each student shall select courses in the area of specialization. These areas of specialization include: Behavioral Disorders, Early Childhood Special Education, Learning Disabilities, Mental Retardation, Severe Developmental Disabilities, and Special Education Administration.

## EDUCATION SPECIALIST

## Human Services/Special Education 61 000786

**Student Learning Outcomes**—The graduate with the Education Specialist/Human Services, Special Education Degree will use the knowledge and skills obtained in the program to:

- Understand the relationship between assessment and instruction through written commentary and supporting documents.
- Develop the ability to answer essential questions they may have about a student's development and learning.
- Involve parents and colleagues in their efforts to grow as teachers.
  Design instruction based upon deep knowledge of the student, the curricular area, and effective instructional practices.
- Link assessment and instruction to continually further the student's learning and development.
- Design meaningful instruction for communication development and literacy learning.

- Evaluate instructional decisions and their implementation with students who present communication or literacy learning challenges to their teaching practice.
- Design responsive and meaningful instruction to further the individual student's social development and participation within a group or environment.

See listing in Department of Educational Leadership and Human Development, College of Education. A thesis is required. The Education Specialist degree in Human Services (Special Education) is a minimum 30 semester hour degree beyond the master's degree including the thesis hours.

Admission requirements include having either a BSE or MSE degree in Special Education or a Speech-Language Pathology degree, and a graduate overall grade-point average of 3.25 or better. All coursework must be taken at the 5000 and higher level. For additional details, consult with the Chair or the Special Education Coordinator of the Department of Educational Leadership and Human Development. Sem. Hours

Aided by an adviser in the student's area of specialization and in consultation with the other members of the student's advisery committee, each student shall select courses in the area of specialization. To be accepted into this program, a student must present a masters degree in area of specialization or with appropriate background courses.

#### Special Education Courses

**EDSP 4000 Special Projects in Special Education (1-5)** Individual or group study of problems in special areas of interest. May be repeated for maximum of 5 semester hours.

EDSP 4140 Collaborating with Families of Exceptional Children (3) A study of the impact of exceptionality on family systems and how empowerment and community resources can strengthen the schoolfamily partnership. Prerequisites: EDSP 2100 or PSY 4200.

EDSP 4150 Career Development for Students with Disabilities (2) Supportive services to students with disabilities within a career development context. Prerequisites: EDSP 2100 or PSY 4200.

EDSP 4310 Introduction to Students with Severe Developmental Disabilities (2) Basic information pertaining to the characteristics and care of students with severe developmental disabilities. Prerequisites: EDSP 2100 or PSY 4200.

EDSP 4320 Introduction to Early Childhood Special Education (3) Basic information pertaining to the characteristics, care, treatment, and education of young children with special needs. Prerequisites: EDSP 2100 or PSY 4200.

EDSP 4330 Education and Training of Students with Severe Developmental Disabilities (3) The treatment and training strategies used in teaching students with severe developmental disabilities. Prerequisites: EDSP 4310 and EDSP 4370.

EDSP 4350 Augmentative and Alternative Communication (3) Study and application of communication options, including manual sign language and communication devices. Prerequisites: EDSP 2100 or PSY 4200 or consent of instructor.

EDSP 4360 Behavioral Management Techniques (2) Practical approaches to behavior management for the classroom teacher, special educator, or clinician. Prerequisites: EDSP 2100 or PSY 4200.

EDSP 4361 Practicum in Behavioral Management Techniques (1) Practical experience in designing behavioral management programs and environments under supervision. Prerequisites: EDSP 4360 or concurrently.

EDSP 4370 Screening, Diagnosing and Prescribing Instruction (3) Case finding, screening, diagnostic and assessment procedures to be utilized in prescriptive educational planning for infants and preschoolaged children. Prerequisites: EDSP 2100 or PSY 4200.

EDSP 4380 Introduction to Individuals with Learning Disabilities (3) Characteristics, etiologies, definitions, legislation and issues related to the identification of and educational planning for individuals with learning disabilities. Prerequisites: EDSP 2100 or PSY 4200. EDSP 4385 Introduction to Cross-Categorical Special Education (3) Information about the characteristics and education of children with mild/moderate disabilities. Prerequisites: EDSP 2100 or PSY 4200.

EDSP 4390 Introduction to Teaching the Gifted/Talented/Creative Student (3) Definitions, identification procedures, the nature and needs, concepts and issues concerning the gifted, talented, creative child. Prerequisites: EDSP 2100 or PSY 4200.

EDSP 4420 Methods of Cross-Categorical Special Education (3) Teaching methods, materials and curricula for educating students with mild/moderated disabilities. Prerequisites: EDSP 4385.

EDSP 4421 Methods of Cross-Categorical Special Education I: Mental Retardation/Other Health Impaired (3) Strategies for addressing general problems in teaching students with mental retardation and other health impairments in cross-categorical and other settings including planning, materials and methods used. Prerequisites: Admission to Teacher Education Program and EDSP 4385.

EDSP 4422 Methods of Cross Categorical Disabilities II: Learning Disabilities (3) Characteristics, etiologies, definitions, legislation and issues related to the identification of and educational planning for individuals with learning disabilities. Prerequisites: Admission to Teacher Education Program and EDSP 4385.

EDSP 4423 Methods of Cross-Categorical Special Education III: Emotional/Behavioral Disorders (3) Strategies for addressing general problems in teaching students with emotional and/or behavioral disorders in cross categorical and other settings including planning, materials and methods used. Prerequisites: Admission to Teacher Education Program and EDSP 4385.

EDSP 4440 Curriculum and Methods for Teaching Early Childhood Special Education (3) The teaching methods and curricula used for educating young children with special needs. Prerequisites: Admission to Teacher Education Program and EDSP 4320 and EDSP 4370.

EDSP 4450 Curriculum and Methods for Teaching the Student with Severe Developmental Disabilities (3) Teaching methodologies and curricula used in programming for students with severe developmental disabilities. Prerequisites: Admission to Teacher Education Program and EDSP 4330.

EDSP 4470 Perceptual Motor Training for Students with Disabilities (2) Theories, assessment, instructional procedures, materials, and equipment adaptations for early childhood special education and students with severe developmental disabilities. Prerequisites: EDSP 2100 or PSY 4200.

EDSP 4480 Curriculum and Methods for the Teaching of Gifted/ Talented/Creative Students (3) Teaching methods and curricula used for educating students who are gifted/talented/creative. Prerequisites: EDSP 4390 or consent of instructor.

EDSP 4620 Evaluation of Abilities and Achievement (3) Instruction in interpretation of individualized intelligence tests, formal and informal diagnostic procedures, and in prescriptive instruction. A directed clinical experience in the diagnostic assessment process for Individual Education Programs is required. Prerequisites: EDSP 2100 or PSY 4200.

**EDSP 4700 IEP and the Law (3)** Administrative procedures and policies needed in establishing a program of special education. Special emphasis is given to compliance with state and federal law. A directed clinical experience in the theory, process, and practice of IEP writing is included. Prerequisites: EDSP 4620 and admission to the Special Education Program, or Graduate Status.

**EDSP 5000 Topics in Special Education (3)** Assists graduate students in researching current issues and trends in special education. May be repeated with a different focus for a maximum of 6 semester hours. Prerequisites: Undergraduate major in special education or consent of instructor. **EDSP 5100 Introduction to Graduate Study in Special Education (3)** Current and future issues in special education, tools of inquiry, role of the National Board of Professional Teaching Standards, scholarly writing, professional ethics and development. Prerequisites: Bachelor of Science in Special Education or equivalent.

EDSP 5350 Evaluation of Students with Disabilities (3) Experience utilizing individual intelligence tests, informal and formal assessments and prescriptive teaching with emphasis on developing IEPs. Prerequisites: EDSP 4620 or consent of instructor.

EDSP 5351 Practicum in Evaluation of Students with Disabilities (3) Field experience designed to provide 150 hours of supervised practice in developing evaluation plans, assessing students, writing diagnostic summaries and participating on IEP teams. Prerequisites: EDSP 5350 or COUN 5710.

EDSP 5410 Advanced Curriculum and Methods for Teaching Individuals with Learning Disabilities (3) Curriculum and instructional planning and practice for persons with learning disabilities. Prerequisites: EDSP 4422.

EDSP 5700 Advanced Organization and Administration of Special Education (3) For administrators and special educators to experience problem solving simulations regarding special education administration. Prerequisites: EDSP 4700.

EDSP 5710 Administration and Supervision of Program for the Gifted/Talented/Creative Child (3) Provides research into administration, supervision, organization, program planning and problems related to school administration of programs for the gifted, talented, creative child. Prerequisites: EDSP 4480.

**EDSP 6000 Seminar in Special Education (3)** An in-depth study of topics current to the field of special education for the advanced graduate student. May be repeated for a maximum of 9 semester hours. Prerequisites: Graduate degree in special education or consent of instructor.

**EDSP 6900 Readings in Special Education (1-5)** Individual study and research regarding areas of particular interest in special education. May be repeated for a maximum of 5 semester hours. Prerequisites: Consent of adviser.

EDSP 6970 Methods of Research in Special Education (3) Research organization, research instrument selection, methods of data collection, data interpretation, statistical design, and the design of an acceptable thesis prospectus. Prerequisites: EDCI 5900, PSY 4520 and 30 semester hours in Special Education.

EDSP 6980 Internship in Special Education (1-6) Experience in a school or program where students with disabilities are served. May be repeated for a maximum of 6 semester hours. Prerequisites: EDSP 4410 or EDSP 4430 or EDSP 4440 or EDSP 4450 or EDSP 5410 or EDSP 5700 and consent of adviser.

**EDSP 6990 Thesis (2-6)** Special investigation of an approved problem in special education resulting in a thesis. A prospectus is required. May be repeated for a maximum of 6 semester hours. Prerequisites: EDCI 5900.

## **College of Health and Human Services**

Dean's Office • Lovinger 2190 • (660) 543-4272

## Department of Communication Disorders Martin 39 • (660) 543-4993

## MASTER OF SCIENCE

# Speech-Language Pathology and Audiology 53 000810

**Student Learning Outcomes**—The graduate with a Master of Science in Speech-Language Pathology and Audiology will use the knowledge and skills obtained in the program to:

- Apply theory and principle, guided by logic to analyze, synthesize and evaluate information regarding prevention, assessment and intervention concerning communication differences and disorders and swallowing or other upper aerodigestive disorders.
- Provide prevention, assessment and intervention services to children and adults across a wide range of disorders and differences including speech, language, swallowing or other upper aerodigestive functions, cognitive aspects of communication, sensory awareness related to communication and additional recognized and emerging areas of practice.
- Demonstrate skill in oral and written language to achieve effective clinical and professional interaction and communicate in a manner that reflects knowledge appropriate to professional role and diverse settings.
- Exhibit professional behavior as defined in the cardinal documents of the American Speech-Language-Hearing Association (ASHA), including but not limited, to Certification Standards for the Certificate of Clinical Competence in Speech-Language Pathology, ASHA Scope of Practice in Speech-Language Pathology, ASHA Code of Ethics and ASHA Preferred Practice Patterns for the Profession of Speech-Language Pathology.
- Collaborate with professionals, provide counseling to individuals and their families, and initiate community education regarding speech and language differences and disorders, and hearing and swallowing disorders or other upper aerodigestive disorders.
- Use contemporary technological resources and a variety of other methods to support Evidence-Based Practice and the acquisition and utilization of new knowledge and clinical skills.

#### **Overview of Program**

The Master of Science Degree Program in Speech-Language Pathology and Audiology is designed for the academic and clinical instruction of persons to enter the profession of speech-language pathology. Students receive specific educational and clinical training to prepare them for the provision of services in a broad range of settings. This program is accredited in speech-language pathology by the Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association (ASHA).

#### Admission

The Department of Communication Disorders admits students each semester. To be considered for admission, the applicant must have a minimum undergraduate grade-point average of 3.0 in Speech-Language Pathology and Audiology courses and a cumulative undergraduate grade-point average of 3.0 (on a 4.0 scale). Students who do not meet these minimum standards may appeal to the Department's Graduate Admissions Exceptions Committee. Meeting the minimal requirements to enter the Program, however, does not guarantee admission to the program.

#### **Transfer of Graduate Credits**

Students may transfer a maximum of nine credit hours from another CAA accredited graduate program. Transfer credits must meet eligibility criteria as outlined in the Graduate Catalog.

#### **Post-baccalaureate Students**

Students with diverse undergraduate degrees are encouraged to apply to the Graduate Program. Once a Post-baccalaureate student is admitted by the Department to the Graduate Program, the student is eligible to enroll in practicum courses.

#### **Graduation Requirements**

Graduation requirements for the Program are based largely on requirements set forth by ASHA. ASHA requirements are based on professional practice trends and as such, are updated periodically. Although this does not happen frequently, if the ASHA requirements change, students must meet the new requirements in order to graduate. Additional graduation requirements are outlined below:

#### **Clinical Clock Hour Requirements**

Department specifications are required to provide each student with experiences across various communication disorders and differences across the lifespan. The minimum number of required hours is outlined below:

- 25 clock hours of supervised observation
- 375 clock hours of supervised clinical practicum in direct client contact
- 325 of the 375 hours must be obtained at the graduate level
- 50 clinical hours must be obtained in each of three different clinical settings

#### Praxis

All students must pass the Praxis II, National Examination in Speech-Language Pathology and Audiology (NESPA) as the comprehensive exit examination before the degree is conferred and to meet ASHA certification requirements. The examination is scheduled and administered through the Educational Testing Service and is offered only at specific times and locations. Students should register through the Assessment and Testing Office at UCM to take the examination during their internship semester. Students should not take the exam prior to completion of CD 5910 Praxis Exam Preparation for Speech-Language Pathology.

#### **Knowledge and Skills Acquisition (KASA)**

The Master of Science Degree in Speech-Language Pathology and Audiology is a competency based program. These competencies reflect the knowledge and skills required by the ASHA Certification Standards III, Program of Study-Knowledge Outcomes and IV, Program of Study-Skill Outcomes. The required knowledges and skills are delineated on the KASA. To understand the procedures associated with the KASA documentation, students are required to attend KASA trainings offered each semester. Students will be expected to demonstrate competency related knowledges and skills throughout their graduate program through formative and summative assessments. Additionally, students need to demonstrate acquisition of knowledges and skills through documentation on the KASA. Students not demonstrating the achievement of course-related knowledge and skills need to successfully complete remediation procedures that provide documentation of knowledge and skill acquisition. Before the degree is conferred, students must demonstrate successful completion of the KASA through a review process with the Director of Clinical Services and the Chair of the Department.

#### **Clinical Practicum Requirements**

All students must fulfill the academic and clinical practicum requirements for the Certificate of Clinical Competence (CCC) in Speech-Language Pathology. Graduate clinicians must be enrolled in clinical practicum every semester to meet the practicum requirements and needs of the Welch-Schmidt Center for Communication Disorders Center. Any graduate student who has not completed practicum requirements by the end of the internship assignment must return to the University's Welch-Schmidt Center for Communication Disorders to complete requirements.

#### **CPR** Certification

Students will obtain certification in adult and child cardiopulmonary resuscitation prior to enrolling in clinical practicum experiences. Students must maintain re-certification throughout all clinical practicum experiences including the internship/externship experiences.

#### Immunizations

Students must be tested annually for Tuberculosis (TB) and submit results of testing to the Director of Clinical Services prior to beginning clinic each year. Additionally, students must also submit proof of having initiated the Hepatitis B immunization series prior to beginning clinical practicum.

#### **Criminal Background Check**

Satisfactory criminal background checks must be completed and validated prior to beginning clinic in the Center and again, prior to placement in internship and externship sites. If a background check is unsatisfactory, placement in clinic and externship/internship sites may not be possible. A student unable to be placed in clinic or externship/ internship will not be able to complete the program.

#### Grades

A graduate student who is placed on academic probation may not enroll in any clinical practicum courses while on probation.

#### Internship/Externship

Internships and externship placements are arranged by the Director of Clinical Services two semesters prior to placement. Entry level clinical skills as defined by obtaining a Level 4 or Level 5 will be demonstrated for Certification Standard IV prior to beginning the internship/externship experience. A minimum number of clinical practicum hours must be completed prior to the internship/externship. Students will need to provide their own transportation and housing during the internship/externship experiences.

#### **Clinician Meetings**

Clinicians are required to attend clinicians meetings which cover a variety of topics ranging from paperwork and procedures to assessment and intervention tools available in the Center. These meetings are scheduled as needed throughout the semester.

#### **Certification and Licensure**

Upon completion of the Master of Science Degree and the Clinical Fellowship, graduates are eligible for the Certificate of Clinical Competence from the ASHA and licensure as a Speech-Language Pathologist by the Missouri Department of Economic Development, Division of Professional Registration. Upon obtaining their unencumbered license as a Speech-Language Pathologist, graduates are also eligible for a Student Services Certificate through application to the Missouri Department of Elementary and Secondary Education. This Student Services Certificate provides the graduate with the opportunity for employment as a Speech-Language Pathologist in Missouri's public schools.

#### Web Site

CD

Information regarding the Department of Communication Disorders can be accessed through the following web site: http://www.ucmo.edu by first locating the College of Health and Human Services and then locating the Department of Communication Disorders, or directly at http://comdisorders.ucmo.edu.

#### REQUIRED GRADUATE COURSES FOR

SPEECH-LANGUAGE PATHOLOGY . . . . . 36 5101 Professional Issues in

		Communication Disorders
CD	5402	Advanced Issues in Child Language Disorders 3
CD	5501	Articulatory and Phonological Disorders 3
CD	5502	Fluency Disorders
CD	5503	Voice Disorders
CD	5504	Adult Neurogenic Language Disorders
CD	5506	Motor Speech Disorders
CD	5508	Adult Swallowing Disorders
CD	5509	Pediatric Feeding and Swallowing Disorders 2

## College of Health and Human Services

CD	5801	Internship in Communication Disorders6	
CD	5802	Externship in Communication Disorders 2	
CD	5902	Research Design in	
		Communication Disorders	
CD	5910	Praxis Exam Preparation for	
		Speech-Language Pathology1	
Elect from the following			
CD	5811	Graduate Clinical Practicum	
Elect from the following research options			
CD	5507	Special Projects in Speech-Language Pathology2	
		or	
CD	6901	Thesis	
MINIMUM GRADUATE HOUR TOTAL			

#### Communication Disorders Courses

CD 4102 Counseling Persons with Communication Disorders and Their Families (2) Application of counseling and interviewing theory to individuals with communication disorders. Ample opportunity to apply knowledge will be provided. Prerequisites: admission to the undergraduate program in speech-language pathology or departmental approval.

CD 4103 Evidence Based Practice in Communication Disorders (2) Introduction to the use of current research results to make clinical decisions regarding client care. Prerequisites: admission to the undergraduate program in speech-language pathology or departmental approval.

**CD 4401 Language Development (3)** Theories and sequence of normal language acquisition.

CD 4402 Language Acquisition in Children with Developmental Disabilities (2) Intended for non-majors; theories and sequences of language development with emphasis on language acquisition and deficiencies exhibited by children with various developmental disabilities.

CD 4501 Basic Neuroscience for Speech-Language Pathologists (2) An introduction to human nervous system structure and function, with special emphasis on neural processing for normal speech, language, hearing and swallowing. Prerequisites: admission to the undergraduate program in speech-language pathology or with departmental approval.

CD 4504 Introduction to Articulation and Phonological Disorders (3) An introduction to articulation and phonological disorders; diagnostic procedures and treatment approaches; knowledge of multicultural issues related to these disorders. Prerequisites: admission to the undergraduate program in speech-language pathology and a grade of "C" or better in CD 3503. CD 4504 may be taken concurrently with CD 3503 under exceptional circumstances with departmental approval.

CD 4505 School-age Issues in Language and Literacy (3) Types of language and literacy disorders; formal/informal assessment procedures of language and literacy skills; intervention procedures for the remediation of language and literacy disorders. Prerequisites: admission to the undergraduate program in speech-language pathology and a grade of "C" or better in CD 3503. CD 4505 may be taken concurrently with CD 3503 under exceptional circumstances with departmental approval.

CD 4510 Multicultural Issues in Communication Disorders (2) Focused study of various issues important to multiculturalism and diversity when assessing and treating individuals with communication disorders from diverse backgrounds. Prerequisites: admission to the undergraduate program in speech-language pathology or with departmental approval.

CD 4511 Assistive Technology Across the Lifespan (2) Assessment and intervention techniques for persons with communication impairments who require assistive technologies; emphasis on broad range of etiologies across the lifespan. Prerequisites: admission to the undergraduate program in speech-language pathology or with departmental approval.

CD 4512 Birth to Three: Assessment and Intervention (3) Focused study of the nature of communication disorders in children from birth

Sem Hours

to three with special emphasis on assessment and intervention models. Prerequisites: admission to the undergraduate program in speechlanguage pathology or with departmental approval.

CD 4515 Rehabilitation of Cognitive Linguistic Communication Disorders (2) Exploration of normal and impaired cognitive-linguistic processing, highlighting processing deficits in traumatic brain injury. Methods to assess-treat cognitive-linguistic impairments will be discussed. Prerequisites: admission to the undergraduate program in speech-language pathology or with departmental approval.

CD 4701 Introduction to Audiology (3) Hearing impairment as related to basic acoustics and psychoacoustics, anatomy and physiology of the ear, and theories of hearing. Prerequisites: Admission to the undergraduate program in speech-language pathology.

**CD 4706 Hearing Measurement (3)** Hearing measurement procedures including pure tone and speech audiometry and some site lesion testing. Prerequisites: admission to the undergraduate program in speech-language pathology or with departmental approval.

**CD 4708 Aural Rehabilitation (3)** Effects of hearing impairment of verbal communication. Principles and methods of aural rehabilitation. Prerequisites: CD 4706.

CD 4900 Special Topics in Communication Disorders (1-3) Selected topics of contemporary interest in speech-language pathology and audiology; variable content. Prerequisites: departmental approval.

CD 5101 Professional Issues in Communication Disorders (2) Integration of knowledge and problem solving applied to professional and ethical decision making in communication disorders. The case study approach will be emphasized. Prerequisites: Must be taken the semester prior to the internship.

CD 5402 Advanced Issues in Child Language Disorders (3) Theories, etiologies, and assessment/intervention procedures for children with severe and /or multiple language impairments and language related literacy impairments. Prerequisites: CD 3501 or CD 4401.

CD 5403 Early Childhood Language Disorders (2) Emphasis on treatment principles and procedures, behavior management, and transdisciplinary play-based assessment within a cognitively-based preschool for children with language delays/disorders. Prerequisites: consent of instructor.

CD 5501 Articulatory and Phonological Disorders (3) Best practices in the prevention, assessment, diagnosis, and treatment of young children exhibiting, or at risk for exhibiting, articulatory/phonological disorders and phonological awareness deficits.

CD 5502 Fluency Disorders (3) Theories, etiologies and assessment/ intervention procedures for individuals with fluency disorders (developmental, psychogenic and neurogenic stuttering and cluttering) across the lifespan.

**CD 5503 Voice Disorders (3)** Nature, assessment and intervention of voice disorders resulting from functional, organic or neurological origin.

CD 5504 Adult Neurogenic Language Disorders (3) Aphasia, its possible etiologies, characteristics, diagnostic evaluations and therapy; head trauma, the language of confusion, and other language problems of the aging population.

**CD 5506 Motor Speech Disorders (3)** Clinical evaluation and treatment of persons with motor speech disorders (dysarthria and apraxia) resulting from neurogenic etiology. Augmentative/alternative forms of communication will be discussed.

CD 5507 Special Projects in Speech-Language Pathology (2) Individual study and/or research in speech-language pathology. Prerequisites: approval of graduate adviser.

CD 5508 Adult Swallowing Disorders (2) Develops diagnostic and treatment skills in the management of swallowing disorders in children and adults.

CD 5509 Pediatric Feeding and Swallowing Disorders (2) Evaluation and treatment of feeding and swallowing disorders in children with emphasis on medical diagnoses and interfering environmental factors. **CD 5801 Internship in Communication Disorders (6)** Scheduled by the Director of Clinical Services, the internship requires ten weeks of full-time practicum in a hospital or rehabilitation setting during the student's last semester of enrollment in the graduate program. Prerequisites: Consent of department Director of Clinical Services two semesters in advance.

**CD 5802 Externship in Communication Disorders (2)** Scheduled by the Director of Clinical Services, the externship is a public school experience, 2 days a week for 16 weeks. Prerequisites: Consent of department Director of Clinical Services two semesters in advance. Special exceptions with departmental approval.

CD 5811 Graduate Clinical Practicum (1) Advanced specialized practice in management of communication and swallowing disorders. Must be repeated for a minimum of 8 semester hours. Prerequisites: CD 3503 or concurrently, and 3.0 graduate GPA in departmental courses.

**CD 5900 Seminar in Communication Disorders (2)** Detailed studies in a specialized area of communication disorders. May be repeated for a maximum of 12 semester hours.

CD 5902 Research Design in Communication Disorders (3) An introduction to research design strategies in communication disorders. Prerequisites: PSY 4520.

CD 5910 Praxis Exam Preparation for Speech-Language Pathology (1) Designed to facilitate self-study in preparation for taking the Praxis Examination in Speech-Language Pathology. Prerequisites: Must enroll in CD 5910 prior to taking the Praxis Exam and completing CD 5801, or with departmental approval.

**CD 6901 Thesis (1-5)** Special Investigation of an approved problem in communication disorders resulting in a formal thesis. Prerequisites: 15 hours of graduate credit.

## Department of Criminal Justice Humphreys 300 • (660) 543-4950

Department of Criminal Justice Statement of Policy—The program for the Criminal Justice MS Degree allows for 6 semester hours of departmentally approved electives under the thesis option and 9 hours under the non-thesis option. UCM criminal justice graduate students may seek departmental approval for courses from the criminal justice program of the University of Glamorgan in Wales. Prior to enrolling for courses at the University of Glamorgan, the UCM criminal justice graduate student must obtain this approval from the UCM Criminal Justice Department Chair. Typically the UCM Criminal Justice graduate student will have completed 12 semester hours prior to study at the University of Glamorgan.

## MASTER OF SCIENCE

## Criminal Justice 53 000704

**Student Learning Outcomes**—The graduate with a Master of Science Degree in Criminal Justice will use the knowledge and skills obtained in the program to:

- Articulate knowledge of the major issues facing the criminal justice system in the nation and world.
- Conduct and present an independent research project.
- Communicate and interact professionally in scholarly, academic settings.
- Delineate the ethical principles of human subject protection in social science research.

This program is designed for those students who wish to enter and/or progress in the criminal justice fields of law enforcement, corrections, and juvenile justice; or who plan to seek positions in leadership, professional specialization, research, or instruction in criminal justice.

To be accepted into the program, a student must have an undergraduate degree in criminal justice or a related field and have earned a minimum grade-point average of 2.75 on all undergraduate course work and 3.0 on all graduate course work. A student without a criminal justice degree may be required to complete up to 15 hours of background courses in criminal justice prior to taking graduate level courses. The requirement to take background courses may be waived by the department's graduate coordinator based on previous courses taken and/or relevant professional experience.

Students not meeting the above requirements may request the department's graduate committee to admit them provisionally to the program by submitting a letter of request to the department's graduate program coordinator explaining why they want to be admitted to the program and are capable of doing graduate level work. The committee may request the submission of additional materials or require the student to take the Graduate Record Examination prior to making a decision. Students admitted provisionally must maintain a minimum graduate grade point average of 3.0 during their first twelve hours of course work listed in their Program of Study.

Upon admission to the degree program the student must file a Program of Study form. The Program of Study is reviewed for approval by the student's assigned adviser and the department's graduate program coordinator.

Prior to completion of the program, a student must select either the thesis or non-thesis option. The thesis option requires the student to complete six hours of thesis (CJ 6600) as part of the 36hour degree program. The non-thesis option requires the student to successfully pass a comprehensive examination as part of the degree requirements. No credit hours are awarded for the comprehensive examination. Students in the non-thesis option must take three hours of CJ 5600 Individual Research as part of their program of study.

Consent to enroll in additional arranged courses must be obtained from the department graduate program coordinator. These include CJ 4602, CJ 5600, or CJ 5602. Students are not eligible to enroll in any of these courses until they have submitted their Program of Study.

		Sem Hours	
REQUIRED GRADUATE COURSES			
CJ	5000	The Criminal Justice System	
CJ	5003	Criminal Justice Studies in Group Behavior 3	
CJ	5006	Comparative Criminal Justice Systems	
CJ	5102	Administration in Criminal Justice	
CJ	5301	Legal Aspects of the Criminal Justice System 3	
CJ	5610	Statistics for Criminal Justice	
CJ	5620	Methods of Criminal Justice Research	
CJ	5625	Crime Analysis	
THESIS OPTION			
CJ	6600	Thesis	
Approved Graduate Electives			
COMPREHENSIVE EXAMINATION OPTION			
CJ	5600	Individual Research	
Approved Graduate Electives			
MINIMUM GRADUATE HOUR TOTAL			

#### **Criminal Justice Courses**

CJ 4000 Special Projects in Criminal Justice Administration (1-3) Individual or group study of problems in special areas of interest.

CJ 4006 Probation, Parole and Community Corrections (3) An examination of the roles of probation, parole and other community correctional methods as they relate to other elements of the criminal justice system. Prerequisites: CJ 3006.

CJ 4015 The Criminal Court System (3) An overview of the goals, functions, and processes of the criminal court system with an examination of current legal issues and trends. Prerequisites: CJ 1000 or consent.

**CJ 4010 Criminal Justice International Study (3)** Credit granted for study in a department-approved program or study tour in a foreign country. Enrollment by consent.

CJ 4025 Comparative Corrections (3) This course provides a comparative overview of correctional practices in various countries. Prerequisites: none.

CJ 4101 Criminal Justice Planning (3) Planning concepts and development of comprehensive criminal justice plans; their integration into meaningful crime reduction and resistance programs; and their influence on the operations of police, judicial and correctional agencies.

CJ 4300 Case Preparation and Courtroom Procedure (3) Criminal procedure from arrest through trial. Preparation for and participation in mock trial. Recommended that students complete CJ 3303 Criminal Procedure before this course. Prerequisites: None.

CJ 4302 Criminal Evidence (3) The rules of evidence as they relate to the prosecution and defense of criminal cases. It is recommended that students complete CJ 2300. Prerequisites: None.

CJ 4321 Civil Remedies in Criminal Justice (3) State and federal legal liabilities and remedies in criminal justice and policy implications. Prerequisites: CJ 3303 or consent.

CJ 4330 Criminal Justice and the Mental Health Systems (3) The relation of the criminal justice system and the mental health process; legal concepts regarding the mentally disabled. Prerequisites: CJ 1000 or consent.

CJ 4352 International Criminal Law (3) Survey of international criminal law examine responsibilities of nation-state and individual, international cooperative efforts and tribunals, and various international crime and defenses, including international terrorism.

CJ 4390 The Death Penalty (3) An examination of the jurisprudence, history and current issues about the death penalty. Prerequisites: none.

CJ 4403 Sexual Assault and the Criminal Justice System (3) Indepth study of sexual assault and sex offenders. Investigation into the motivation of sex offenders, the victim's responses to assault, and investigative procedures.

CJ 4420 Organized Crime (3) An analysis of both the historical development of organized crime and its current impact on society. The enforcement, prosecutorial, judicial, and legislative actions utilized to combat organized crime will be examined.

**CJ 4444 Terrorism (3)** Study of violent political and religious movements around the world and the difficulties they pose to the institutions of justice in a democratic society.

CJ 4601 Directed Studies (1-6) Individual research and study in student's field of interest as approved and directed by major professors. May be repeated for a maximum of 6 semesters hours. Not available for graduate credit. Prerequisites: Consent.

**CJ 4602 Internship in Criminal Justice (1-6)** Practical experience in the operation of various components of the criminal justice system. May be repeated for a maximum of 12 semester hours. Prerequisites: Consent.

**CJ 4607 Issues in International Justice (3)** Seminar on current and developing issues in international justice. Prerequisites: consent of instructor.

CJ 4701 The Juvenile and the Law (3) The jurisdiction of juvenile courts, role of law enforcement agents, judicial process, fact-finding hearings, dispositions, waivers, appeals, philosophy of the juvenile court with attention to the legal rights of children, and comparative analyses of juvenile codes.

CJ 4702 Juvenile Corrections (3) An analysis of the theories, concepts, practices and special problems of juvenile corrections, including a review of contemporary juvenile correctional systems and discussion of recent research concerning the juvenile institution and the various field services.

CJ 4703 International Juvenile Justice (3) An overview of international juvenile justice, through an examination of how the international society reacts to juvenile misbehavior and various juvenile justice models.

CJ 5000 The Criminal Justice System (3) Historical development and present structure and function of the American criminal justice system.

CJ 5003 Criminal Justice Studies in Group Behavior (3) The dynamics of interpersonal, group, and societal relationships as they impinge on the criminal justice mission.

CJ 5006 Comparative Criminal Justice Systems (3) Criminal justice systems worldwide and means of establishing cooperation toward mutual goals despite structural, historical and ideological differences.

CJ 5102 Administration in Criminal Justice (3) An intensive, in-depth analysis of criminal justice agencies (law enforcement, corrections, and court administration), organizational structures, and management techniques.

CJ 5105 Custody, Care and Treatment in the Institutional Setting (3) An examination of operations in the institutional setting relating to classification, custody, care, and treatment of the confined offender.

CJ 5301 Legal Aspects of the Criminal Justice System (3) Current legal issues affecting the various areas of criminal justice.

CJ 5600 Individual Research (1-6) Individual study and research of pertinent criminal justice administration problems. Not open to those enrolled in CJ 4601. May be repeated for a maximum of 6 semester hours. Prerequisites: 12 semester hours graduate credit and consent.

CJ 5602 Readings in Criminal Justice Administration (1-6) Selected readings that allow the student to pursue areas of particular interest in Criminal Justice. May be repeated for a maximum of 6 semester hours. Prerequisites: Consent.

**CJ 5610 Statistics for Criminal Justice (3)** Graduate introduction to statistical techniques in criminal justice. The course provides an understanding of the relationship between statistical analysis and research methodology. It is a basic graduate course in statistics and presumes minimal mathematical or statistical background. Stress is placed on the assumptions, restrictions and uses of various statistical techniques rather than on mathematical derivation of formulas or detailed examination of theoretical systems.

CJ 5620 Methods of Criminal Justice Research (3) A comprehensive examination of the basic concepts of research, causal order of variables, sampling techniques, research designs, techniques of data collection and analysis that will enable the student to critically evaluate crime and delinquency research as well as design and implement his/ her own research.

**CJ 5625 Crime Analysis (3)** The patterns of crime, the analysis of such patterns and applications of crime analysis. Focus is on temporal and spatial distributions of crime, crime analysis charting and visual investigative analysis. Prerequisites: Admission to departmental graduate program.

**CJ 5700 The Juvenile Justice System (3)** The historical development and assessment of current policies and practices of agencies involved in the juvenile justice system.

CJ 6600 Thesis (1-6) Special investigation into a specific area of criminal justice administration. It is recommended that the student should have completed the major courses in his/her program before enrolling in this course. Prerequisites: CJ 5620.

## Department of Health and Human Performance Humphreys 216 • (660) 543-4256

## MASTER OF SCIENCE

# Physical Education/Exercise and Sport Science 53 000818

**Student Learning Outcomes**—The graduate with a Master's of Science in Physical Education, Exercise and Sport Science, in the Health and Human Performance Department will use the knowledge and skills obtained in the program to:

- Demonstrate creative thinking, problem solving and independent study skills.
- Demonstrate and apply an understanding of current technology available in their area of expertise.
- Use Physical Education as a catalyst for proactive change in personal health and wellness.
- Explore interdisciplinary relationships within physical education and associate disciplines.
- Examine the nature and effects of discipline-related skills as they are applied in a professional setting.

This program is designed to prepare students for careers in areas associated with physical activity and sports. The student has a choice of area specialization from one of the following options: Athletics and Sports Business Administration, Athletic Training, Fitness/Wellness, or Pedagogy (Teaching Physical Education).

Students may contact the department graduate coordinator for specific course requirements.

## Student Learning Outcomes Per Option

#### **Athletics and Sports Business Administration:**

- Apply theoretical concepts of Sport Administration and Management in a practical setting.
- Conduct research that contributes to the creation, expansion, and/or application of knowledge in the field of Sport Administration and Management.
- Demonstrate an understanding of an area of specialization in the field of Sports Administration and Management.

#### **Athletic Training:**

- Apply Athletic Training principles to diverse populations and problems.
- Demonstrate learned skills and knowledge of Athletic Training in designated clinical rotations and employment settings.
- Prepare graduates for gainful employment in the field of Athletic Training.

## Fitness/Wellness:

- Apply Fitness/Wellness principles with diverse populations of in a variety of situations.
- Demonstrate and apply skills and knowledge of Fitness/Wellness in clinical settings through internships and other appropriate programs.

#### Pedagogy:

- Implement technology into the teaching of Physical Education.
- Implement, monitor, assess and reconfigure individualized instructional practices geared towards the development of physically active lifestyles.
- Critically analyze and report secondary research pertaining to major issues of the education field.

To be accepted into this program, a student must have a major in exercise science, physical education or appropriate physical education background courses. A minimum undergraduate grade-point average of 2.50 or a grade-point average of 3.0 on 8 semester hours of earned graduate credit is required.

The student's program must be planned with the advice and consent of a department adviser. The elective hours may not merely be a collection of courses but must be an integrated and related group of advanced courses fulfilling the department's and student's objectives.

The student who desires to work toward the National Athletic Trainer's Association Certificate should present undergraduate and/ or graduate course work in the areas of human anatomy, human physiology, physiology of exercise, applied anatomy, psychology, advanced first aid/CPR (current upon graduation), and both basic and advanced athletic training Physical Education 4000 level courses listed in this Catalog may be taken for graduate credit, but that credit cannot apply towards the 32-hour Master's Degree program without departmental approval.

Before completion of the degree, an exit interview is required of a student who elects PE 6980 or PE 5630; a student who elects PE 6960 or PE 6990 must pass an oral defense of the research or thesis.

	Sem Hours
ED GRA	DUATE COURSES
4520	Statistics for the Behavioral Sciences
5110	Philosophy of Sport
5210	Technological Application in Physical Education,
	Exercise & Sport Science
5740	Legal Liability for Sport &
	Fitness Administration
6190	Trends & Issues in Physical Ed
h	
5900	Introduction to Research in Physical Education,
	Exercise & Sport Science
	4520 5110 5210 5740 6190

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Elect f	rom the fo	bllowing
PE	5630	Internship in Athletic Training
PE	6960	Research Problems
PE	6980	Internship
PE	6990	Thesis
Graduate Electives		

#### GRADUATE ELECTIVES FROM ONE OF THE FOLLOWING

#### **Physical Education Courses**

**PE 4000 Special Projects in Coeducational Physical Education (1-5)** Individual or group study of problems in special areas of interest. May be repeated for a maximum of 5 semester hours.

**PE 4320 Choreography (2)** Basic choreography as to forms, formations, lines, qualities, relationships, choreographic styles, choreographers of renown and their works, constructive criticism, notation. Prerequisites: Consent.

**PE 4340 Adapted Physical Education (3)** A study whereby the full educational services of physical education may be made available to atypical students on all school levels.

**PE 4341 Physical Activity and the Older Adult (2)** Principles of activity applicable to older adults, including recommended programs and evaluations.

**PE 4350 Physical Education for Special Education (2)** Activities and program development as an integral tool in the physical education of the mentally retarded, learning disabled, and emotionally disturbed.

**PE 4390 Evaluation Procedures in Physical Education (3)** The theory of measurement in health and physical education, including the selection, administration, and evaluation of appropriate tests and the interpretation of the results.

PE 4520 Theory and Coaching of Basketball (2) Coaching aids, techniques, strategy, and systems of the activity. Prerequisites: PE 3310.

**PE 4530 Theory and Coaching of Track and Field (2)** Coaching aids, techniques, strategy, and systems of training.

**PE 4541 Theory and Coaching of Football (2)** Coaching aids, techniques, strategy, and systems of the activity.

**PE 4550 Theory and Coaching of Volleyball (2)** Coaching theory and techniques, aids, strategy, and systems of volleyball. Prerequisites: PE 3331.

**PE 4551 Theory and Coaching of Wrestling (2)** Squad and practice organization, techniques, budget, equipment, match management, and strategy.

PE 4560 Theory and Coaching of Softball and Baseball (2) Coaching aids, techniques, strategy, and systems of softball and baseball.

**PE 4561 Theory and Coaching of Soccer (2)** Coaching theory and techniques, aids, strategy, and systems of soccer. Prerequisites: PE 2300.

**PE 4590 Administration of Interscholastic Athletics (2)** Organization and management of a program of competitive athletics for schools and colleges.

PE 4740 Legal Liability in Fitness/Wellness, Physical Education, Recreation and Sport Settings (2) Acquaints the student with legal research and basic concepts of negligence in governing the school sport and fitness industries.

**PE 4760 Physical Education Curriculum\* (2)** Problems involved in organization and design of physical education curricula. Prerequisites: Admission to Teacher Education Program.

**PE 4830 Psychological Aspects of Physical Education (2)** An application of psychological principles to physical education.

**PE 4840 Social Aspects of Physical Activity (2)** The application of sociological concepts and theories to the study of physical education and sport in American society.

PE 5000 Special Projects in Physical Education (1-3) Individual or

group study of selected topics. May be repeated for a maximum of 8 semester hours. Prerequisites: Department chair consent.

**PE 5110 Philosophy of Sport (2)** The nature, values and ethics of sport in society.

**PE 5200 Analysis of Teaching in Physical Education (3)** Present and analyze systems used in evaluating student behavior, teacher behavior, and student-teacher interaction. Study strategies for planning and implementing effective teaching and supervising in physical education.

PE 5210 Technological Application in Physical Education, Exercise and Sport Science (3) Prepares students to utilize specialized technological applications in physical education, exercise and sport science.

**PE 5370 Advanced Curriculum and Supervision (3)** Advanced study of curriculum and techniques of supervision in physical education.

PE 5420 Growth and Physical Performance of the Preschool and Elementary School Child (K-6) (3) An in-depth study of the development and characteristic relations of children as they relate to movement and performance.

PE 5430 Theory and Practice for Elementary and Secondary Physical Education (3) Analysis of current theories and practices in elementary and secondary physical education.

PE 5600 Growth and Development and Athletic Injuries (2) Growth and development of children and youth with emphasis on their vulnerability to athletic injury. Prerequisites: PE 2800.

**PE 5610 Advanced Athletic Training Techniques (3)** Advanced methods of injury prevention, recognition, and treatment of athletic injuries. Prerequisites: PE 3610, PE 3800, and PE 5830. PE 5830 may be taken concurrently.

**PE 5620 Modalities and Rehabilitation of Athletic Injuries (2)** The use of therapeutic modalities and exercises in athletic injury rehabilitation. Prerequisites: PE 5610 or concurrently.

**PE 5630 Internship in Athletic Training (2)** Provides clinical clock hour experience under the supervision of a N.A.T.A. Certified Athletic Trainer. May be repeated for a maximum of 6 semester hours. Prerequisites: PE 5610 or concurrently.

**PE 5720 Sport Facility Management (3)** Prepares the student to engage in planning, constructing, promoting, and managing a variety of sport facilities, including fitness centers, race tracks, major stadium, etc.

PE 5730 Risk Management for Sport and Fitness Administration (2) Strategies of risk control for sport and fitness industries.

PE 5740 Legal Liability for Sport and Fitness Administration (3) Inspection of case law and legislative acts as they affect the conditions of sport and fitness activities. A major focus is on negligence theory.

**PE 5750 Sports Administration and Management (3)** Administrative and management functions of the sports administrator. Prerequisites: PE 4590 or concurrently.

**PE 5830 Advanced Exercise Physiology (3)** The effects of muscular activity with particular reference to the respiratory, circulatory, and nervous systems. Prerequisites: PE 5900, and BIOL 2401 or PE 2850.

**PE 5840 Principles of Motor Learning (3)** The physical and psychological factors affecting the acquisition of motor skills. Prerequisites: PE 5900.

**PE 5850 Fitness Assessment (2)** Instruments and protocols used for fitness/wellness assessment; development of fitness programs; interpretation of results. Prerequisites: PE 5830.

PE 5870 Mechanical Analysis of Sport Skills (3) Anatomical and mechanical principles applied toward analyzing and evaluating the efficiency of human motion. Prerequisites: PE 3800.

PE 5900 Introduction to Research in Physical Education, Exercise and Sport Science (3) Overview and planning for graduate school with an introduction and study of the major methods, tools, and laboratory and statistical techniques employed in research in physical education, including the development of a research prospectus.

PE 6190 Trends and Issues in Physical Education (3) Directed reading and special investigation of selected problems. Identification, analysis, and discussion of on-the-job problems.

**PE 6600 Seminar in Athletic Training (2)** Directed readings for the purpose of discussion and evaluation of selected problems in the area of sports medicine.

**PE 6900 Readings in Physical Education (1-5)** Guided study in the literature of special and related fields in the area of physical education. May be repeated for a maximum of 6 semester hours. Prerequisites: PE 5900.

**PE 6960 Research Problems (2)** Special investigation of an approved problem in the major field. Prerequisites: PE 5900.

**PE 6980 Internship (2-6)** Practical experience in sports administration, sports business management, sports communication, fitness/wellness, or pedagogy in a school, business or hospital. May be repeated for a maximum of 6 semester hours. Prerequisites: PE 5850 for Fitness/ Wellness specialization; PE 5750 for Athletic and Sports Administration specialization; and department approval.

**PE 6990 Thesis (6)** Special investigation of an approved problem in physical education resulting in a formal thesis. A prospectus is required. Prerequisites: PE 5900.

## **Dietetics and Nutrition Courses**

**D&N 4340 Advanced Nutrition (3)** An in-depth study of human nutrition and the evaluation of nutritional status. Prerequisites: BIOL 2402, D&N 3340 and CHEM 2652 or CHEM 4421.

**D&N 4341 Child Nutrition (2)** Nutritive requirements of mothers during pregnancy and lactation and of children during early childhood. Bases of determining reliability of nutrition information. Prerequisites: D&N 3340.

D&N 4342 Medical Nutrition I (3) Role of nutrition in the prevention and dietary treatment of disease. Prerequisites: BIOL 2402, D&N 3340 and CHEM 2652 or CHEM 4421.

**D&N 4343 Medical Nurtrition II (3)** A case study oriented approach to nutritional medicine with an in-depth emphasis on pathophysiology and the nutritional care plan in the prevention and treatment of disease. Only offered Spring semester. Prerequisites: D&N 4342.

**D&N 4350 Special Problems in Foods and Nutrition (2-3)** An indepth study of human nutrition; some foods emphasis. Group and/or individual problems including reports, discussion, bibliographies, research, and experiments. May be repeated for a maximum of 6 semester hours. Prerequisites: senior class standing.

D&N 4351 Geriatric Nutrition (2) Dietary needs and feeding of the elderly. Prerequisites: D&N 3340 or consent.

D&N 5360 Seminar in Foods and Nutrition (2-3) Intensive investigation and discussion of specific problems in foods and nutrition. Minor professional research problems may lead to a thesis. May be repeated for a maximum of 6 semester hours. Prerequisites: D&N 3340.

## Family and Consumer Sciences Courses

FACS 4000 Special Projects in Family and Consumer Sciences (1-3) Investigation of contemporary problems and issues in family and consumer sciences. May be repeated for a maximum of 6 semester hours.

FACS 4150 Special Problems in Family Economics and Management (2-3) Recent trends. Group and individual problems which will include reports, discussions, bibliographies, research, and experiments. Prerequisites: FACS 3120.

FACS 4750 Curriculum in Family and Consumer Sciences Education (2) Design of programs and courses for consumer homemaking or occupational family consumer sciences education including theory, principles, development and implementation, federal and state guidelines, trends and issues. Prerequisites: FACS 4740 or equivalent.

FACS 5160 Seminar in Family Economics and Management (2-3) Intensive investigation and discussion of specific problems in family economics or management. Research problems may lead to a thesis. Prerequisites: Consent of instructor.

FACS 5510 Family Housing (2) Social, psychological, economic, and design aspects of American family housing. Needs, conditions, types of dwellings. Role of local, state, and federal governments in housing.

FACS 5740 Current Topics in Family and Consumer Sciences Education (2) Changes evolving in our society which affect the teaching of family and consumer sciences. May be repeated for a maximum of 6 semester hours. Prerequisites: B.S. in Ed. degree in home economics.

FACS 5760 Seminar in Family and Consumer Sciences (2-3) Studies in specialized area problems in family and consumer sciences with emphasis on individual investigation. May be repeated for a maximum of 6 semester hours.

FACS 6080 Research in Family and Consumer Sciences (2-3) Independent investigation of a specific problem. May be repeated for a maximum of 6 semester hours. Prerequisites: T&OE 5130 or EDCI 5900 or equivalent.

FACS 6090 Thesis (6) Special investigation of an approved problem based on a prospectus in the area of family consumer sciences resulting in a formal thesis. Prerequisites: Consent and T&OE 5130 or EDCI 5900.

## Food Course

Food 4326 Experimental Foods (3) An experimental approach to the study of factors which influence the behavior of foods. Group and individual experiments. Prerequisites: Food 2322 or equivalent.

## Health Education Courses

HED 4000 Special Projects in Health Education (1-5) Individual or group study of problems in special areas of interest. May be repeated for a maximum of 6 semester hours.

HED 4300 Nutrition and Human Performance (2) Nutrition as it applies to athletics, physical exercise, and health. Prerequisites: PE 2800 and PE 2850 or equivalent.

**HED 4310 Drugs and Youth (3)** Use and abuse of alcohol and drugs; current problems relative to drug use, abuse, and control; programs in education, law enforcement, and community agencies.

**HED 4320 Teaching Sexuality Education in the School (3)** Prepares the teacher for course development, instruction, and integration of sexuality education into the school curriculum.

HED 4350 Advanced First Aid and Emergency Care (3) Emphasizes the essential knowledge and skills needed to develop the functional first aid capabilities required by policemen, firemen, emergency squad and rescue squad members, ambulance attendants, and other special interest groups. Students taking this course may complete requirements for the American Red Cross Advanced First Aid and Emergency Care Certificate.

HED 4360 CPR Instructors Training (1) Procedures, theories, and techniques involved in the teaching of the American Red Cross CPR Modular System course. Students may complete requirements for the Red Cross CPR Modular System Instructor Certificate. Prerequisites: current Red Cross CPR Modular System Certificate.

HED 4370 Human Diseases (3) An overview of the agents of disease, the processes of contagion, and the effects on humans. Prerequisites: PE 2850 or BIOL 2401 or equivalent.

HED 4390 Community Health Education (2) various types of health programs conducted by private, volunteer, and official agencies.

HED 4760 Organization and Administration of the School Health Program (2) The organization and administration of the school health program emphasizing the areas of healthful school living, health services, and health instruction. Prerequisites: HED 3310 or HED 3360.

## **Hospitality Management Courses**

HM 4000 Special Projects in Hospitality Management (1-3) Investigation of current problems and issues in hospitality management. May be repeated for a maximum of 9 semester hours.

HM 4710 Internship (3-6) Provides experience for students in cooperating businesses and agencies/organizations. May be repeated for a maximum of 12 semester hours with no more than 6 semester hours graduate credit. Prerequisites: 20 semester hours of major course offerings; undergraduate grade-point average of C or above; departmental approval.

HM 4720 Hospitality Technology (2) Hotel, restaurant, and industry specific global technologies for management, employees and guests.

HM 4800 Hotel and Restaurant Management (3) Specialized managerial functions involved in operation of hotels, restaurants, and other facilities in the hospitality industry.

HM 4840 Legal Aspects of Hotel and Restaurant Management (3) Examination of federal and state laws, including judicial interpretations relevant to hotel and restaurant operations, as well as tort, negligence and criminal liability. Methods for prevention of legal action will be investigated.

## **Recreation Course**

**Rec 4740 Seminar (2)** Covers new and significant publications in the recreation and tourism industry and provides the student with an opportunity to develop basic research skills. Prerequisites: Consent of instructor.

#### **Therapeutic Recreation Courses**

TR 4600 Assessment and Documentation in Therapeutic Recreation (3) Skills to assess and document the impact of cognitive, physical , psychological or social limitations on an individual's functional ability. Prerequisites: TR 3400 and admission to program.

TR 4800 Management, Administration and Funding in Therapeutic Recreation Services (3) Current information and techniques for inclusive management of therapeutic recreation services. Prerequisites: Grade of "C" or better in TR 2250 and admission to program.

**TR 4900 Seminar in Therapeutic Recreation (3)** Recreation therapy internship application, interview, service and termination process; exploration of professional issues and basic research skills. Prerequisites: Grade of "C" or better in TR 2250 and admission to program.

**TR 4990 Internship in Therapeutic Recreation (6)** Supervised field work blending academic preparation (theory, concepts, models, clerical and technical skills) with practical application. Prerequisites: Approval by instructor and admission to program.

#### **Tourism Course**

**TOUR 4720 Tourism Planning and Development (3)** The processes involved in planning quality recreation and tourism destination areas. Prerequisites: TOUR 1200 or HM 1800 or REC 3210.

## Department of Nursing University Health Services 106 (660) 543-4775

## MASTER OF SCIENCE

#### Rural Family Nursing 53 000242

Accredited by the Commission on Collegiate Nursing Education.

**Student Learning Outcomes**—The graduate with a Master of Science degree in Rural Family Nursing will use the knowledge and skills obtained in the program to:

- Use multiple modes (Effective, Oral, Written, Therapeutic, Media, and Technological) in adapting language and communication strategies appropriate to the advanced practice role and diverse settings.
- Use theory and principles, guided by logic and sound judgment, to allow for the provision of advanced practice nursing care.
- Use reasoning and knowledge to assess, plan, intervene and evaluate while providing holistic care in diverse environments utilizing pertinent resources.
- Actively engage in interaction based on mutual respect with collaboration toward goal achievement.
- Internalize and demonstrate ethically grounded behaviors reflective of the ANA Scope and Standards of Advanced Practice Registered Nursing (1996) and ANA Code for Nurses 2001.
- Locate, organize, store, retrieve, evaluate, synthesize, and annotate information from print, electronic, and other sources in preparation

for providing advanced nursing care.

This program is designed to emphasize advanced practice nursing knowledge, skills, and attitudes, as well as the application of the research process to clinical phenomena within the context of rural family health. The Nurse Educator emphasis area stresses the use of academic technologies in the educator role. The advanced practice emphasis area of Family Nurse Practitioner provides graduates with the needed course work and practica necessary to sit for the certification exam.

#### **Admission Requirements:**

- Bachelor's degree with an upper division nursing major from a program accredited by the National League for Nursing or the Commission on Collegiate Nursing Education.
- Admission to UCM's graduate school including specific requirements for the Department of Nursing.
- Completion of the Department of Nursing's application for admission including undergraduate transcripts.
- A minimum of one year of post baccalaureate nursing experience for students choosing the Family Nurse Practitioner emphasis area. This year may be completed while taking core theory courses for the program.
- Undergraduate minimum grade point average of 3.0 on a 4.0 scale.
- Has an active registered nurse license.
- Computer or computer access with hardware compatible with UCM's program software. Basic computer skills are required prior to matriculation.
- Completion of a criminal background check.

Selection is based on the applicant's qualifications, intellectual curiosity, potential for professional growth, and contributions to the profession. Exception to any of the admission requirements will be considered on an individual basis.

**Post-Master Certificates**—In addition to a Master of Science in Rural Family Nursing, we are offering two post-master certificates: Nurse Educator or Family Nurse Practitioner. This certificate is for individuals who have been prepared with a Bachelor of Science in Nursing and a Master's Degree in Nursing, and who would like to have specialty knowledge in either Nursing Education or Family Nurse Practitioner.

The Nurse Educator Certificate consists of courses in the nurse educator concentration, for a total of 14 credit hours.

The Family Nurse Practitioner Certificate consists of courses in the family nurse practitioner concentration, for a total of 26 credit hours.

**Consideration of Applications**—Completed applications will be considered by the Department of Nursing on a space available basis until one week before the first day of classes fall and spring semester. Students may enroll in courses prior to official admission.

**Notification of Status**—Admission to the Department of Nursing may be approved, deferred, or rejected. If admission is approved, the applicant will receive a letter of admission. Applicants whose admission is deferred or rejected will be notified by letter. Applicants who wish to be considered for financial assistance are highly encouraged to complete and submit a Free Application for Federal Student Aid when applying for admission.

**Full-Time and Part-Time Degree Status**—Opportunities for parttime and full-time study are available. A full-time graduate student is one enrolled in 9 or more semester hours of graduate credit during the fall and spring semesters and 6 semester hours during the summer session. Students who wish to change from full-time or part-time status must notify the Graduate Program Coordinator.

#### Additional Admission Requirements for International

**Applicants**—International students provide a unique cultural and personal addition to UCM. They are encouraged to apply early in the academic year prior to the year they wish to attend Central Missouri to ensure time to complete the following additional requirements:

- 1. Evidence of adequate financial support for the duration of the program.
- 2. A minimum score of 600 paper-based or 100 internet based on the Test of English as a Foreign Language (TOEFL) if English is not the primary language.

3. A passing score on the Commission on Graduates of Foreign Nursing Schools (CGFNS) examination.

The CGFNS examination is a prerequisite for taking the Registered Nurse Licensing examination in the state of Missouri and for obtaining a nonimmigrant occupational preference visa (H-1A) from the United States Immigration and Naturalization Service. CGFNS offers a two-part certification program that includes a credentials review followed by a test of nursing and English language skills. The CGFNS examination is given in March, August, and November. Application materials may be requested from CGFNS, Attn: CP, 3600 Market Street, Philadelphia, Pennsylvania, 19014-2651 (Phone 215/349-8767). The registration deadline for these exams is approximately four months prior to their administration. Early application is therefore essential.

**Health and Immunization Record**—As a professional nurse, the graduate student is expected to maintain immunizations according to departmental policy. Missouri law requires all new students to present proof of certain immunizations before matriculation. The University of Central Missouri, Department of Nursing Student Health Immunization Form and Report of Medical History, furnished by the Department of Nursing, should be completed and returned to the Department of Nursing, UHC 106, University of Central Missouri, Warrensburg, Missouri 64093 (660-543-4775). It is preferable for students to arrive on campus with complete, verified immunization forms. For those who are unable to do so, the University Health Center may provide some of the necessary inoculations for a minimal charge (660-543-4770).

**CPR Certification**—Students must be trained and certified in adult and child cardiopulmonary resuscitation (CPR) prior to enrollment in graduate courses requiring clinical experience. Students must maintain re-certification throughout the program.

**Non-Degree Students**—Individuals may take graduate level courses as a non-degree student, provided they have a bachelor of science in nursing degree from a National League for Nursing (NLN) or Commission on Collegiate Nursing Education (CCNE) accredited school. Non-degree students are admitted to individual classes by permission of the instructor on a space available basis.

To apply, applicants must send an official copy of all undergraduate nursing transcripts to the Department of Nursing, along with a completed Application for Admission as a non-degree student. Students who also register for clinical courses must submit two letters of reference from their employer and evidence of licensure as a nurse in the state of Missouri. All non-degree application requirements must be received by the deadline for the semester during which the course will be offered (cf. "Consideration of Application" in this book). Requests for non-degree status will be considered within two weeks after the appropriate deadline.

If permission is granted by faculty, the student will be notified by the Chair of the Department of Nursing. (Non-degree students requesting a second course may make the request to the Department of Nursing). Up to seven credits earned as a non-degree student may be accepted for credit toward the MS degree if the applicant is later admitted to the master's program.

**Transfer of Graduate Credits**—Transfer credit will be given only for academic work completed within five years before matriculation at Central. Such units are transferable only if the student has earned a minimum of 6 units of graduate credit at University of Central Missouri's Department of Nursing. A student wishing to transfer course work should make a written request and provide a syllabus or some other description of the course to his/her academic adviser. (See Central's Graduate Catalog or other policies related to the transfer of graduate credit).

**Transfer to Another Graduate Nursing Emphasis Area**—A change of graduate nursing emphasis area may be made, contingent upon approval of the faculty involved. Should a change be made, a student must meet all requirements of the new emphasis area.

**Advisement**—The Graduate Program Coordinator will assign students to graduate faculty for advisement. The graduate faculty adviser assists the student in planning and implementing his/her course of study throughout the master's program. Students select their thesis/project according to their clinical and research interests.

**Grades**—All courses counting toward the master's degree must be taken for the following grades: A (4.0); B (3.0); C (2.0). Master's Degree students with a GPA of less than 2.7 after completing 20 credits will be asked to withdraw from the program. An F (0.0) in any graduate level course will result in administrative withdrawal from the program at the end of the semester in which the grade is received. In case of illness or other nonacademic problems, it is the student's responsibility to negotiate with the professor for a U (uncompleted grade).

**Withdrawal from a Course**—Students may make changes in their schedules during the drop/add periods of the fall, spring and summer semesters. A fee is charged by the university if changes are made after that period. If a student withdraws from a course after the drop/add period, the progress of the student at the time of withdrawal from the course will be indicated on the record as Withdrew Passing (WP) or Withdrew Failing (WF).

Interruption of Program and Withdrawal from the Graduate Program—The Department of Nursing reserves the right, and matriculation by the student is a concession of this right, to request the withdrawal of any student whose performance at any time does not comply with the Missouri State Board of Nursing Practice Act (1993) and the American Nurses' Association Code for Nurses (2001).

If a student for any reason wishes to withdraw from the program, notification should be made in writing to the coordinator before the expected date of withdrawal. Students who have withdrawn from the program must apply for readmission according to regular admission policies. Students who find it necessary to interrupt their programs of study should request in writing a leave of absence addressed to the Graduate Program Coordinator of the Department of Nursing. A maximum of one calendar year's leave may be granted; this will be counted toward the total time allowed to complete the program.

**Commencement**—Graduation exercises are held twice a year, in May and December, when degrees are conferred and diplomas issued to students who have completed all requirements. Diplomas cannot be issued until they are approved by the Academic Council and Board of Governors. All graduates are expected to attend commencement exercises.

		Sem Hours
	-	DUATE COURSES
NUR	5015	Theories of Nursing
NUR	5016	Theoretical Foundations of Rural
		& Family Nursing
NUR	5600	Contemporary Issues in Health Care
		Delivery & Nursing
Gradua	te Statis	tics
NUR	5000	Methods of Research in Nursing
NUR	5010	Nursing Research Thesis or
NUR		Nursing Research Project
CONCE	NTRATIO	DN
Stud	ents mus	st complete all requirements in one of the following
		concentration areas.
Family N	Nurse Pr	actitioner Concentration
NUR	5020	Pharmacology for Advanced Practice Nursing 3
NUR	5200	Family Nurse Practitioner: Primary Care
		of the Childbearing Family
NUR	5201	Family Nurse Practitioner:
		Primary Care of the Childrearing Family3
NUR	520	Family Nurse Practitioner: Primary Care of
		Adults & the Elderly I
NUR	5203	Family Nurse Practitioner: Primary Care of
		Adults & the Elderly II
NUR	5204	Family Nurse Practitioner: Primary
		Care Practicum
NUR	5300	Advanced Concepts of Altered Health
NUR	5310	Advanced Health Appraisal

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Nurse Educator Concentration				
NUR	5030	Academic Technologies in Nursing Education 3		
NUR	5035	Measurement in Nursing		
NUR	5040	Teaching Theory in Nursing		
NUR	5041	Teaching Clinical Practica in Nursing		
NUR	5050	Designing Nursing Curricula		
MINIMUM GRADUATE HOUR TOTAL				

#### **Nursing Courses**

NUR 4000 Special Projects in Nursing (1-3) Investigation of contemporary problems and issues in nursing by selected individuals or groups. May be repeated for a maximum of 6 semester hours.

NUR 4020 Grief and Loss (2) A seminar designed to assist various pre-professionals to understand and deal with loss and death either in a professional capacity or on a personal basis. Open to nursing and non-nursing majors.

NUR 4030 Human Sexuality (2) Current theory regarding the biological, cultural, and behavioral parameters of human sexuality. Open to nursing and non-nursing majors.

NUR 4040 Nursing Informatics (2) Introduces the student to the synergistic use of nursing, information and computer sciences unique to nursing informatics. Explores impact on nursing practice roles and quality of patient care. Prerequisites: Meeting general education requirement for technology.

NUR 4405 Aging of Self and Others (2) Seminar concerning an individual's aging in our society. Focus is on how one perceives and adapts to the aging of self and others. Open to nursing and non-nursing majors.

NUR 5000 Methods of Research in Nursing (3) Generating research questions, conducting and critiquing nursing research are explored.

NUR 5010 Nursing Research Thesis (1-3) A research investigation of a nursing problem. May be repeated for a maximum of 6 semester hours. Prerequisites: Graduate level statistics, NUR 5000 and NUR 5015.

NUR 5012 Nursing Research Project (1-3) A research based investigation and implementation of a nursing project. May be repeated for a maximum of 6 semester hours. Prerequisites: Graduate level statistics, NUR 5000 and NUR 5015.

NUR 5015 Theories of Nursing (3) Theory, theory development, application of theory in nursing practice settings and theory critique are explored. Prerequisites: Admission to graduate nursing program or consent of instructor.

NUR 5016 Theoretical Foundations of Rural & Family Nursing (3) Theories and research findings are analyzed in determining the scientific and practice base of rural and family nursing. Prerequisites: Admission to graduate nursing program.

NUR 5020 Pharmacology for Advanced Practice Nursing (3) Clinical application of pharmacological treatments commonly encountered by the advanced practice nurse. Explores the advanced practice nurse role in prescribing, administering and monitoring drug therapy.

NUR 5030 Academic Technologies in Nursing Education (3) Academic technologies are explored for their use in nursing education.

NUR 5035 Measurement in Nursing (2) An overview of the measurement process in nursing science with emphasis on national/ state and teacher/researcher data collection instruments.

NUR 5040 Teaching Theory in Nursing (3) Theories and principles of teaching and learning are analyzed for applicability to the teaching of nursing science.

NUR 5041 Teaching Clinical Practica in Nursing (3) An introduction to teaching and learning in nursing practice settings. Prerequisites: NUR 5040 or concurrently.

NUR 5050 Designing Nursing Curricula (3) An analysis of the processes for designing and implementing nursing curricula.

NUR 5200 Family Nurse Practitioner: Primary Care of the Childbearing Family (3) Application of theory and research of childbearing in the advanced practice nursing care of infants and children with emphasis based in rural family health nursing. Prerequisites: NUR 5020 and NUR 5310.

#### NUR 5201 Family Nurse Practitioner: Primary Care of the Childrearing Family (3) Application of theory and research of childrearing in the advanced practice nursing care of infants and children with emphasis based in rural family health nursing. Prerequisites: NUR 5020 and NUR 5310.

NUR 5202 Family Nurse Practitioner: Primary Care of Adults and the Elderly I (3) Wellness promotion with design, implementation and evaluation of nursing management of selected acute health problems of adults and the elderly. Prerequisites: NUR 5020, NUR 5300 or concurrent, and NUR 5310.

NUR 5203 Family Nurse Practitioner: Primary Care of Adults and the Elderly II (3) Management of older individuals and families with emphasis on wellness and chronic problems and continuing exploration of the nurse practitioner role. Prerequisites: NUR 5020, NUR 5300, and NUR 5310.

NUR 5204 Family Nurse Practitioner: Primary Care Practicum (4) Primary care management of individuals and families. Prerequisites: NUR 5015, NUR 5016, NUR 5200, NUR 5201, NUR 5202, and NUR 5203.

NUR 5300 Advanced Concepts of Altered Health (3) An examination of pathophysiological alterations associated with individuals seeking primary care.

NUR 5310 Advanced Health Appraisal (4) Advanced health assessment skills essential to primary health care. Expands upon previous health and wellness knowledge and physical assessment abilities. Includes an integrated clinical practicum.

NUR 5600 Contemporary Issues in Health Care Delivery and Nursing (3) Emphasis on health care delivery systems, professional behavior, health policy and organizational.

## Department of Safety Sciences Humphreys 235 • (660) 543-4626

### MASTER OF SCIENCE

#### Occupational Safety Management 53 000xxx

**Student Learning Outcomes**—The graduate with a Master of Science degree in Occupational Safety Management (all emphases) will use the knowledge and skills obtained in the programs to:

- Demonstrate the ability to communicate professionally verbally and in writing.
- Demonstrate knowledge of professional integrity and ethical standards.
- Recognize the importance of contemporary, global and societal issues as they relate to the practice of occupational safety and health.
- Develop, coordinate and/or participate on multidisciplinary teams to protect people, property and the environment.
- Recognize the importance of life-long learning for the purpose of enhancing discipline specific technical competencies.
- Analyze injury, illness and liability trends to help establish priority direction.
- Organize limited resources for optimum risk control.
- Develop, implement and evaluate hazard control processes for a performance safety program.

This professional degree is offered to prepare students to assist management in the effective use of resources for the development, implementation and assessment of a comprehensive safety and health program in a variety of occupational settings.

To be accepted into this program, an applicant must hold a baccalaureate degree with a grade point average of 2.5. An applicant must submit a three-to-five page essay that demonstrates writing skills and relates proposed graduate degree learning outcomes to professional goals. Application for admission will not be considered by the department prior to submission of the required essay. A Program of Study should be submitted to the graduate program adviser as soon as admission procedures are complete. An applicant must have completed a semester of business or industrial management, a semester of behavioral science (i.e. psychology or sociology), one semester of two different college level science classes with laboratory (i.e. chemistry, life science or biology), and a semester of college level algebra and statistics. Each candidate for the degree must exhibit an acceptable level of competence on a departmentally designated exit examination to be completed during the last semester of study.

REQUIR	REQUIRED GRADUATE COURSES			
SAFE	5010	Organization, Administration &		
		Supervision of Safety Programs		
SAFE	5120	Principles of Industrial Hygiene		
SAFE	5430	Occupational Hazard Management 3		
SAFE	5940	Current Literature & Research in Safety 3		
SAFE	6920	Seminar in Safety Sciences		
SAFE	6930	Individual Research Problems or		
SAFE	6950	Thesis		
SAFE	6940	Internship in Safety Sciences or		
		Approved Electives		
Industria	al Safety	v Option 000232		
SAFE	4000	Ergonomics in Safety & Health		
SAFE	5015	Emergency Planning & Operations		
SAFE	5220	Management of Safe Transportation Systems 3		
SAFE	4560	Introduction to Systems Safety		
SAFE	4850	Industrial Fire Protection		
Transpo	rtation S	Safety Option 000233		
SAFE	4215	Transportation & Storage of		
		Hazardous Materials		
SAFE	4250	Traffic Engineering3		
SAFE	4260	Management of Fleet Safety Programs		
SAFE	5220	Management of Safe Transportation Systems 3		
SAFE	5230	Traffic Safety Program Management 3		
Public S	afety Op	ption 000234		
SAFE	5015	Emergency Planning & Operations		
SAFE	5180	Principles of Epidemiology		
SAFE	5230	Traffic Safety Program Management		
SAFE	4850	Industrial Fire Protection		
POLS	4570	Public Administration		
Loss Control Option 000235				
SAFE	4510	Loss Control		
SAFE	4520	Safety & Risk Analysis		
SAFE	5530	Loss Control Management		
SAFE	5740	Comm. & Institutional Security		
SAFE	4850	Industrial Fire Protection		
Fire Scie		tion 000236		
SAFE	5015	Emergency Planning & Operations		
SAFE	4800	Water & Sprinkler Systems Analysis		
SAFE	4810	Fire Extinguishing & Alarm Systems3		
SAFE	4830	Fire Investigation		
SAFE	4850	Industrial Fire Protection		
Security	Option	000237		
SAFE	4710	Security Technology		
SAFE	4720	Personnel & Information Security		
SAFE	5710	History of Security		
SAFE	5740	Commercial & Institutional Security		
SAFE	5760	Security Statutes & Codes		
		DUATE HOUR TOTAL		

## MASTER OF SCIENCE

#### Industrial Hygiene 53 000179

Accredited by the Applied Science Accreditation Commission of ABET 111 Market Place, Suite 1050 Baltimore, MD 21202-4012

Phone: (410) 347-7700

**Student Learning Outcomes**—The graduate with a Master of Science degree in Industrial Hygiene will use the knowledge and skills obtained in the programs to:

- Demonstrate the ability to communicate professionally verbally and in writing.
- Demonstrate knowledge of professional integrity and ethical standards.
- Recognize the importance of contemporary, global and societal issues as they relate to the practice of occupational safety and health.
- Develop, coordinate and/or participate on multidisciplinary teams to protect people, property and the environment.
- Recognize the importance of life-long learning for the purpose of enhancing discipline specific technical competencies.
- Identify and evaluate agents and stressors in occupational and nonoccupational settings.
- Collect and analyze data using qualitative and quantitative methods and procedures.
- Recommend and evaluate hazard mitigation strategies.

Additionally, graduates with a Master of Science degree in Industrial Hygiene will demonstrate the following specific program outcomes:

- Apply basic skills in developing sampling strategy, sampling methods, and use of control measures.
- Design a hygiene program that mitigates chemical, biological and physical hazards.
- Collect, analyze and interpret data using qualitative and quantitative methods of hazard assessment.
- Identify and evaluate agents and stressors in occupational and nonoccupational settings.
- Apply techniques of using instrumentation to discover/identify hazards, prioritizing, and implementation for strategies to control or minimize the risks of exposure.
- Evaluate the most appropriate level of protection that considers the degree of hazard, concentration of chemical and nature of the toxicity.

This program is designed to prepare graduates to recognize, evaluate, and control environmental factors of chemical and physical stress arising from the work-place. An applicant must hold a baccalaureate degree with a grade-point average of 2.50. Candidates must have a minimum of 63 hours of credit, of which 15 hours are senior division level, in science, mathematics, engineering, safety and technology.

Applicants must have 21 hours in communications, humanities, and social sciences. An applicant must have a minimum of 15 hours of chemistry to include organic chemistry, 9 hours of biology to include physiology, one semester of physics, and 9 hours of mathematics to include statistics.

A successful applicant must have a minimum grade-point average of 2.25 in mathematics and science. The applicant must complete the Graduate Record Exam (GRE) and must submit a three-to five page essay that demonstrates writing skills, and relates proposed graduate education to professional goals.

Application for admission will not be considered by the department prior to submission of the GRE scores and required essay. Each candidate for the degree must exhibit an acceptable level of competency on a departmentally designated exit examination to be completed during the last semester of study.

				Hours
REQUIR	ed gra	DUATE COURSES	. 33	
SAFE	4150	Noise Measurements		2
SAFE	4160	Industrial Ventilation for Environmental		
		Safety & Health		3
SAFE	5170	Industrial Toxicology		3

SAFE	5180	Principles of Epidemiology		
SAFE	4425	Safety & Health Legislation & Standards 3		
SAFE	5010	Organization, Administration and Supervision of		
		Safety Programs		
SAFE	5120	Principles of Industrial Hygiene		
SAFE	5130	Industrial Environmental Monitoring 3		
SAFE	6940	Internship in Safety Science & Technology 6		
SAFE	4435	Environmental Compliance		
SAFE	5940	Current Literature & Research in Safety		
DEPARTMENTALLY APPROVED GRADUATE ELECTIVES 9				
MINIMU	M GRA	DUATE HOUR TOTAL		

#### Safety Courses

SAFE 4000 Ergonomics in Safety and Health (3) An introduction into the role and application of ergonomics in a comprehensive safety program. Prerequisites: SAFE 3000 or equivalent.

**SAFE 4010 Accident Investigation (3)** Fundamentals and techniques of investigating accidents. Prerequisites: SAFE 3000 or SAFE 3120.

SAFE 4015 School Safety, Security and Crisis Management (3) Provides school personnel with current information addressing school safety and security needs, including an analysis of threat identification, violence prevention, safety plans, and crisis response.

SAFE 4020 Legal Aspects of Safety and Health (3) An investigation of the legal problems confronting the safety and health specialist. Prerequisites: SAFE 3000.

SAFE 4035 Safety Program Management (3) Examination of theory and practices of safety and health management. Includes planning programs, contemporary safety and health management practices, and programmatic impact of organizational theory.

SAFE 4140 Safety and Health Laboratory (3) A lab course using instrumentation commonly used in the evaluation of the workroom environment and equipment for safety. Prerequisites: SAFE 3120 and SAFE 3430, or equivalent.

SAFE 4150 Noise Measurements (2) Physics of sound, measurement and control of noise. Laboratory required. Prerequisites: one year of college physics or equivalent.

SAFE 4160 Industrial Ventilation for Environmental Safety and Health (3) Industrial ventilation systems designed to control health and safety hazards in the work environment with emphasis given to the design of local exhaust systems. Prerequisites: SAFE 3120 or equivalent.

SAFE 4215 Transportation and Storage of Hazardous Materials (3) A study of the state-of-the-art of safe methods for the transportation and storage of hazardous materials. Prerequisites: SAFE 3000 or equivalent.

SAFE 4250 Traffic Engineering (3) Planning, design and operation of effective and efficient traffic movement systems. Various types of traffic studies, traffic control techniques and devices, traffic flow patterns, street lighting and street and parking are presented and discussed. Students participate in field studies.

SAFE 4260 Management of Fleet Safety Programs (3) The role and responsibilities transportation officials have in the administration and operation of a motor fleet safety program.

SAFE 4425 Safety and Health Legislation and Standards (3) A comprehensive study of legislation and standards designed to protect the worker. Prerequisites: SAFE 3000.

**SAFE 4430 Workers Compensation Legislation (3)** An overview of the principles and statutes that govern workers compensation as they apply to the industrial setting. Prerequisites: SAFE 3000.

**SAFE 4435 Environmental Compliance (3)** Comprehensive study of federal and state environmental legislation and standards to protect the health and safety of citizens. Prerequisites: SAFE 3000.

SAFE 4510 Loss Control (3) Provides a background in loss control by investigating professional safety management. Emphasis is placed on incident recall, management's role in loss control, total job observation, total job analysis, and supervisory training. Techniques of implementing a total loss control program are explored. Prerequisites: SAFE 3000. SAFE 4520 Safety and Risk Analysis (3) Identification of safety risks and analytical treatment of those risks in various work settings. Prerequisites: SAFE 3000 or equivalent.

SAFE 4560 Introduction to System Safety (3) Techniques and concepts of hazard control within the constraints of operational effectiveness, time, and cost attained through the specific application of management and scientific principles throughout all phases of a system life cycle. Prerequisites: SAFE 3000 or equivalent.

SAFE 4700 Special Security Problems (3) An overview of security as applied to contemporary situations in business, industry, and government.

SAFE 4710 Security Technology (3) A survey of security detection, including electromechanical and electronic systems. Future applications of technology are discussed. Prerequisites: college level math course.

SAFE 4720 Personnel and Information Security (3) Methods used in screening personnel and safeguarding information.

SAFE 4800 Water and Sprinkler Systems Analysis (3) Water supply, how to determine quantity, and basic fire service water requirements. An in-depth study of the design, installation, operations and maintenance of sprinkler systems that use water. Prerequisites: MATH 1111 or equivalent.

**SAFE 4810 Fire Extinguishing and Alarm Systems (3)** Basic types of extinguishing systems, other than sprinkler systems, and their use. Fire alarm systems, their use, installation and components.

SAFE 4830 Fire Investigation (3) Fire investigation techniques with emphasis on fire causation, equipment, evidence, and reporting. Prerequisites: SAFE 1800 or equivalent.

SAFE 4850 Industrial Fire Protection (3) The recognition, control or elimination of fire hazards in industrial settings. Prerequisites: CHEM 1104 or MATH 1111, or consent of instructor.

SAFE 4900 Directed Studies (1-6) Individual or group study of problems in special areas of interest. May be repeated for a maximum of 6 semester hours.

SAFE 4910 Special Projects in Safety Sciences (1-3) Individual or group study of problems in special areas of interest. May be repeated for a maximum of 6 semester hours.

SAFE 4940 Introductory Quantitative Methods (3) Mathematical and statistical methods designed for the efficient collection and rational interpretation of data by individuals responsible for analysis in a variety of settings. Prerequisites: high school algebra or equivalent.

SAFE 5010 Organization, Administration, and Supervision of Safety Programs (3) Management styles and their effects upon safety and health programs.

SAFE 5015 Emergency Planning and Operations (3) The role and responsibilities of private and public officials in the development of emergency plans to reduce the human and material losses in time of an emergency.

**SAFE 5120 Principles of Industrial Hygiene (3)** The role and responsibilities of an industrial hygienist; the application of industrial hygiene methods to the recognition, evaluation and control of health hazards arising in or from the workplace.

SAFE 5130 Industrial Environmental Monitoring (3) Fundamentals of sample collection, precision and reliability of measurements, and methods for detecting and measuring trace contaminants in air and water. Prerequisites: CHEM 2650 or equivalent.

SAFE 5170 Industrial Toxicology (3) Chemical composition of cells, chemical processes of life, and the effects thereon of selected corrosive and toxic substances. Prerequisites: CHEM 2650 or equivalent.

SAFE 5180 Principles of Epidemiology (3) Introduction to the nature and scope of epidemiology. Principles and application of epidemiological methods in the investigation of environmental hazards.

SAFE 5220 Management of Safe Transportation Systems (3) Safety and management considerations specific to the five modes of transportation: water, rail, motor vehicle, air, and pipe. Development and importance of each mode; intermodalism. SAFE 5230 Traffic Safety Program Management (3) The process of preparing a traffic safety program plan, arranging for its implementation and monitoring the program administration of identified countermeasures.

SAFE 5430 Occupational Hazard Management (3) The examination of the management of hazards in the industrial environment. Industry standards affecting the management of hazards will be reviewed. Prerequisites: safety background or consent of instructor.

SAFE 5530 Loss Control Management (3) Development, management and evaluation of a comprehensive loss control program for business, industry, and government.

SAFE 5710 History of Security (3) The security of humans from primitive to modern times.

SAFE 5740 Commercial and Institutional Security (3) Security applications in commerce and institutions.

SAFE 5760 Security Statutes and Codes (3) Examination of state and federal statutes, ordinances as they relate to the field of security.

SAFE 5800 Managing Fire Risk (3) An integration of decision analysis and quantitative risk assessment with a defined step approach for quantifying the performance success of fire protection systems.

SAFE 5940 Current Literature and Research in Safety (3) Current research in the area of safety, research techniques and design in proposal and other technical writing. Prerequisites: SAFE 4940 or equivalent.

SAFE 5950 Readings in Safety Sciences (1-6) Readings in the student's field of interest or in related areas designed to enhance knowledge and/or skills. May be repeated for a maximum of 6 semester hours. Prerequisites: 9 semester hours of graduate credit.

SAFE 6920 Seminar in Safety Sciences (1) A seminar designed to investigate a broad spectrum of current problems and innovations in the field of safety. Consideration of criteria for the identification of problems and a critical analysis of present practices toward improving the quality and management of safety programs. May be repeated for a maximum of 2 semester hours.

SAFE 6930 Individual Research Problems (3) Independent study and investigation of a pertinent problem confronting the safety science and technology professional that will culminate in a research paper. Prerequisites: SAFE 5940 or equivalent.

SAFE 6940 Internship in Safety Sciences (1-6) Internships are based on student needs and educational goals. Actual work experiences in education, government, industry or business are provided. May be repeated for a maximum of 6 semester hours for each degree program. Prerequisites: departmental approval.

SAFE 6950 Thesis (3) An extensive investigation into a selected problem on an original research topic, culminating in a thesis. May be repeated for a maximum of 6 semester hours for each degree program. Prerequisites: SAFE 5940 or equivalent.

## Department of Sociology and Social Work Wood 203 • (660) 543-4407

### MASTER OF SCIENCE

#### Social Gerontology 53 000760

Student Learning Outcomes—The graduate with a Master of Science Degree in Social Gerontology will use the knowledge and skills obtained in the program to:

- Demonstrate knowledge of the social, psychological, economic and physical aspects of aging.
- Examine the impact social policy has on the older person, families, long-term care workers, and the organizations for which they work.
- Demonstrate knowledge of the formal and informal system of social support available to older adults.
- Engage in critical thinking by recognizing the complexity, ambiguity, and uncertainty that are present in the use of knowledge to address issues facing older adults.
- Apply the knowledge he/she has learned in the classroom to organizations which work with older people; or if doing a thesis, demonstrate an ability to formulate an independent research question and conduct a project to assess the question.
- Communicate effectively in both written and oral form.
- Demonstrate an understanding of end-of-life issues.
- Demonstrate and understanding of care-giving issues.
- Demonstrate knowledge of the ethical concerns involved in working with older adults.

This program is an interdisciplinary course of study designed for students seeking to prepare themselves for one of the many opportunities in the growing field of service for older adults. UCM offers both an on-campus program in Warrensburg and an extended campus experience in the Kansas City area. The off-campus program centers around evening classes that rotate in a two year cycle.

To be accepted into this program, a student must have a minimum undergraduate grade-point average of 2.50. Before filing a Program of Study, a student must have taken an oral departmental qualifying examination and have a Program of Study approved by the department graduate coordinator. Eligibility for Internship must also be approved by the department graduate coordinator prior to beginning the practical experience. A student must pass a departmental comprehensive examination before completion of the program.

			Sem Hours		
REQUIRED	GRAD	JATE COURSES	23		
SOC	4894	Sociology of Aging	3		
SOC	5840	Applied Gerontology	3		
SOWK	4620	Social Services & the Elderly			
NUR	4405	Aging of Self & Others	2		
MGT	4300	Health Care Administration			
SOC	4890	Social Survey Research or			
SOC	5810	Methods of Sociological Research	3		
Research		-	6		
SOC	5850	Internship in Gerontology or			
SOC	6890	Thesis	6		
GRADUATE ELECTIVES9					
Must be approved by the department graduate coordinator.					
MINIMUM	MINIMUM GRADUATE HOUR TOTAL				

## MASTER OF ARTS

Sociology 52 000758

Student Learning Outcomes--The graduate with a Master of Arts Degree in Sociology will use the knowledge and skills obtained in the program to: • Articulate a clear understanding of Sociology as a discipline including its key theoretical debates, analytic concepts and underlying assumptions. • Formulate a research question, design a project, and conduct the research to address the question. • Critically assess the theoretical ideas and/or evaluate theories in relation to empirical evidence.

• Develop a culturally sensitive perspective on the role of diversity and its impact on social interaction as well as on knowledge production within the United States and internationally.

Communicate effectively and appropriately in a variety of professional roles.

 Competently utilize library and public document research techniques including online data resources and demonstrate the ability to cite sources accurately.

• Act ethically in research and professional practice.

The Masters degree in Sociology is a dual-emphasis program designed to prepare students for employment in public sectors and academic settings by providing both methodological and theoretical training.

To be accepted into this program, a student must have a minimum overall undergraduate grade-point average of 2.75 and a minimum grade-point average of 2.75 in at least 15 hours of undergraduate sociology or related areas. A student without the 15 semester hours in sociology or related areas may be required to complete up to 15 hours of background courses in sociology prior to enrolling in 5000 or 6000 level courses.

Working with the Graduate Coordinator, each student will develop a Program of Study no later than after the completion of 12 graduate credit hours.

Students are required to submit a portfolio demonstrating knowledge and skill development which is reviewed by a minimum of two graduate faculty members in sociology to meet graduation requirements. The portfolio must receive a minimum evaluation of Acceptable prior to degree completion.

REQUIRED GRAI	Sem DUATE COURSES	. Hours		
SOC 5800	Theories of Society	3		
SOC 5880	Seminar in Sociological Theory	3		
Elect from the fe	bllowing6			
SOC 4890	Social Survey Research	3		
SOC 5810	Qualitative Research	3		
SOC 5815	5 Evalutuation Research	3		
Elect from the fe	Elect from the following6			
SOC 6880	) Internship in Sociology or	6		
SOC 6890	) Thesis	6		
GRADUATE ELEC	TIVES IN SOCIOLOGY15			
MINIMUM GRADUATE HOUR TOTAL				

#### Sociology Courses

Soc 4810 Urban Sociology (3) Urbanization, rise and growth of cities; attention to demography, ecology and changes in urban society; social problems such as land utilization, housing, slums, politics, crime, and living standards. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor.

Soc 4815 Special Projects in Sociology (1-6) Study, interpretation, and discussion of special topics and problems in sociology. May be repeated for a maximum of 6 semester hours.

Soc 4820 Collective Behavior (3) An application of social-psychological principles to various forms of collective phenomena, including cults, civil disturbances, and social movements. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor.

Soc 4825 Sociology of Education (3) Education as a social institution; its relationship to other institutions and the community. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor.

Soc 4830 Media, Culture, and Society (3) The purpose of this course is to provide students with a critical political economy framework for understanding the effects of mass media on society. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor. Soc 4840 Sociology of Sport (3) An investigation and analysis of the relationships between sport and society. Focus will be upon the development and changing nature of sport as an institution in modern society.

Soc 4845 Juvenile Delinquency (3) The nature, extent, and causes of juvenile delinquency; types of juvenile offenders and their career patterns; institutional controls and treatment programs. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor.

Soc 4846 Corrections and Preventions (3) Views and methods of dealing with criminals and juvenile delinquents; types of correctional systems and prevention programs. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor.

Soc 4850 Work and the Modern Society (3) Inquiry into modern society and its cultures, institutions, elites and classes as they are affected by work dynamics in the industrial and corporate arenas. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor.

Soc 4855 Sociology of Gender (3) Explores impact of gender stratification and roles on the attitudes and behavior of women and men, gender and social institutions, theories of gender, and sexuality. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor.

Soc 4860 Contemporary Sociological Thought (3) Assessment of current sociological thought as it is reflected by outstanding scholars in the field. Prerequisite: SOC 3800 and 3 additional semester hours of sociology, graduate standing or consent of instructor.

Soc 4865 Family Diversity (3) Focus on the institutional implications of the family. Diversity in ethnicity, sexuality, and class are emphasized. Intersection of work and family is explored. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor.

Soc 4872 Sociology of Organizations (3) A systematic study of the structural and interactional processes of work related organizations. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor.

Soc 4875 Medical Sociology (3) Social factors and institutional settings for physical and mental health care; public needs and medical services; research in medical sociology. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor.

Soc 4880 Sociology of Law (3) The development of legal institutions; law as a system of social control; law and social change. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor.

Soc 4885 Religion and Society (3) The structure and function of religion in society; social sources of religions; religion and the individual. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor.

Soc 4890 Social Survey Research (3) Major concepts in social survey research design, measurement, sampling, and data collection techniques. Quantitative analysis of survey data and micro-computer applications. Prerequisite: Soc 2805, graduate standing, or consent of instructor. Soc

4894 Sociology of Aging (3) The aging process and its consequences for the individual and society; an examination of the problem of aging in terms of demographic, economic, psychological and sociological implications; and emphasis on sociological principles and perspectives. Prerequisite: six semester hours of sociology, graduate standing, or consent of instructor.

Soc 5800 Theories of Society (3) Comprehensive assessment of core topics, schools, and debates in sociological theory based on primary sources.

Soc 5810 Qualitative Research (3) Advanced, applied course in qualitative research methods focusing on interpretive data collection strategies and analysis.

Soc 5815 Evaluation Research (3) Applied course in social research procedures for assessment of conceptualization and design, implementation, and utility of social intervention programs.

Soc 5830 Causation and Prevention of Delinquent Behavior (3) Major theories regarding the causes of delinquent behavior and their implication for the prevention of delinquency.

Soc 5840 Applied Gerontology (3) Interdisciplinary survey of current theoretical and empirical knowledge of aging. Particular focus upon the social, emotional, economic and physical aspects of aging and the societal programs designed to enhance the well- being of the aged. Prerequisite: 5 semester hours of sociology or graduate standing.

Soc 5845 Readings in Social Gerontology (1-3) Directed readings in social gerontology. May be repeated for a maximum of 6 semester hours.

Soc 5850 Internship in Gerontology (6) The application of theories and principles in the field of aging under the direction of the department and the supervising agency. Prerequisite: 10 semester hours of graduate credit.

Soc 5860 Advanced Topics in Sociology (3) Selected topics of contemporary interest in Sociology; variable content. May be repeated for a maximum of 6 semester hours.

Soc 5880 Seminar in Sociological Theory (3) Explores major debates in contemporary sociological theory including modernity/postmodernity, power, structure/agency and the cultural turn.

Soc 5885 Directed Readings in Sociology (1-3) Directed readings in sociology. Prerequisite: Consent of graduate coordinator required.

Soc 6880 Internship in Sociology (6) Supervised practical application of skills under the direction of the department and a supervising agency. Prerequisite: Soc 5815 or currently, and 18 hours of graduate credit.

Soc 6890 Thesis (6) Research leading to the completion of a thesis. Prerequisite: 18 hours of graduate sociology credit and 6 hours of graduate research methods.

#### Social Work Courses

SoWk 4610 Special Topics in Social Work (3) Selected Topics of contemporary interest in social work or specialized fields of practice; variable content. May be repeated for a maximum of 9 semester hours. Prerequisite: 9 semester hours of social work, graduate standing, or consent of instructor.

SoWk 4620 Social Services and the Elderly (3) Development of public policy and social service programming. Present and potential utility of individual, group and community intervention modalities as they relate to both the private troubles and public issues of aging. Prerequisite: 9 semester hours of social work, graduate standing or consent of instructor.

## **College of Science and Technology**

Dean's Office • Humphreys 225 • (660) 543-4450

## Department of Agriculture Grinstead 126 • (660) 543-4240

#### **Agricultural Courses**

AGRI 4000 Special Projects in Agriculture (1-6) Investigation of contemporary problems and issues in agriculture by selected individuals or groups. May be repeated for a maximum of 9 semester hours.

AGRI 4110 Agricultural Futures Trading (3) Examination of techniques used in pricing products in the agricultural commodities futures market. Emphasis on futures trading as a marketing tool with some consideration of alternative speculating techniques. Prerequisites: AGRI 2010 and AGRI 3120 or equivalent.

AGRI 4120 International Agriculture (3) Economic, cultural, governmental and environmental factors which influence agricultural production and trade among countries. Prerequisites: AGRI 2130 and AGRI 3120.

AGRI 4140 Agricultural Policy (3) History, principles, settings, objectives, and methods of policy development as applied to agriculture in our society. Prerequisites: AGRI3110 and AGRI 3120.

AGRI 4150 Natural Resource Economics (3) Nature of natural resources; economic efficiency as basis for natural resource use; externalities in natural resource use; factors influencing environmental quality; alternate public policy tools for influencing natural resource use. Prerequisites: ECON 1010 and ECON1011.

AGRI 4200 Advanced Agriculture Mechanics (3) Application of shop principles to the design and construction of farm mechanical projects. Prerequisites: AGRI 1200.

AGRI 4300 Soil Fertility and Fertilizers (3) Theory and practice of utilizing agricultural fertilizers to maximize soil productivity. Prerequisites: AGRI 2330.

AGRI 4310 Plant Improvement (3) The principles and practices involved in the selection and breeding of farm crops. Prerequisites: AGRI 1600; AGRI 1310 or AGRI 2315.

AGRI 4320 Agricultural Plant Diseases (3) Agricultural plant diseases with emphasis on recognition and control. Prerequisites: AGRI 1600; AGRI 1310 or AGRI 2315.

AGRI 4330 Soils Management (3) Principles of soils management as applied to physical improvement and fertility maintenance of soils. Prerequisites: AGRI 2330.

AGRI 4340 Agricultural Sprays and Chemicals (3) Types of agricultural chemicals and their application in control of insects, parasites, and weeds. Prerequisites: AGRI 2330; AGRI1310 or AGRI 2315.

AGRI 4410 General Veterinary Science (3) Anatomy, physiology, disease control, parasitic control, and sanitation of farm animals. Prerequisites: AGRI 1420 and CHEM 1104.

AGRI 4415 Reproduction of Farm Animals (3) Reproductive physiology of farm animals with practice in evaluation of semen, artificial insemination, and methods of pregnancy diagnosis. Prerequisites: AGRI 1420 and AGRI 3410.

AGRI 4430 Animal Science: Beef (3) Systems of beef production. Includes breeding, feeding, and management of commercial and purebred beef. Prerequisites: AGRI 1420.

AGRI 4435 Animal Science: Pork (3) Systems of pork production. Includes breeding, feeding, and management of commercial and purebred swine. Prerequisites: AGRI 1420.

AGRI 4600 Horticultural Plants I: Woody (3) Identification, description, climatic adaptation, classification, characteristics, and best landscape use of woody horticultural trees and shrubs. AGRI 4605 Turfgrasses (3) Identification, description, adaptation, classification, cultural charateristics, and best use of herbaceous Horticultural plants. Prerequisites: AGRI 1300, AGRI 1600 and AGRI 1610.

AGRI 4610 Turfgrass Science (3) Selection, identification, establishment and maintenance of turf grasses. Prerequisites: AGRI 1600 and AGRI 2330.

AGRI 4800 Topics in Agriculture (1-3) Individual investigation of a special problem in agriculture in the student's major field not available under regular classes. May be accomplished by reports, surveys, discussions, bibliographies, experiments, and library research. May be repeated for a maximum of 3 semester hours. Prerequisites: consent.

AGRI 4820 Agricultural Safety (3) The history of and need for agricultural safety, operating guidelines for machines and chemical handling and application. A review of occupational health laws and how they relate to the agricultural workforce. Prerequisites: junior standing and AGRI 1200 or AGRI 3200.

AGRI 4900 Planning and Conducting Programs in Agricultural Education (3) Development and organization of vocational agriculture programs at the secondary level to meet the needs of local schools and community.

AGRI 4910 Agricultural Occupations Experience Programs (2) Understandings and competencies required to establish, administer, and evaluate supervised agricultural occupational experience programs. Prerequisites: AGRI 4900.

AGRI 4920 Agricultural Mechanics in Agriculture Education (2) The selection and organization of teaching materials; planning shop facilities and selection of equipment, hand tools, and shop supplies essential in establishing and teaching the agricultural mechanics program. Prerequisites: AGRI 4900.

AGRI 5000 Advanced Readings in Agriculture (1-3) Advanced readings in the student's field of interest or related areas. May be repeated for a maximum of 6 semester hours. Prerequisites: consent of instructor.

AGRI 5230 Agricultural Machinery Management (3) The capacities, costs, and practicalities of various mechanical systems used in the agricultural industry. Prerequisites: 15 semester hours of agriculture courses.

AGRI 5310 Pasture Management (3) Maintenance and uses of grasses and legumes for pastures. Prerequisites: AGRI 2330 and AGRI 2315.

AGRI 5410 Advanced Animal Breeding (3) An in-depth study of methods of livestock selection utilizing genetic variation. Prerequisites: AGRI 3410.

AGRI 5800 Research Problems in Agriculture (1-3) Meets individual student needs for additional experience in selected areas of agricultural research. Requires the completion of an original research project, presentation of the results in a public forum, and the completion of a formal, bound research paper. May be repeated for a maximum of 6 semester hours. Prerequisites: AGRI 5160 and T&OE 5130.

AGRI 5850 Research and Thesis (2-4) Designed to give experience in executing research and analyzing agricultural data. Required for collecting data to complete a thesis. Maybe repeated for a maximum of 6 semester hours. Prerequisites: AGRI 5160 and T&OE 5130.

AGRI 5920 Induction to Teaching Year I (2) This course is for the professional development of first-year agriculture teachers. Focus is placed on knowledge and skills needed by a beginning teacher. Prerequisites: consent of the Instructor.

AGRI 5930 Induction to Teaching Year II (2) This course is for the professional development of second-year agriculture teachers. Focus is placed on knowledge and skills needed by a beginning teacher. Prerequisites: consent of the Instructor.

## Department of Aviation Gaines 210 • (660) 543-4975

#### MASTER OF SCIENCE

#### Aviation Safety 53 000158

**Student Learning Outcomes**—The graduate with a Master of Science degree in Aviation Safety will be able to:

- Apply the knowledge and skills appropriate to aviation and aviation management.
- Understand and use specialized knowledge in aviation safety, and aviation safety program management.

This program is designed to prepare individuals for a career in aviation safety, safety program management, or aviation management. To be accepted into this program, a student must have a minimum grade-point average of 2.50 in the undergraduate major. Exceptions to this standard may be granted on a case by case basis. Suitable educational background or experience in aviation and/or safety is required for acceptance. A student must pass a comprehensive examination before completion of the program.

		Sem. Hours
REQUIRE	D GRA	DUATE COURSES
AVIA	4040	Aviation Management
AVIA	4090	Aviation Law
AVIA	4500	Aviation Safety
AVIA	5030	Airport Planning & Design
AVIA	5500	Aviation Systems Safety
AVIA	5510	Aviation Safety Program Management3
AVIA	5520	Aircraft Accident Investigation
AVIA	4420	Air Transportation or
SAFE	4560	Introduction to Systems Safety
RESEARC	CH	
T&OE	5130	Research Methods in Applied Sciences & Technology
		or
SAFE	5940	Current Literature & Research in Safety
GRADUA	TE ELEC	CTIVES
MINIMU	M GRAI	DUATE HOUR TOTAL

#### **Aviation Courses**

AVIA 4000 Special Projects in Power and Transportation (1-3) Investigation of contemporary problems and issues in power and transportation by selected individuals or groups. May be repeated for a maximum of 6 semester hours.

AVIA 4040 Aviation Management (3) Aviation/airport management and administrative functions, issues, and problems involving both large and small airports, heliports, sea plane bases and related fixed base operations.

AVIA 4045 Airport Management (3) Airport operations and management principles and applications. Personnel, security, budgeting, contracts, maintenance and public relations.

AVIA 4060 Aerospace Education (2-3) Basic aerospace information dealing with the social, scientific, and technological importance of aviation and space with special applications for teachers who desire to utilize such information in the elementary and secondary school.

AVIA 4070 Aviation History (3) Major events, people, and changing technologies in the development of the present day air transportation system.

AVIA 4080 Nondestructive Inspection and Testing (3) Magnetic particle, eddy current, dye penetrant, ultrasonic vibration analysis, acoustics, radiographic, infrared, and liquid crystal methods of nondestructive inspection. Prerequisites: PHYS 1104 or SAFE 1010 or SAFE 1200 (for A&P students).

AVIA 4090 Aviation Law (3) Legal foundations and the federal and state regulatory functions which influence aviation and those who work in the industry.

AVIA 4095 International Aviation (3) Aviation issues in international aviation including ICAO regulations and other factors related to the operation of airplanes in a global environment.

AVIA 4310 Air Traffic Control (2) Purposes, activities and operational procedures of air traffic control centers, towers and flight service stations. Study will include both standard and emergency services available from ATC/FSS systems.

AVIA 4320 Physiology and Flying (2) Physiological factors related to flying, including those related to changes in pressure, supply of oxygen, spatial disorientation, and both positive and negative effects of chemicals in the body.

AVIA 4330 Sport Aviation (2) Sailplanes, hot air balloons, and related sport aircraft. Students will have flying experience in either sailplanes or hot air balloons. Flight fees are required to cover expenses of flight instruction. Principles of organizing fly-ins, air shows, and contests.

AVIA 4350 Aviation Weather (3) Meteorology for pilots with information for understanding and interpreting aviation weather reports and forecasts, weather hazards including windshear, turbulence, icing and visibility restrictions. Prerequisites: SAFE 1310.

AVIA 4370 Advanced Flight Crew Management (3) Advanced flight crew operations with emphasis on the transition of the professionally qualified pilot into a highly skilled member of a flight management team with knowledge of cockpit resource management, high speed and high altitude flight techniques, turbine-powered operations and advanced avionics systems. Prerequisites: SAFE 3317.

**AVIA 4380 Flight Operations Management (3)** Airline flight operations management principles and applications.

AVIA 4390 Part 135 Flight Operations (3) Emphasis is placed on the operating systems of a Beechcraft King Air A90 along with the knowledge required to operate in a Part 135 Flight Operation as Second-In-Command. Prerequisites: SAFE 3330, SAFE 3317, and SAFE 3314.

AVIA 4420 Air Transportation (3) Organization and administration of the air transportation industry with attention to airline regulations, rate and route structures, air cargo and freight, scheduled and nonscheduled operations, and contract air transport.

AVIA 4430 Corporate Aviation Management (3) Role, scope and purpose of business aviation. Managerial, administrative and financial business functions related to the use of business aviation aircraft.

AVIA 4500 Aviation Safety (3) To develop a knowledge of contributing factors affecting aviation safety and fostering control methods and techniques to reduce accidents related to aircraft and the aviation field.

AVIA 5010 Special Problems in Aviation Technology (2-6) Meets individual student needs for additional research and/or laboratory experiences in the development of technical knowledge and skills in the areas of power and transportation. May be repeated for a maximum of 6 semester hours.

AVIA 5030 Airport Planning and Design (3) Criteria involved in the planning, design, development, and improvement of airports. Includes planning for normal operating procedures of modern airport facilities.

AVIA 5500 Aviation Systems Safety (3) Provides background necessary to identify, analyze, and control hazards involved with the air transportation system.

AVIA 5510 Aviation Safety Program Management (3) Provides the student with prevention information and activities necessary to enable the graduate to perform effectively as an aviation safety program manager.

AVIA 5520 Aircraft Accident Investigation (3) Principles and procedures for investigating aircraft accidents to determine probable causes and to make recommendations which will prevent the reoccurrence of accidents and factors which led to them.

## Department of Biology and Earth Science W.C. Morris 306 • (660) 543-4933

### MASTER OF SCIENCE

#### Biology 53 000382

**Student Learning Outcomes**—The graduate with a Master of Science degree in Biology will use the knowledge and skills obtained in the program to:

- Demonstrate an understanding of the theories and principles of biology and of the development of biology as a discipline in the student's area of specialization.
- Use the language and concepts of biology effectively in oral and written presentations.
- Select, apply and interpret appropriate metrics and computer applications to resolve biological issues and problems in the student's area of specialization.
- Develop, implement and carry through to completion original research (Plan A).
- Report the results of original research using professionally accepted formats and in an academically recognized venue (Plan A).
- Develop and report secondary research based on literature search of published resources (Plan B).
- Integrate the perspectives and understandings of other disciplines with that of Biology in analyzing a specific problem.
- Integrate the perspectives and knowledge of the discipline of Biology with the perspectives and knowledge of other disciplines in analyzing and participating in the development of environmentally sustainable technologies and values.
- Interact and collaborate with other biologists, including researchers, administrators, teachers and students.

This program is designed for the student seeking advanced training in professional biology, including the teaching of biology. To be accepted into the program, a student must have a minimum of 30 semester hours in biology, a minimum undergraduate grade-point average of 2.50 in biology and 2.50 overall. A student must submit a thesis and present a departmental seminar (Plan A) or satisfy the additional course requirements shown below (Plan B). All biology graduate students must be enrolled in BIOL 5005 during all semesters they are actively involved in their graduate work and must comply with "The Graduate Guide". All students must pass an oral examination before completion of the program.

Sem. Hour	ſS
REQUIRED GRADUATE COURSES	
BIOL 5005 Graduate Seminar	5
BIOL 5031 Biological Literature	2
PLAN A: BIOL 5951 Master's Thesis 6	
or	
PLAN B: Additional approved electives and	
BIOL 5952 Project in Lieu of Thesis	3
APPROVED ELECTIVES IN BIOLOGY AND/OR	
RELATED AREAS	
MINIMUM GRADUATE HOUR TOTAL	
PLAN A:	
PLAN B:	

**Note:** In addition to the department degree requirements, the following University requirements must be satisfied: At least 15 semester hours on the approved program must have been in 5000/6000 level courses for graduate students only; a student is limited to a maximum of 6 semester hours of credit in thesis or in an individual research project on a Master's degree program.

#### **Biology Courses**

**BIOL 4011 Special Problems in Biology (1-4)** Individual work under supervision of a staff member. Problems may be undertaken in any field of biology. May be repeated for a maximum of 4 semester hours. Prerequisites: consent of instructor.

BIOL 4012 Special Projects in Biology (1-8) May be repeated for a maximum of 9 semester hours. With permission of the Department Chair, functional majors in medical technology may repeat for a maximum of 30 semester hours. Prerequisites: consent of instructor.

BIOL 4013 Introduction to Experimental Design and Analysis (3) This course covers the conceptualization, implementation, analysis, and communication of research in biology. Prerequisites: BIOL 1111 or BIOL 1112 and College Algebra or Pre Calculus or consent of instructor.

**BIOL 4014 Internship in Biology (1-9)** Practical experience working within the various components of the Biology discipline. Only 4 credit hours total may be used to satisfy approved Biology electives. Prerequisites: Must be a major in the Department of Biological Sciences with at least 60 hours of credit.

**BIOL 4210 Ichthyology (4)** A thorough examination of the biology of the fish with special emphasis on the fish of Missouri. Students will be expected to develop a detailed knowledge of the literature on ichthyology. Field trips at additional expense to the student are part of this course. Prerequisites: CHEM 1131 and 14 hours of biology including BIOL 1112.

**BIOL 4221 Mammalogy (4)** A thorough examination of the Class Mammalia. Students will be expected to develop a detailed knowledge of the literature on mammalogy. Prerequisites: BIOL 1111 and BIOL 1112.

**BIOL 4223 Ornithology (4)** An examination of the geology of birds with special emphasis on the field study of locally occurring species. Prerequisites: BIOL 1111 and BIOL 1112. An additional fee is associated with this course.

**BIOL 4232 Herpetology (4)** A thorough examination of the classes Amphibia and Reptilia, including systematics, evolution and ecology of these groups with special attention to identification of local forms. Prerequisites: BIOL 2512.

**BIOL 4311 Parasitology (4)** Animal parasites, with emphasis on identification, morphology, biology, life histories, and host-parasite relationships. Prerequisites: BIOL 2512.

**BIOL 4312 Entomology (4)** An introduction to the systematics, morphology, physiology, evolution, and ecology of insects. Prerequisites: BIOL 1111 and BIOL 1112.

**BIOL 4400 Endocrinology (2)** Examination of the physiology of endocrine glands and the roles of each hormone in the regulation of growth, metabolism, and reproduction. Examples will be selected from humans and domestic species. Prerequisites: BIOL 3431.

BIOL 4403 Environmental Physiology (4) Physiological responses and adaptations to alterations in natural and man-generated environmental factors such as temperature, light cycles, pressure, water, ions, radiation, vibration, chemicals, microorganisms, and exercise. Prerequisites: BIOL 2402 or BIOL 3431.

**BIOL 4411 Plant Physiology (4)** Life processes occurring in plants, the factors affecting these processes, their measurement, and the significance of these processes to the growth of the plant. Prerequisites: BIOL 2512; and CHEM 1104 or CHEM 1131.

**BIOL 4511 Cytogenetics (4)** Examination of cellular and molecular mechanisms in cell division and their role in evolution and human health. Laboratory exercises include techniques for experimentally manipulating chromosomes and use of computer and video techniques. Prerequisites: BIOL 2512; and CHEM 1104 or CHEM 1131.

**BIOL 4514 Molecular Biology (3)** This course emphasizes how biological molecules interact to express cellular phenotypes. Transcriptional and translational controls of gene expression and the latest biotechnological advances are discussed. Prerequisites: BIOL 2511.

BIOL 4515 Molecular Technology Laboratory (2) This course emphasizes the proper use of laboratory equipment, molecular techniques, experimental design, and data analysis. Questions and experiments encountered in molecular biology are addressed. Prerequisites: BIOL 4514 with a grade of C or better, or concurrent enrollment with consent of instructor. **BIOL 4516 Hematology/Virology (3)** The study of blood and viruses. Topics include hematopoiesis, coagulation, viral replication, host responses to viruses, and normal and diseased host responses. Prerequisites: BIOL 2511 and BIOL 2512.

BIOL 4517 Serology Laboratory (1) A combined immunology, hematology, and virology laboratory emphasizing cellular components and identification and differentiation by technological methodologies. Prerequisites: Concurrent enrollment in either BIOL 3413 or 4516.

**BIOL 4709 Plant Ecology (4)** Concepts and methods pertaining to the collection and analysis of ecological data. Fundamental principles of interactions between plants and their environment will be addressed. Prerequisites: BIOL 1111; BIOL 1112; BIOL 2020; BIOL 3711 or equivalent; or instructor consent.

BIOL 4711 Animal Ecology (4) Ecological principles and concepts pertaining to populations, communities, and ecosystems with special emphasis on animals. Both field work with local examples and laboratory work are part of this course. Prerequisites: CHEM 1131 and 20 semester hours of biology including BIOL 1111 and 1112. An additional fee is associated with this course.

**BIOL 4722 Conservation Biology (4)** This is a synthetic course applying the multidisciplinary approaches of ecology, biogeography, evolution, genetics and economics to the global biodiversity crisis. Prerequisites: BIOL 1111, BIOL 1112, BIOL 2020, BIOL 2511.

**BIOL 4810 Curriculum Development in Biological Science (2)** Classroom techniques for teaching life science to junior and senior high school students. Historical development and changes to current programs of life science discussed. Prerequisites: 4 credit hours of EDCI and concurrent enrollment in BIOL 4811.

**BIOL 4811 Investigative Laboratory (2)** Investigative laboratory activities related to life science teaching in junior and senior high school. Problem in investigative biology to be conducted and a paper written. Prerequisites: 4 credit hours of EDCI and concurrent enrollment in BIOL 4810.

**BIOL 5005 Graduate Seminar (1)** A course designed to prepare graduate students for the development and presentation of scientific seminars. Graduate students shall be enrolled in the seminar course during all semesters of residency. May be repeated for a maximum of 5 semester hours. Prerequisites: Acceptance in the Biology Graduate Program.

**BIOL 5011 Special Topics in Biology (1-5)** Reading and analysis of the literature in a special area under the direction of a staff member. May be repeated for a maximum of 5 semester hours. Prerequisites: Acceptance in the Biology Graduate Program and consent of the instructor.

**BIOL 5013 Biometry (4)** Multivariate hypothesis testing, experimental design, model construction, and analytical procedures. Specifically this includes applying multivariate parametric and non-parametric statistics to biological data. Prerequisites: An Introductory Statistics course or instructor's consent.

**BIOL 5031 Biological Literature (2)** Introduction to the research literature of biology with emphasis on the organization of information for oral presentation, thesis, and publication. Prerequisites: Acceptance in a Biology Graduate Program.

**BIOL 5032 History of Biology (2)** An examination of the historical development and refinement of concepts in the major subdisciplines of biology, and of the integration of these concepts into the present disciplinary framework.

**BIOL 5710 Aquatic Ecology (4)** Ecology and biology of aquatic species, populations, communities, and ecosystems will be emphasized. Both lentic and lotic habitats will be examined. Field trips at additional expense to the student are part of this course. Prerequisites: BIOL 4711 or equivalent and 15 semester hours of chemistry.

**BIOL 5951 Master's Thesis (1-6)** Research required for the completion of an MS degree in Biology following Plan A. To be scheduled only with the consent of the student's graduate committee. Six hours total are required for Plan A. May be repeated for credit. Prerequisites: Consent of the student's graduate committee.

**BIOL 5952 Project in Lieu of Thesis (1-3)** Non-thesis project required for the completion of an MS degree in Biology following Plan B. To be scheduled only with the consent of the student's graduate committee. Three hours total are required for Plan B. May be repeated for credit. Prerequisites: Consent of the student's graduate committee.

**BIOL 5953 Ecology Field Course (1-6)** Advanced field methods and analysis of the physical, chemical, and ecological aspects of diverse ecosystems. On a rotating basis, the field course may focus on marine, northern temperate woods, and alpine systems. May be repeated for credit as topics vary. Prerequisites: Consent of the instructor.

**BIOL 5954 Contemporary Topics in Biology (1-4)** Contemporary topics and issues of topical themes that warrants course instruction. May be repeated for credit as topics vary. Prerequisites: Consent of instructor.

## MASTER OF ARTS

### Environmental Studies 52 000860

This program is an interdisciplinary collaboration with departments throughout the University of Central Missouri. It is designed for the student seeking advanced training in the broad interdisciplinary field of environmental studies. The program of study involves core courses and electives that are flexible and designed to accommodate students with various backgrounds and interests in the natural, physical, and social sciences, who desire careers related to environmental science. The interdisciplinary training promotes analytical and communicative skills required to study the critical problems facing industries, municipalities, and state and federal agencies.

To be accepted into the program, a student must have a minimum of 10 semester hours in science including ecology or environmental science and a minimum undergraduate grade-point average of 2.50.

A student, with the guidance of a Graduate Advisory Committee comprised of three members, must develop an individual degree plan according to the student's area of interest. All environmental studies graduate students must comply with "The Graduate Guide". All students must pass an oral examination or written examination before completion of the program.

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		Sem. Hours	
REQUIRED	GRAI	DUATE COURSES	
BIOL 4	013	Introduction to Experimental Design	
		and Analysis	
BIOL 5	005	Graduate Seminar2	
BIOL 5	031	Biological Literature	
BIOL 5	951	Masters Thesis or	
BIOL 5	952	Project in Lieu of Thesis	
APPROVED ELECTIVES IN AT LEAST 2 DISCIPLINES25			

semester hours on the approved program must have been in 5000/6000 level courses.

A student is limited to a maximum of 6 semester hours of credit in thesis or in an individual research project on a Master's degree program.

### **Earth Science Courses**

EASC 4010 Special Problems in Geology (1-3) Individual work under supervision of a staff member. Problems may be undertaken in any area of geology. May be repeated for a maximum of 9 semester hours. Prerequisites: adequate preparation in that field and consent.

EASC 4301 Minerals and Rocks (4) The origin and classification of minerals and rocks in a course designed primarily for teachers of earth science. Methods and techniques of identification are stressed. Prerequisites: EASC 1004.

EASC 4320 Geochemistry (3) Application of chemical principles to the study of earth and environmental systems. Topics include origin and distribution of elements, stable and radiogenic isotopes, thermodynamics, aqueous and environmental geochemistry, and geochemical cycles. Prerequisites: EASC 1004, EASC 3320.

EASC 4325 Petrology (4) Igneous and metamorphic rocks. Includes consideration of processes of formation and identification of rock types. Prerequisites: EASC 3320.

EASC 4420 Sedimentary Petrology and Stratigraphy (5) The description and classification of sedimentary rocks and the principles of stratigraphy. Laboratory exercises will focus on hand specimen petrology and subsurface stratigraphic analysis. Field work will deal with measured stratigraphic sections. Prerequisites: EASC 3320.

EASC 4500 Fossils of Missouri (3) Emphasis on collecting and identifying fossils in order to prepare teachers for teaching the fundamental aspects of common fossils from Missouri. Prerequisites: EASC 1004.

## Department of Chemistry and Physics W.C. Morris 405 • (660) 543-4948

### **Chemistry Courses**

CHEM 4010 Special Topics in Chemistry (1-3) Topics of contemporary significance not given in-depth coverage in regularly offered courses. May be repeated as the topic is changed. Prerequisites: CHEM 3500 or CHEM 4531 or consent of instructor.

CHEM 4011 Methods of Teaching Physical Science (3) Provides the teacher education candidate with skills and resources for the teaching of science. Students will learn a variety of strategies for both laboratory and classroom instruction. Prerequisites: Admission to the Teacher Education Program.

CHEM 4111 Advanced Inorganic Chemistry (4) An advanced study of inorganic compounds with a focus on the transition elements, current issues and modern laboratory techniques. Prerequisites: CHEM 3111; CHEM 4532 or concurrently. An additional fee is associated with this course.

CHEM 4231 Instrumental Analysis (4) A study, including applications, of instrumental methods of chemical analysis. Prerequisites: PHYS 2122, 2124, or 1102 and CHEM 3212.

CHEM 4531 Physical Chemistry I (4) Kinetic-molecular theory of gases, thermodynamics, chemical equilibria, and chemical kinetics. Laboratories are project-based and include calorimetry and spectroscopy. Prerequisites: PHYS 2122, 2124, or 1102, MATH 1151, and CHEM 3212.

CHEM 4532 Physical Chemistry II (4) Quantum mechanics, atomic and molecular structure, spectroscopy, electrical and magnetic properties of molecules. Laboratories include atomic and molecular spectroscopy, molecular modeling, and mathematical modeling. Prerequisites: CHEM 4531.

CHEM 4910 Research in Chemistry (1-5) Individual work on a chemical research project under supervision of a staff member. Project will terminate in a written and oral presentation. May be repeated for a maximum of 10 semester hours. Prerequisites: CHEM 3212, CHEM 3342 and consent of instructor and department.

CHEM 4911 Special Problems in Chemistry (1-3) Individual work under supervision of a staff member. May be repeated for a maximum of 3 semester hours. Prerequisites: Consent.

CHEM 5010 Modern Chemical Theories and Practices (3-5) For secondary and primary teachers. Content varies but typically covers aspects of the main chemistry subdivisions, modern teaching methods in chemistry or current technological procedures. May be repeated for a maximum of 15 semester hours. Prerequisites: CHEM 1132 and consent.

#### **Physics Courses**

PHYS 4212 Analytical Mechanics II (3) Using a vector analysis, a study is made of kinematics; motion of a particle; kinetics of rigid bodies; work and energy, impulse and momentum; impact. Prerequisites: PHYS 3211 and MATH 2153.

PHYS 4312 Electricity and Magnetism (3) Electric and magnetic fields using vector analysis, dielectrics, vector potential, Coulomb's law, Gauss' law, Laplace's equation, and Maxwell's equations. Prerequisites: PHYS 2122 and MATH 2153.

PHYS 4411 Thermodynamics (3) Properties of gases, kinetic theory of gases; laws of thermodynamics; entropy and introduction to statistical thermodynamics. Prerequisites: PHYS 2122 and MATH 2153 or concurrently.

PHYS 4512 Introduction to Quantum Mechanics (3) Experimental basis; fundamental postulates; Schrödinger wave equation; superposition of states; calculation of energy, position, momentum; hydrogen atom; identical particles; perturbation theory. Prerequisites: PHYS 3511 and MATH 2153.

PHYS 4513 Solid State Physics (3) Crystal structure and diffraction in solids. Thermal dielectric properties. Free electron model of metals. Band theory of solids. Brillouin zones. Prerequisites: PHYS 3512; PHYS 3080 concurrently.

PHYS 4711 Atomic and Nuclear Physics (3) Designed to use introductory quantum concepts and techniques as applied to the analysis of atoms and nuclei. Prerequisites: PHYS 3512.

PHYS 4911 Special Problems in Physics (1-3) Individual work under supervision of a staff member. Problems may be undertaken in any phase of physics. May be repeated for a maximum of 6 semester hours.

PHYS 5010 Current Theories and Practices in Physics (3-5) Designed for teachers. Content varies but typically covers aspects of mechanics, heat, sound, electricity and magnetism, optics, or modern physics. May be repeated for a maximum of 10 semester hours. Prerequisites: Consent.

PHYS 5951 Physics Research for Teachers (1-5) Individual work on a physics research project under the supervision of a physics staff member. Project will terminate in a written and oral presentation. May be repeated for a maximum of 10 semester hours. Prerequisites: Consent.

## Department of Mathematics and Computer Science W.C. Morris 222 • (660) 543-4930

## MASTER OF SCIENCE

Mathematics 53 000456

### Applied Mathematics 53 000457

**Student Learning Outcomes**—The graduate with a Master of Science (MS) degree in Mathematics or Applied Mathematics will use the knowledge and skills obtained in the program to:

- Cultivate his/her abilities for independent thinking.
- Demonstrate his/her abilities to do and present research in the mathematical sciences.
- Work both individually and collaboratively in a specialized area of mathematical sciences.

This program is designed to fit the needs of students in two different areas—pure mathematics or applied mathematics. To be accepted into this program, a student must have an undergraduate major in mathematics, or course work equivalent to a Central major in mathematics, with a minimum grade-point average of 3.0 in upper level mathematics courses.

A student not meeting these minimum standards may consult the Department of Mathematics and Computer Science for possible acceptance on a conditional basis. Before completion of the program, a student must either pass a department comprehensive examination or write and successfully defend a thesis.

#### Master of Science, Mathematics

This is designed to meet the needs of students who are preparing for continued advanced study of mathematics, college teaching, or certain areas of industrial research requiring a depth of understanding of the structure of mathematics.

Elect from MATH MATH	-	DUATE COURSES	<b>9</b> 3 3
Elect from	the fo	ollowing	9
MATH	4180 5171 5180	Advanced Calculus          Functions of a Complex Variable          Real Analysis	3
Elect the f	ollowi	ng	3
ELECTIVE Graduate MATH Graduate	COUR Mathe 6950 course	Introduction to Topology	5 2 6 3

#### Master of Science, Applied Mathematics

This is designed to strengthen the computer science and/or mathematics background of students who plan to work in industry; teach in technical colleges or schools that do not require state certification; or continue the study of applied mathematics.

		Sem. Hours			
REQUIRED GRADUATE COURSES					
Elect from	Elect from the following				
MATH	4711	Modern Algebra I			
MATH	5711	Modern Algebra II			
MATH	5722	Matrix Algebra3			
Elect from	n the fo	bllowing			
MATH	4180	Advanced Calculus			
MATH	5171	Functions of a Complex Variable			
MATH	5180	Real Analysis			
Elect from	n the fo	bllowing			
MATH	4312	Probability Models			
MATH	4450	Intro to Graph Theory			
MATH	4510	Mathematics of Finance			
MATH	4520	Life Contingencies			
MATH	4530	Actuarial Modeling			
CS	4310	Theory of Computation			
CS	4400	Numerical Analysis I			
CS	4410	Operations Research			
CS	4420	System Simulation and Modeling3			
CS	5400	Numerical Analysis II			
CS	5410	Linear Programming3			
CS	5420	Methods of Optimization			
CS	4500	Operating Systems			
CS	4600	Database Theory & Applications			
CS	4700	Artificial Intelligence			
CS	4800	Networks and Mobile Computing			
CS	4900	Compiler			
CS	4910	Software Engineering3			
ELECTIVE COURSES.					
Graduate Mathematics or Computer Sciences Courses. 3-12 MATH 6950 Thesis or CS 6010 Thesis					
Graduate Courses in Areas Related to Mathematics 0-3					
		DUATE HOUR TOTAL			
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#### **Computer Science Courses**

**CS 4000 Special Problems in Computer Science (1-3)** Individual reading and research on some topics not included in the regular offerings of the department. May be repeated for a maximum of 3 semester hours. Prerequisites: CS 2300 or consent.

**CS 4020 Internship in Computer Science (3-8)** Opportunity for students to gain knowledge in areas of computer science, both theoretical and applied, that would not normally be included as part of the department's curriculum. Internship contract must be completed prior to beginning work/learning experience. May be repeated for a maximum of 16 semester hours. A maximum of 8 semester hours may be applied to any one degree. Prerequisites: Consent of department Internship Committee and if taken for graduate credit, approval of graduate adviser.

**CS 4300 Algorithm Design and Analysis (3)** Techniques needed to analyze algorithms. The application of these techniques to topics such as sorting, graph algorithms, fast Fourier transforms, dynamic programming, and NP-completeness. Prerequisites: MATH 1151 and CS 2300.

**CS 4310 Theory of Computation (3)** Includes finite-state automata, pushdown automata, and Turing machines. The topics of regular expressions, context-free languages, the halting problem, Post's correspondence problem, P, NP, Incompleteness, and some NPcomplete problems will be discussed. Prerequisites: MATH 2410 or CS 2400.

**CS 4400 Numerical Analysis I (3)** Finite difference interpolation, numerical differentiation and integration, numerical solution of nonlinear equations, numerical solution of ordinary differential equations. Computational techniques stressed and extensive quantity of problems to be solved on a digital computer. Prerequisites: CS 1110 and MATH 1152.

**CS 4410 Operations Research (3)** Systems and models, including Random Number Process, (Monte Carlo Process) and Queuing Concepts. Combining these concepts into model building techniques. Prerequisites: CS 1110 and MATH 3311, or CIS 2615 and Fin 2801.

**CS 4420 System Simulation and Modeling (3)** Model construction and simulation applied to problems taken from finance, statistics, sciences, communication networks and computer systems. Prerequisites: CS 1100 and MATH 3311.

**CS 4500 Operating Systems (3)** An introduction to operating systems. Topics include processes, threads, CPU scheduling, process synchronization, deadlock, memory management, file systems, mass-storage structure, I/O systems, and case studies. Prerequisites: CS 2200 and CS 2300.

**CS 4600 Database Theory and Applications (3)** An introduction to database theory and design, including relational algebra/calculus, normalization of data, and query optimization. Security, integrity, and concurrent operation issues will be presented. Distributed database systems will also be introduced. Significant application-oriented projects sing SQL will be required. Prerequisites: (CS 1400 or MATH 2410) and CS 2300.

**CS 4700 Artificial Intelligence (3)** An introduction to Artificial Intelligence (AI) and AI languages such as LISP and PROLOG. Specific topics will include knowledge representation, predicate calculus, resolution, pruning, heuristic search techniques, probabilistic reasoning, and expert systems. Prerequisites: (CS 1400 or MATH 2410) and CS 2300.

CS 4800 Networks and Mobile Computing (3) General principles and concepts of computer networks. Topics include low-level network technologies, packet-switching and routing technologies, the client-server model, Internet protocols, and wireless networking. Prerequisites: CS 2200.

**CS 4900 Compiler (3)** Includes finite-state machines, top-down and bottom-up parsing, and syntax directed translation. The topics of regular grammars, lexical analysis, LL (k) grammars, LR (k) grammars, syntax-directed translation schemes, and simple transducers will be discussed. Prerequisites: CS 3100. CS 4910 Software Engineering (3) Techniques for software design, team management, and product development. Students will gain experience in managing all phases of large-scale software projects and ethical issues. Prerequisites: CS 3100

CS 5000 Special Topics in Computer Science (1-3) Individual reading and research leading to an acceptable paper on some topic not included in the regular offerings of the department. May be repeated for a maximum of 3 semester hours. Prerequisites: Consent.

CS 5010 Seminar in Computer Science (1-3) For presentation of those topics in computer science not included in the regular offerings of the department. May be repeated for a maximum of 3 semester hours. Prerequisites: Consent.

**CS 5400 Numerical Analysis II (3)** Extension of topics in Numerical Analysis I to include numerical treatment of empirical data, numerical solution of simultaneous linear equations and calculation of eigenvalues and eigenvectors of matrices, numerical solution of partial differential equations. Extensive quantity of problems to be solved on digital computer. Prerequisites: CS 4400.

**CS 5410 Linear Programming (3)** Methods used in linear programming such as the simplex method and the ratio-analysis method with application to typical problems. Prerequisites: MATH 3710.

CS 5420 Methods of Optimization (3) An introduction to optimization techniques for both nonlinear programming and nonlinear optimization problems. Specific topics include Dimensional geometry, convex sets, hyperplanes, convex polyhedra, Fibonacci search, steepest-descent method, conjugate gradient method, and the Davidon-Fletcher-Powell method. Current papers in the area will be surveyed.

CS 6000 Readings in Computer Science (1-5) Selected reading in computer science designed to deepen and expand the student's understanding of an area of interest. May be repeated for a maximum of 5 semester hours. Prerequisites: Consent.

**CS 6010 Thesis (6)** Research in an area of computer science, directed by a graduate faculty member in the Department of Mathematics and Computer Science, which leads to the completion of a thesis. Prerequisites: Consent.

### **Mathematics Courses**

MATH 4180 Advanced Calculus (3) A rigorous approach to the fundamental concepts of differential calculus, integral calculus, and infinite series. Prerequisites: MATH 2153 and MATH 3710.

MATH 4211 Introduction to Topology (3) Introduces the concept of point set topology. Includes the study of the real line, the real plane, metric spaces, topological spaces, continuity, connectedness, compactness, product spaces, and separation properties. Prerequisites: MATH 3720.

MATH 4312 Probability Models (3) An in-depth study of probability theory and stochastic processes with their applications in fields such as computer science, management science, social science, and operations research. Prerequisites: MATH 2153 and MATH 3311.

MATH 4450 Introduction to Graph Theory (3) Basic graph theory concepts: connectivity, trees, matchings, graph coloring, Eulerian and Hamiltonian graphs, distance, planarity, and network flows. Prerequisites: CS 2400 or MATH 2410.

MATH 4501 Actuarial Exam Review–Problem Set I (1) Problems from calculus, analytic geometry, and probability that apply to actuarial science. Prerequisites: MATH 4312.

MATH 4510 Mathematics of Finance (3) The basic measures of interest, annuities, discounted cash flow analysis, and their applications. Prerequisites: MATH 1152.

MATH 4511 Actuarial Exam Review–Problem Set II (1) Problems from math of finance, financial management, and micro- and macroeconomics. Prerequisites: MATH 4510, Fin 3861, Fin 4817, and ECON 1010. Prerequisites: MATH 4312 and MATH 4510.

MATH 4520 Life Contingencies (3) Theory and applications of contingency mathematics in the areas of life and health insurance, annuities and pensions. Prerequisites: MATH 4312 and MATH 4510.

MATH 4530 Actuarial Modeling (3) Actuarial concepts, principles,

and techniques that are used in insurance modeling including loss distributions, aggregate loss models, credibility theory, and simulations. Prerequisites: MATH 4312.

MATH 4710 Real Number System (2) The real number system beginning with the natural numbers using Peano's postulates. Prerequisites: MATH 3720.

MATH 4711 Modern Algebra I (3) Some of the theories of modern algebra with emphasis on algebraic systems with one operation. Prerequisites: MATH 3720.

MATH 4741 Introduction to the Theory of Numbers (3) Congruences, quadratic residues, the reciprocity theorem, and Diophantine equations. Prerequisites: MATH 3720.

MATH 4821 Elements of Algebra (3) Basic concepts of algebra adapted to the needs of elementary teachers. May be taken for graduate credit by elementary teachers only. Prerequisites: MATH 2802.

MATH 4822 Elements of Geometry (3) Concepts and relationships of geometry adapted to the needs of elementary teachers. Available for graduate credit to elementary teachers only. Prerequisites: MATH 2802.

MATH 4823 Introduction to Infinite Processes (5) Transition from the concepts of elementary analysis to the infinite processes which form the foundation for the calculus. Open only to elementary and middle school/junior high education majors in the BS in Ed. and Master of Science in Education degrees. Prerequisites: MATH 4821 and MATH 4822.

MATH 4851 Probability and Statistics for Middle/High School Mathematics (3) A course focusing on the concepts and methods of teaching probability and statistics in the middle and high school mathematics program. Not available for graduate credit for MS Mathematics. Prerequisites: MATH 4821 and MATH 4822 or MATH 1151.

MATH 4871 Algebraic Concepts for Teachers (3) The properties and language of sets, functions, groups, rings, integral domains, and fields. Recommended for middle school/junior high school teachers. Will not satisfy requirements on undergraduate programs where MATH 3720 is a requisite. Prerequisites: MATH 4821 or equivalent course in college algebra.

MATH 4890 Mathematics for Special Education (2) Individual and small group investigation of concepts and procedures appropriate for instruction of mathematics to all special needs children. Prerequisites: EDSP 2100; and MATH 2801 or MATH 2802 or MATH 3890.

MATH 4910 Special Problems in Mathematics (1-3) Individual reading and research leading to an acceptable paper on some topic not included in the regular offerings of the department. May be repeated for a maximum of 3 semester hours. Prerequisites: mathematics major or MATH 3720 or consent.

MATH 4912 Internship in Mathematical Sciences (3-8) Opportunity for students to gain knowledge in areas of mathematical science, both theoretical and applied, that would not normally be included as a part of the department's curriculum. Internship contract must be completed prior to beginning work/learning experience. May be repeated for a maximum of 16 semester hours. A maximum of 8 semester hours may be applied to any one degree. Prerequisites: Consent of department Internship Committee and if taken for graduate credit, approval of graduate adviser.

MATH 5171 Functions of a Complex Variable (3) General properties of analytic functions of a complex variable with applications. Prerequisites: MATH 4180 or consent of Department Chair.

MATH 5180 Real Analysis (3) Properties of functions of one real variable, Lebesgue measure, measurable functions and integration, Fubini's theorem. Prerequisites: MATH 4180.

MATH 5711 Modern Algebra II (3) A continuation of the study of algebraic systems with emphasis on ring theory. Prerequisites: MATH 4711.

MATH 5722 Matrix Algebra (3) Treats the algebra of matrices, vector spaces, linear transformations, and characteristic equations of matrices. Prerequisites: A basic knowledge of vectors and vector operations is assumed and MATH 4711.

MATH 5812 Problems in Teaching Elementary Mathematics (3) An investigation of problem areas, general and student initiated, concerning teaching elementary school mathematics.

MATH 5852 Problems of Teaching Secondary Mathematics (3) A survey of current issues in the teaching of secondary mathematics.

MATH 5900 Special Projects in Mathematics (1-3) May be repeated for a maximum of 3 semester hours.

MATH 5911 Special Topics in Mathematics (1-3) Individual reading and research leading to an acceptable paper on some topic not included in the regular offerings of the department. May be repeated for a maximum of 3 semester hours. Prerequisites: MATH 2153, MATH 3720 and consent.

MATH 5920 Seminar in Mathematics (1-3) For presentation of those topics in mathematics not included in the regular offerings of the department. May be repeated for a maximum of 3 semester hours. Prerequisites: Consent.

MATH 6912 Readings in Mathematics (1-5) Selected readings in mathematics designed to deepen and expand the student's understanding of an area of interest. May be repeated for a maximum of 5 semester hours. Prerequisites: Consent.

MATH 6950 Thesis (6) Research in an area of the mathematical sciences, directed by a graduate faculty member in the Department of Mathematics and Computer Science, which leads to the completion of a thesis.

## School of Technology Grinstead 9 • (660) 543-4439

## MASTER OF SCIENCE

#### Industrial Management 53 000141

**Student Learning Outcomes**—The graduate with a Master of Science degree in Industrial Management will use the knowledge and skills obtained in the program to:

- Apply management skills and concepts to specific situations.
- Plan and implement a project.
- Analyze and develop a human relations strategy.
- Demonstrate the ability to communicate effectively.
- Explain and apply the basic concepts of an Industrial Economy.
- Introduce and adapt technical expertise to a given process or product.
  Perform, interpret and explain research.

This program is designed for students who are preparing for supervisory or management positions in industry. To be accepted into this program, a student shall have a minimum overall gradepoint average of 2.60 in the undergraduate major. A student not meeting this requirement may petition the department for admittance on a conditional basis. The 4000-level courses may be completed in the undergraduate program of study or through approved work experience. If these requirements are completed in this manner, elective courses are required to achieve the 33-semester-hour degree requirement.

Students selecting the thesis must enroll in 3 hours for two consecutive semesters or 6 hours for a single semester. The applicant must complete the course INDM 5010 Applied Research for Industrial Technology prior to submitting the application for candidacy. A "Career Goal Statement" is required of all applicants to this degree program.

		Sem. Hours
REQUIRE	D GRA	DUATE COURSES
MMGT	4580	Quality Systems
INDM	4210	Industrial Management
INDM	4260	Organizational Dynamics
INDM	5010	Applied Research for Industrial Technology 3
INDM	5212	Production & Operations Management
INDM	5240	Engineering Economy
CULMIN	ATING	EXPERIENCE
(taken las	st semes	ster of student's program)
INDM	5230	Seminar in Industrial Management
INDM	5290	Thesis

### School of Technology 85

#### COGNATE REQUIREMENTS

(choose	any 3 w	ith Thesis or 4 with Seminar)
INDM	4010	Current Issues in Industry
INDM	4220	Human Factors Engineering
INDM	4240	Facilities Engineering
INDM	5015	Legal Aspects of Industry
INDM	5020	International Technology Management 3
INDM	5260	Systems Analysis &
		Management Information Systems
		pproved graduate electives
MINIMU	M GRAD	DUATE HOUR TOTAL

### MASTER OF SCIENCE

#### Industrial Technology 53 000151

**Student Learning Outcomes**—The graduate with a Master of Science degree in Industrial Technology will use the knowledge and skills obtained in the program to:

- Apply management skills and concepts to specific situations.
- Plan and implement a project.
- Analyze and develop a human relations strategy.
- Demonstrate the ability to communicate effectively.
- Explain and apply the basic concepts of an Industrial Economy.

The Master of Science degree in Industrial Technology is an advanced curriculum focused on preparing for industrial management positions in either manufacturing or construction. Students are able to select coursework to meet their individual career goals. Coursework will include advanced technologies, management, safety, applied research, quality assurance and/or computer applications.

Prior to admission to this program, a student must have a minimum grade-point average of 2.50 or have received at least a 3.0 in each of the three departmentally specified graduate courses of Research Methods, Legal Aspects of Industry, and one 3-hour course from the approved graduate electives. In addition to the undergraduate or graduate grade-point average, each student must have completed minimum background requirements of 8 semester hours of mathematics, 6 semester hours of physics and/or chemistry, and 15 semester hours of technology and/or related work experience.

Before filing a Program of Study, the student must have completed T&OE 5130. A student must pass a comprehensive examination before completion of the program.

Sem Hours

#### REQUIRED BACKGROUND COURSES

REQUIRED BACK	GROUND COURSES
For entry into this	s program, students must have college credit in these
courses or equive	alent work experience. Applied Statistics course
(CJ 5610, SAFE 4	4940, MATH 2311, Fin 2801)
Computer Applic	ations course (CIS 1605, PE 1120)
Industrial Manag	ement course (INDM 4210, Mgt 3315)
REQUIRED GRAI	DUATE COURSES
INDM 4010	Current Issues in Industry
INDM 4260	Organizational Dynamics
MMGT 4580	Quality Systems
INDM 5015	Legal Aspects of Industry
INDM 5020	International Technology Management 3
RESEARCH	
INDM 5010	Applied Research for Industrial Technology 3
T&OE 5130	Research Methods in
APPROVED GRA	Applied Sciences & Technology

Agriculture, Electronics Technology, Manufacturing and Construction, Power and Transportation, Graphics or other approved departments. Graduate electives are to be taken at UCM and may include a concentration of study in technology

## DOCTOR OF PHILOSOPHY

#### **Technology Management**

UCM is participating as a charter member of a five-university consortium offering this degree, which is conferred by Indiana State University. This degree takes advantage of distance education technology with courses available through Internet, telecommunication, and other media. Selected courses are also available on the respective campuses. The doctoral program is designed to provide students with planned opportunities to increase their depth and breadth of knowledge in technological studies. Students must complete a minimum of 90 semester hours of graduate study above the baccalaureate degree, with a majority of the course work at the 6000 level or higher. The program of study includes 24-30 semester hours in an area of technical specialization. Admission occurs through Indiana State University. The Graduate Record Exam (GRE) is required. For more information, contact the Department of Industrial Technology, call (660) 543-4439 or visit http://web.indstate.edu/ConsortPhD/

#### Industrial Management Courses

**INDM 4010 Current Issues in Industry (3)** Identify, discuss, and research current issues, trends, and technological changes affecting industry as related to corporate planning, decision making, and managing for the future. Prerequisites: junior or senior standing for undergraduate credit.

**INDM 4210 Industrial Management (3)** A survey of operations management in industry today. Industrial management principles and applications, management science, operations analysis and design, manufacturing processes, process life cycle, production inventory, and quality control are emphasized.

**INDM 4220 Human Factors Engineering (3)** Integration of concepts involved in providing safe and comfortable work places (Ergonomics) with concepts directed toward increased productivity and profitability (Work Design).

**INDM 4230 Quality Control Management (3)** Overall approach to quality and the control activities of management. Technical aspects of management control systems, statistical analysis, statistical quality control, and management concepts are emphasized. Prerequisites: background statistics course.

**INDM 4240 Facilities Engineering (3)** provides students and practitioners with the practical resources that describe the techniques and procedures for developing an efficient facility layout and an introduction to computer simulations.

**INDM 4260 Organizational Dynamics (3)** Various types and styles of supervisory leadership in the industrial setting. Emphasis is placed on human relations aspects of leadership in the line and staff organizational structure.

**INDM 5010 Applied Research for Industrial Technology (3)** Research investigation of a technical problem. The course will culminate in a research report. May be repeated to a maximum of 6 semester hours per degree program.

**INDM 5015 Legal Aspects of Industry (3)** Identify, discuss, and research legal issues affecting industry as related to corporate planning, decision making, and management. The role of corporate and social responsibility will also be developed.

**INDM 5020 International Technology Management (3)** Develop an understanding of international technology management for graduate students in the international environment.

INDM 5212 Production and Operations Management (3) Production/operations concepts with emphasis upon systems, systems design and analysis, strategies, productivity, planning, forecasting, deterministic and stochastic inventory control, MRP scheduling, and project planning.

**INDM 5220 Applied Operations Research (3)** Systems and modeling in industrial management situations. General models, and models such as linear programming, transportation assignment, dynamic programming, and queuing theory are discussed.

INDM 5230 Seminar in Industrial Management (1-3) To provide

individual research and experimentation opportunities for industrial management majors. May be repeated for a maximum of 3 semester hours. Prerequisites: 10 semester hours of graduate study in industrial management.

**INDM 5240 Engineering Economy (3)** Principles and techniques needed for making decisions about the acquisition and retirement of capital goods by industry. Emphasis on techniques which produce long-run economy in industrial operations.

INDM 5260 Systems Analysis and Management Information Systems (3) Development of material requirements planning within the context of management information systems.

**INDM 5290 Thesis (3)** A special investigation of selected problems in Industrial Management which culminates in the completion of a thesis. Must be repeated for a total of 6 semester hours. Prerequisites: Graduate Enrollment.

**INDM 6580 Advanced Strategic Quality and Standards (3)** A course of study in total quality techniques, quality standards and criteria, and quality certification training utilized by quality professionals in dynamic organizations. Prerequisites: MMGT 4580 or consent of the instructor.

#### Industrial Technology Courses

**INDT 4000 Special Projects in Industrial Technology (1-3)** Investigation of contemporary problems and issues in manufacturing and construction by selected individuals or groups. May be repeated for a maximum of 6 semester hours.

**INDT 5000 Special Problems in Industrial Technology (2-6)** Meets individual student needs for additional research and/or laboratory experiences in the development of technical knowledge and skills in the areas of manufacturing and construction. May be repeated for a maximum of 6 semester hours.

#### **Construction Management Courses**

CMGT 4310 Construction Safety (3) Construction safety and health conditions on the job as they relate to workers, supervisors, inspectors, and the public. Prerequisites: CMGT 2310 or junior standing, or consent of instructor.

CMGT 4325 Computer Estimating and Cost Analysis (3) An advanced course in construction cost estimating utilizing the computer and associated professional software to assist the estimator. Prerequisites: CMGT 2310 and CMGT 2325.

CMGT 4330 Mechanical Systems for Buildings (3) Mechanical systems integrated with buildings and other equipment. Prerequisites: CMGT 2310 or junior standing.

CMGT 4340 Solar Energy for Building Construction (3) An analysis of solar energy systems and components as they apply to types of structure, sites, and climate regions.

CMGT 4355 Computer-Based Project Control (3) An advanced course in construction project scheduling utilizing the computer and associated professional software to assist the project scheduler. Prerequisites: CMGT 3355.

CMGT 4380 Heavy Equipment (3) Survey of the types, uses, and economics of heavy equipment utilized in the construction industry. Prerequisites: CMGT 2310 and MATH 1111.

#### Manufacturing Management Courses

MMGT 4520 Robotics and Automation (3) Automated manufacturing equipment, computer integrated manufacturing systems, and the use of industrial robots. Computer programming background recommended.

MMGT 4580 Quality Systems (3) The principles and practices of Total Quality Managements and the decision making tools and techniques utilized by professionals in today's successful industries.

MMGT 5520 Computer Integrating Manufacturing (3) Utilization of the computer in factory automation, engineering design, manufacturing control and manufacturing planning leading to the factory of the future. Prerequisites: general knowledge of the microcomputer and its use or MMGT 2500 or CS 1100 or CIS 1600. MMGT 5562 Computer Numerical Control Applications (3) Advanced applications in computer numerical control. Students will apply their knowledge of manufacturing processes and CNC programming in completing advanced projects. Prerequisites: MMGT 3562.

### Fashion and Apparel Merchandising Courses

FAME 4410 Architectural Interiors (3) The application of architectural designs, materials, and furnishings in the interior environment. A concentration of textile products for residential and nonresidential settings reflecting today's lifestyle. Prerequisites: FAME 1420 or equivalent and FAME 2442.

FAME 4414 Advanced Technical Problems in Fashion (1-3) Individual or group work on advanced technical problems in Fashion/ Apparel Merchandising. Provide exploration of content not available through normal course offerings. May be repeated for a maximum of 6 semester hours. Prerequisites: minimum 2.5 Cumulative GPA, written contract/proposal with objectives/learning competency and written department consent.

FAME 4424 Pattern Design (3) The design and construction of garments from a basic pattern, using the principles of art as applied to dress design. Prerequisites: FAME 2430 and 3 semester hours of clothing construction.

FAME 4430 Merchandising Applications (3) Builds upon the necessary understanding, knowledge, and working applications of the basics for profitable fashion merchandising. Prerequisites: Acct 2101 and must be taken concurrently with FAME 4444.

FAME 4433 International Apparel Technology (3) An analysis of economic, political, and cultural systems affecting the importing and exporting of textiles and apparel. Technology affecting the global fashion marketplace will be emphasized.

FAME 4434 Fashion History (3) Analysis of the evolution of fashion in Western civilization. Prerequisites: FAME 2430.

FAME 4442 Advanced Textiles (3) Comparative study of factors influencing the properties of fibers and fabrics as wells the performance of textile and apparel products. Lab period is used to test textile performance with standardized test procedures. Prerequisites: CHEM 1104 or equivalent and FAME 2442.

FAME 4444 Fashion Merchandising (3) Principles and practices of fashion manufacturing and merchandising. Prerequisites: FAME 3444, MKT 3410 and must be taken concurrently with FAME 4430.

FAME 4445 Senior Seminar in Fashion and Apparel Merchandising (3) Philosophy, current issues and trends in fashion and apparel merchandising will be covered. Focus on problem-solving styles leading to group and individual research problems. Prerequisites: senior standing.

FAME 4450 Special Problems in Textiles and Clothing (2-3) Recent trends. Group and individual problems which will include reports, discussions, bibliographies, research, and experiments. May be repeated for a maximum of 6 semester hours. Prerequisites: FAME 2442.

FAME 4490 Internship in Fashion and Apparel Merchandising (2-3) Provides experience for students in cooperating businesses. May be repeated for a maximum of 12 semester hours with no more than 6 semester hours graduate credit.

FAME 5460 Seminar in Textiles and Clothing (2-3) Investigation and discussion of particular problems in fashion and apparel merchandising. Students may carry on minor research studies of a professional nature which may lead to a thesis.

## Graphic Arts Technology Management Courses

GRAP 4014 Advanced Technical Problems in Graphic Arts (1-3) Individual/group work on recent developments and advanced technical concepts. Experimentation and technical exploration of content not available through formal course offerings in the department. By arrangement for qualified students. May be repeated for a maximum of 6 semester hours. Prerequisites: written contract/proposal with objectives and written department consent. GRAP 4038 Principles of Color Reproduction (3) Technical aspects of process color reproduction; includes color theory, ink evaluation, densitometry, tone reproduction, printing characteristics, color correction, gray balance, color separation, and proofing. Laboratory experiences support lecture/theory content. Prerequisites: GRAP 2032.

**GRAP 4045 Color Electronic Prepress Systems (3)** Study of color electronic prepress systems used in the graphic arts to manipulate and modify images for graphic design, photographic illustration, page layout, prepress assembly, and printing. Activities using computer application software are included. Laboratory experiences support lecture/theory content. Prerequisites: GRAP 2031 and GRAP 2032.

**GRAP 4051 Print Production (3)** Applied experiences in management and technological applications in the production of printed material including prepress, press, and post press operations. Prerequisites: GRAP 2032, GRAP 2035, and GRAP 3051.

GRAP 4053 Graphic Arts Production Analysis (3) A variety of printing requests are analyzed to determine printing specifications, production sequence, cost factors, material ordering, and technical problems that may arise during the actual printing. Course emphasis utilizes this analysis into a planning sequence of communications, scheduling, routing, dispatching, and work and material flow required for printing production. Prerequisites: GRAP 2035, GRAP 3034 and GRAP 3045.

**GRAP 4055 Printing Estimating and Costing (3)** Identification of costs relative to materials, operations, and labor utilized in the production of printed matter. Budgeting, forecasting, cost accounting, and budgeted hourly rates. Prerequisites: GRAP 3051 and GRAP 4053.

**GRAP 4095 Senior Seminar in Graphic Arts (1)** Professional preparation integrating team building skills, problem solving, and analysis of current trends specific to graphic arts. Prerequisites: 90 semester hours.

### Computer-Aided Drafting and Design Technology Courses

GRAP 4114 Advanced Technical Problems in Drafting (1-3) Individual or group work on advanced technical problems in drafting. Provide exploration of content not available through normal course offerings. May be repeated for a maximum of 6 semester hours. Prerequisites: 2.5 GPA, written contract/proposal with objectives and written department consent.

GRAP 4124 Geometric Dimensioning and Tolerancing Principles for Engineering Technology (2) Basic theory and application of geometric dimensioning and tolerancing practices applicable to working drawings of machine parts. Prerequisites: GRAP 1120.

GRAP 4170 Computer-Aided Drafting and Design for Engineering Technology (3) Advanced industrial applications of computer-aided drafting systems. Three dimensional modeling and design using interactive graphics techniques and standard design elements. Prerequisites: GRAP 2170.

**GRAP 4175 Advanced 3D Analysis and Rapid Prototyping (3)** Advanced course which surveys the application of computer drafting and design systems and how they relate to 3D analysis and rapid prototyping. Prerequisites: GRAP 1110, GRAP 2170, GRAP 4170, CMGT 2020.

**GRAP 4180 Industrial Design (3)** Study and application of the design process and design principles related to industrial products. Prerequisites: GRAP 1110.

## **General Graphics Courses**

**GRAP 4500 Special Projects in Graphics (1-3)** Investigation of contemporary problems and issues in graphics by selected individuals or groups. May be repeated for a maximum of 6 semester hours. Prerequisites: written contract/proposal with objectives and written department consent.

**GRAP 4570 Computer Graphics (3)** Computer-generated presentation graphics utilizing a variety of software programs on numerous hardware configurations. Experiences will include production of laser prints, ink-jet prints, transparencies, color slides, and plots.

**GRAP 5500 Special Problems in Graphics (2-6)** Meets individual student needs for additional research and/or laboratory experiences in the development of technical knowledge and skills in the areas of graphics. May be repeated for a maximum of 6 semester hours. Prerequisites: written contract/proposal with objectives and written department consent.

#### **Photography Courses**

#### PHOT 4214 Advanced Technical Problems in Photography

(1-3) Individual or group work on advanced technical problems in photography. Provide exploration of content not available through normal course offerings. May be repeated for a maximum of 6 semester hours. Prerequisites: minimum 2.5 GPA, written contract/ proposal with objectives and written department consent.

PHOT 4230 Business Management for Photographers (3) Exploratory experiences, information and techniques concerning the use of computer hardware and software use for photographic business management.

PHOT 4250 Advanced Color Portraiture (3) Commercial photography providing experiences in posing, exposure, and composition for a color portrait. Precise camera room techniques will be emphasized to ensure the most salable product from machine proofing. Prerequisites: PHOT 1210 and PHOT 3250.

**PHOT 4252 Portfolio Photography (3)** Culminating experience in photography providing for the creation of a successful interview strategy and the production of a portfolio to reflect personal career goals. Prerequisites: 9 semester hours of photography.

**PHOT 4260 Advertising Photography (3)** Theories and practices of advertising photography as a marketing medium with in-depth experience in procedures and techniques. Prerequisites: PHOT 2210.

PHOT 5200 Special Problems in Photography (1-6) Individualized research or experience in Photography/ Imaging. Prerequisites: PHOT 1210, PHOT 1211.

### Aerospace Manufacturing Technology Courses

AMT 4060 Aerospace Manufacturing Safety (3) Safety, health and environmental issues in aerospace manufacturing with an emphasis on the management of safety programs in manufacturing industries. Prerequisites: AMT 3210.

AMT 4221 Manufacturing Problem Solving (3) A micro-level look at issues that directly affect processes, procedures, and management within the manufacturing industry.

AMT 4250 Project Management in Aerospace Manufacturing (3) Managing aerospace manufacturing projects. Students deal with decision making, organizing, planning, and controlling manufacturing projects in the aerospace industry. Prerequisites: AMT 3510.

### **Electronics Technology Courses**

**ET 4000 Special Projects in Electronics Technology (1-3)** Investigation of contemporary problems and issues in electronics technology by selected individuals or groups. May be repeated for a maximum of 6 semester hours.

**ET 4014 Advanced Technical Problems in Electronics (1-4)** Individual/group work on recent developments and advanced technical concepts. Experimentation and technical exploration of content not available through formal course offerings. May be repeated for a maximum of 8 semester hours.

**ET 5010 Special Problems in Electronics Technology (1-3)** Meets individual student needs for additional research and/or laboratory experiences in the development of technical knowledge and skills in electronics technology. May be repeated for a maximum of 6 semester hours.

NET 4040 Fundamentals of Network Operating Systems (3) Installing, configuring, and administering Network Operating Systems. Prerequisites: NET 2058 or instructor consent.

**NET 4042 Network Servers and Services (3)** Implementing and Administering of Network Infrastructure and Directory Services Infrastructure. Prerequisites: NET 4040 or consent of instructor.

**NET 4043 Network Services and Infrastructure (3)** Advanced implementing and administering of network infrastructure and directory services infrastructure. Prerequisites: NET 4042 or instructor consent.

**NET 4063 Network Support (3)** Topics in Local and Wide Area Network documenting, baselining, and trouble shooting methodologies and tools are used to troubleshoot OSI layers 1 to 7 utilizing Cisco Systems hardware.

NET 4064 Advanced Network Design (3) Cisco Systems design considerations for IPv6, popular routing protocols, the Security Ecosystem, and both Traditional and Integrated Voice architectures. Prerequisites: NET 3062 or NET 4100 or instructor consent.

**NET 4100 Network Device Configuration (3)** A comprehensive overview of Cisco Systems device configuration. Prerequisites: Required for non-NET specialist. Not open to NET specialist. See your Adviser.

**NET 4500 Managerial Design for Secure Networks (3)** Utilizing Cisco Systems Architecture for Voice, Video and Integrated Data networks to apply modular design practices to ensure the enterprise solution is highly available and optimized for the business and technical needs. Prerequisites: NET 4064 or NET 4100 or instructor consent.

**NET 4501 Network Security Management I (3)** Utilizing Cisco routers for network and overall security processes focusing on designing and implementing solutions that will reduce the risk of revenue loss and vulnerability. Prerequisites: NET 4100 or instructor consent.

NET 4502 Network Security Management II (3) An emphasis on security policy design and management, security technologies, firewall and secure router design, installation, configuration and maintenance, AAA and VPN implementation using Cisco Systems' routers and firewalls. Prerequisites: NET 4501.

#### Power and Transportation Courses

**PR&T 4410 Intermodal Surface Transportation (3)** Surface transportation (motor vehicle, pipeline, rail, and water) in the United States as seen from an integrated, intermodal viewpoint. Major aspects include systems analysis, organization, operations, financing, research and development, training, and regulation. Economic, social, and political factors are considered.

**PR&T 4025 Motorcycle Systems Maintenance (3: 2 lecture, 1 lab)** Theory, maintenance and repair of motorcycles and systems. Special emphasis on diagnostics, repair, and adjustment procedures. Students will need to provide a motorcycle.

**PR&T 4032 Hydraulics and Pneumatics (3: 2 lecture, 1 lab)** Fluid power principles with practical application of hydraulics, pneumatics, and fluidics Prerequisites: MATH 1111.

**PR&T 4038 Advanced Hydraulics (3)** Hydraulic system analysis and troubleshooting along with servo and electronic control theory and application. Prerequisites: PR&T 4032.

### Technology Management Doctoral Courses

TMD 6315 Advanced Legal Aspects of Construction (3) An advanced course in legal aspects of the construction process. Prerequisites: INDM 5015.

TMD 6525 Manufacturing Economy (3) Managerial related economic factors pertaining to a manufacturing enterprise and the influence of these factors on manufacturing in a global society. Prerequisites: DTEC 6800 and admission to the manufacturing specialization.

TMD 7320 Ethics and Professional Issues of the Construction Process (3) Develops the ability to think critically and systematically about the issues of relevance to any practicing professional in construction. Prerequisites: INDM 5015.

TMD 7550 Current Issues in Manufacturing (3) Issues and trends in manufacturing and their implications and impact on manufacturing in a global society. Prerequisites: ECU 6800 and admission to the manufacturing specialization.

TMD 8590 Internship (1-6) Practicum designed to provide direct, supervised experiences for doctoral students, usually in the areas of the technical specialization. The experiences are tailored to provide an opportunity to test and experiment with regard to industry, research organizations, government agencies, and other appropriate experiential ventures associated with technology utilization, transfer, and innovation. The area in which the internship is taken will be designated on the student's transcript, i.e., Internship: Quality Systems. No more than 6 hours may count toward meeting degree requirements. Prerequisites: Admission to candidacy in the PhD in Technology Management program.

TMD 8920 Field Research Projects (1-3) Provides opportunity for doctoral students to test a theory or hypothesis in technology or management. Field research projects will be designed, conducted, and results evaluated. Prerequisites: Admission to candidacy in the PhD in Technology Management program.

TMD 8990 Dissertation (18) A requirement for all doctoral students. Offered by arrangement with the chair of the student's dissertation committee. Credit registration must have 9 hours of the 18 hours from Indiana State University and 9 from University of Central Missouri. Prerequisites: Admission to candidacy in the PhD in Technology Management program.

## Office of Academic Enrichment Humphreys 127 • (660) 543-4061

### Academic Enrichment Course

**AE 4800 Special Projects** (.5-3) Individual or group study of material in special areas of interest. May be repeated for a maximum of 6 semester hours.

## Office of International Studies Ward Edwards 1200 • (660) 543-4195

### International Studies Course

**ISP 4000 Study Abroad (3-4)** This course allows students to enroll at the University of Central Missouri while attending classes in a sponsored study abroad program. The variable credits are based on the number of credit hours the student plans to complete at the foreign institutions. The actual credit recorded represents those credits completed by the student and transferred back to UCM. May be repeated for a total of 12-16 semester hours in one semester. Prerequisites: Approval of the Director of International Programs.

## The Graduate School Ward Edwards 1800 • (660) 543-4621

### The Graduate School Course

**GRAD 5000 Special Projects in Graduate Studies (1-3)** Individual or group study of problems in special areas of interest. May be repeated for a maximum of 6 semester hours.

## **Graduate Faculty**

- DAVID E. AABERG Professor of Music. B.A., M.M., Central Washington University; D.M.A., University of Texas-Austin.
- ROBERT F. AHLERING Professor of Psychology. B.S., Loyola University of Chicago; M.A., Ph.D., Northern Illinois University.
- JAMIE L. AIKEN Instructor in Physical Education. B.A., Kansas State University; B.A., M.A., University of Oregon.
- M. SAEED AKHTAR Professor Emeritus of Industrial Technology. B.A., DeMontmorancy College, Pakistan; M.Ed., University of Punjab, Pakistan; Ph.D., Purdue University.
- JENNIFER E. ALDRICH Associate Professor of Early Childhood Education. B.S., Cameron University; M.A., University of Maryland-Baltimore; Ed.D., University of North Texas.
- M. LYNN ALKIRE Associate Professor of Fashion and Apparel Merchandising and Associate Dean of the College of Applied Sciences and Technology. B.S. in Ed., M.S. in Ed., University of Central Missouri; Ph.D., University of Missouri-Columbia.
- DENSIL E. ALLEN Professor Emeritus of Agriculture. B.S., D.V.M., University of Missouri.
- KRISTEN A. ALLEY Assistant Director of Residence Life. B.A., University of Nebraska-Lincoln; M.A., University of Missouri-Columbia.
- PATRICK A. AMENT Associate Professor of Psychology. B.A., University of Nevada-Las Vegas; M.A., Ph.D., University of Nevada-Reno.
- KIM ANDREWS Associate Professor of Economics. B.S. in B.A., University of Central Oklahoma; M.S., Ph.D., Oklahoma State University.
- PATRICIA A. ANTRIM Associate Professor of Library Science and Information Services and Chair of the Department of Educational Leadership and Human Development. B.A., Calvin College; M.L.S., Emporia State University; Ph.D., Emporia State University.
- CAROL A. ATKINSON Professor of Mass Communication. B.G.E., M.S., University of Kansas; Ph.D., Bowling Green State University.
- NOORULLAH BABRAKZAI Professor of Biology. B.S., M.S., University of Peshawar, Pakistan; Ph.D., University of Arizona, Tucson.
- DALE J. BACHMAN Assistant Professor of Mathematics. B.A., Phillips University, Enid, OK; M.S., Ph.D., University of Missouri-Columbia.
- DUANE P. BACHMANN Professor of Marketing. B.S., B.A., Northeast Missouri State University; M.A., University of Central Missouri; Ph.D., Kansas State University.
- GORDON S. BACHUS Professor Emeritus of Education Administration and Adult Education. B.A., M.A., Ouachita Baptist University; Ed.D., University of Arkansas.
- NICHOLAS R. BAETH Assistant Professor of Mathematics. B.A., Computer Science, B.S., Mathematics, Pacific Lutheran University; M.S., Ph.D., University of Nebraska-Lincoln.
- BARBARA L. BAKER Professor of Speech Communication. B.S., M.S., North Texas State University; Ph.D., University of Southern California.
- DONNA T. "CANDEE" BAKER Assistant Professor of Nursing. B.S.N., Montana State University; M.S.N., University of Missouri-Columbia; R.N.
- **TRUDY A. BAKER-TATE** Instructor in Photography. B.S., B.S.B.A., M.S., University of Central Missouri.
- DAVID M. BARABAS Assistant Professor of Graphic Arts Technology. B.S., M.S., Indiana State University-Terre Haute.
- ROCHELLE R. BARABAS Assistant Professor of Career and Technology Education. B.S., M.S., Indiana State University-Terre Haute.
- SHARLENE G. BAX Associate Professor of Political Science. B.A., University of the South-Sewanee, Tennessee; M.A., Ph.D., University of Tennessee-Knoxville.

- JOHN F. BELSHE Professor Emeritus of Biology. B.S., University of Central Missouri; M.S., Ph.D., University of Miami.
- CAROL L. BENTON Professor of Speech Communication. B.A., M.A., Eastern Michigan University; Ph.D., Southern Illinois University.
- TERRILL R. BERKLAND Professor Emeritus of Earth Science Education. B.S., Loras College; M.A., Drake University; Ph.D., University of Iowa.
- MICHAEL D. BERSIN Professor of Music. B.M., University of Arizona; M.M., University of Hartford; D.M.A., University of Arizona.
- **ROGER J. BEST** Professor of Finance and Chair of the Department of Economics and Finance. B.B.A., Georgia College; Ph.D., Florida State University.
- KESHAV BHATTARAI Associate Professor of Geography. B.A., B.S., Tribhuwan University-Kathmandu, Nepal; M.S. Edinburgh University, Scotland; Ph.D., Indiana University.
- LINDA M. BIGBY Associate Professor of Education Administration. B.S., Missouri Valley College; M.S., University of Missouri-Columbia; Ed.D., University of Kansas-Lawrence.
- ZINNA L. BLAND Associate Professor of Business Education. B.S., Alcorn State University; M.Ed., University of Southern Mississippi; Ph.D., Iowa State University.
- MARK L. BLUMBERG Professor Emeritus of Criminal Justice. B.A., M.A., University of Kansas; M.A., Ph.D., State University of New York Albany.
- LEIGH ANN BLUNT Assistant Professor of Safety. B.S. in Ed., Missouri Western State College-St. Joseph; M.S., University of Central Missouri; Ph.D., University of Missouri Columbia.
- LUTHER E. BONHAM, JR. Assistant Professor of Criminal Justice. B.A., Washburn University, Topeka, KS; M.A., Wichita State University, Wichita, KS; Ph.D., Sam Houston State University, Huntsville, TX.
- JANET PAIGE BONSALL Professor of Photography. B.S., Rochester Institute of Technology; M.S., Ed.D., West Virginia University.
- STEVEN R. BOONE Professor of Chemistry and Associate Dean of the College of Arts and Sciences. B.S., California Polytechnic State University; Ph.D., University of Colorado-Boulder.
- PHILIP A. BOS Assistant Professor of Aviation. B.A., University of Missouri-Kansas City; M.S. University of Central Missouri.
- **RAJA BOUZOUITA** Associate Professor of Finance. Maitrise de Finance, Université de Tunis; M.A., Ph.D., University of Pennsylvania.
- COREY L. BOWMAN Assistant Vice President for Student Affairs. B.A., M.S., Miami University.
- JIM R. BOWMAN Professor of Educational Leadership and Human Development. B.S.B.A., M.S., Pittsburg State University; Ph.D., University of Oklahoma-Norman.
- ROBERT L. BOWMAN Associate Professor of College Student Personnel Administration. B.S., M.A., University of Evansville; Ph.D., Purdue University.
- KAREN A. BRADLEY Associate Professor of Sociology. B.A., Oklahoma Baptist University; M.A., University of Oklahoma-Norman; Ph.D., University of Missouri-Columbia.
- PATRICK J. BRADLEY Senior Director of University Housing and Residential Dining Services. B.S., Morningside College; M.S. in Ed., Wayne State College; M.B.A., Eastern Illinois University.
- KITTY J. BRANT Assistant Professor of Elementary Education. B.S, M.S., Ed Specialist, University of Central Missouri; Ph.D., Saint Louis University.
- BAIRD A. BROCK Professor Emeritus of Economics. B.A., M.A., University of Central Missouri; Ph.D., University of Arkansas.

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AGREGORY E. BROWN — Professor Emeritus of Child and Family Development. B.S., University of Wisconsin Madison; M.S., University of Wisconsin Milwaukee; Ph.D., University of Missouri Columbia.

ROGER "BART" BROWN — Assistant Professor of Aviation and Assistant Airport Manager/Chief Flight Instructor. B.S. in B.A., M.S., University of Central Missouri.

RICHARD D. BRUCE — Assistant Professor of Construction Management. B.A., University of Kansas; M.S., University of Central Missouri.

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DARLENE M. BUDD — Assistant Professor of Political Science. B.S., Indiana University; M.A., San Francisco State University; Ph.D., University of Wisconsin-Milwaukee.

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SALLY BURNETT — Insructor in Educational Technology.B.S., M.S., University of Central Missouri.

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M. JENISE COMER — Professor of Social Work. B.A., University of Missouri Kansas City; M.S.W., University of Kansas.

JAMES H. CONN — Professor of Physical Education. B.A., University of Northern Colorado; M.S., Eastern Washington University; Ph.D., Southern Illinois University.

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