## UMSL Home

The University of Missouri-St. Louis is one of four campuses that constitute the University of Missouri. Established in Columbia in 1839 on the ideals of Thomas Jefferson, the University of Missouri became a landgrant institution upon passage of the Morrill Act by Congress in 1862.

When the University of Missouri System was organized in 1963, the St. Louis campus was the only one that started as an entirely new university. The University of Missouri-St. Louis began as a consequence of the national movement to create public universities in metropolitan centers. UMSL was designed to educate the area's professionals through research, coursework, and hands-on experiences in the region's businesse $\mathbf{j}_{\text {, }}$ schools, hospitals, agencies, and the arts.

According to the campus's history, The Emerging University: The University of Missouri-St Louis, 1963-1983, faculty were hired from prestigious universities with a vision of creating a university where graduates would be able to confront urban issues through research, critical thinking, and creativity. More than traditional workforce development, these leaders' vision for UMSL was to educate students for lifelong learning, which would produce good citizens and effective leaders in the region's organizations. That legacy continues because those early leaders created a culture of faculty excellence that persists today.
Since the doors of the old Administration Building opened on a golf course more than 45 years ago, UMSL has grown to encompass 350 acres of beautifully landscaped rolling hills. The campus has grown to be St. L.ouis's largest university in the number of students and is now the third largest in the state.
Out of pride in the successes of our students, faculty, and staff and our culture of quality improvement, the campus posts on the Web recent highlights on the UMSL home page, detailed information on the About UMSL site, and student achievement data on the college Portrait.

## Mission

## VISION

The University Missouri-St. Louis will be known as a premier metropolitan public research university and as a university of choice for undergraduate, graduate and professional students.

## MISSION

The University of Missouri-St. Louis provides excellent learning experiences and leadership opportunities for a diverse student body. Outstanding faculty and staff, innovative research, and creative partnerships foster synergies that advance the welfare of our stakeholders and benefit the global society.

## Academic Structure

UMSL's academic units include the following.

## College of Arts and Sciences

The College of Arts and Sciences is the largest and most diverse college at UMSL. In its continued efforts to improve and deliver the academic core for the campus, CAS's long-range plans have included various initiatives intended to strengthen the foundational coursework in the liberal arts. Also central to the college's mission is faculty and student collaboration in research and scholarship. Both undergraduate and graduate students participate in a community of scholars that promotes excellence in teaching, critical thinking skills, collaborative learning, and strong research and scholarship across a range of disciplines.

## College of Business Administration

Through its undergraduate and graduate degree programs, the College of Business Administration expands student capability in communication, analysis, and judgment, enabling its graduates to deal effectively with today's complex economic environment. The college maintains a balance between the specialization of professional courses and the diversity of liberal arts.

## College of Education

Consistently among the top institutions in the state in preparation of educators, the College of Education
provides undergraduate and graduate programs to support and sustain educational leaders. Its programs emphasize state-of-the-art technological applications to enhance teaching and learning as well as collaboration among university, school, agency, and corporate partners.

## College of Fine Arts and Communication

Faculty, students, and alumni of the College of Fine Arts and Communication, which includes the departments of Art and Art History, Communication, Music, and Theatre, Dance and Media Studies, have distinguished themselves as scholars, visual artists, teachers, and performers. The university's $\$ 55$ million Touhill Performing Arts Center that opened in the fall of 2003 provides two world-class venues for performances. In addition, three galleries on campus offer space for display of student and faculty artwork as well as visiting exhibitions.

## Graduate School

The Graduate School provides leadership to graduate programs across campus. In contrast to those in traditional universities, UMSL's graduate programs reflect the campus's mission as a public metropolitan research university: our faculty and students' scholarship advances understanding of their disciplines in rapidly changing local, regional, and global contexts.

## College of Optometry

The College of Optometry, one of 17 such programs in the United States, provides professional optometric education and clinical experience. Facilities are furnished with equipment and technology for the enhancement of both teaching and research. The college operates the University Eye Center on campus, the Optometric Center of St. Louis in the city's Central West End, the Harvester Eye Care Center in St. Charles County, and the East St. Louis Eye Center, jointly owned and operated by the UMSL College of Optometry and Southern Illinois University at Edwardsville.

## Pierre Laclede Honors College

Students in the Pierre Laclede Honors College major in any of the campus's undergraduate programs and share a commitment to a challenging, innovative general education curriculum. In the Honors College, students and faculty work together to foster an intellectual climate in which democracy, diversity, civility and excellence are fundamental values. The Honors program offers small seminars that emphasize critical reading and open discussion upon which students National Student Exchange

## College of Nursing

The College of Nursing offers programs at the bachelor's, master's, and doctoral levels. The Bachelor of Science in Nursing is available for a student wishing to pursue a program of study leading to eligibility to complete state licensure examinations to become a registered nurse (R.N.). The Master of Science in Nursing offers studies in adult, children, and women's health along with nurse educator and nurse leader tracks. Nurse practitioner options are also available (adult, family, pediatric, and women) as part of the MSN program. Doctoral students may choose between the Doctor of Nursing Practice (DNP) or the Ph.D. in Nursing.

## UMSL/Washington University Joint Undergraduate Engineering Program

The University of Missouri St. Louis and Washington University joined forces to offer accredited Bachelor of Science degrees in mechanical, electrical, and civil engineering. Students who enter the program take about half of their course work--mathematics, physics, chemistry, humanities and social sciences, and some elementary engineering subjects--at UMSL. The remaining program consists of engineering courses and laboratories taken at Washington University, Students register for all courses at UMSL, pay tuition at UMSL rates (plus a small surcharge on engineering courses), and receive their degrees from the University of Missouri.

## Division of Continuing Education

Continuing Education provides a wide variety of credit courses and noncredit professional development programs that help adults keep abreast of new developments in their field, prepare them for a career in a new field of endeavor, or enrich their personal and family life. Courses leading to undergraduate and graduate programs are also offered on the campuses of the St. Louis Community College South County Education Center, St. Louis Community College at Wildwood, St. Charles Community College, Jefferson College, and Mineral Area College.

## Student Life

Numerous student organizations at UMSL, from the Accounting Club to Zeta Tau Alpha sorority, seek members and leaders. Guest speakers, concerts, film series, plays, exhibits, recitals, and a host of informal gatherings crowd each week's schedule. The St. Louis area offers still more recreational sports and cultural events.

The university offers a wide range of varsity and intramural sports for students, whether as players or spectators. On the varsity level, the Tritons compete in most major sports, including men's soccer, basketball, baseball, and golf and women's basketball, soccer, softball, volleyball, and tennis.

Students participate in fitness activities, both organized and individual, on campus. The Mark Twain athletic
facility offers a fitness center, weight room, swimming pool, and basketball, volleyball, handball, and racquetball courts. Outdoor facilities include tennis and handball courts, a fitness trail, and baseball, so:cer, and softball fields. Intramural sports are available to all students, with schedules designed for maximun participation.

## UMSL Alumni

The university has nearly 80,000 graduates living in all 50 states and several foreign countries. Of these alumni, more than 77 percent live and work in the St. Louis metropolitan area and reflect the area's diversity. The university is a major force in providing the region with a highly educated and diverse work force. UMSL alumni can be found making contributions in companies and communities throughout the United States and internationally.

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UMSL Home
Undergraduate Degrees (Majors)

| Program | Degree | Emphasis Area |
| :--- | :--- | :--- |
| Accounting | BS |  |
| Anthropology | BA |  |
| Art History | BA |  |
| Biochemistry and <br> Biotechnology | BS |  |
| Biology | BA; BS |  |
| Business Administration | BSBA | Finance; International Business; Logistics and Operations <br> Management; Marketing |
| Chemistry | BA; BS |  |
| Civil Engineering | BSCIE | Construction Engineering; Environmental Engineering <br> Science |
| Communication | BA |  |
| Computer Science | BS |  |
| Criminology and Criminal | BS |  |
| Justice | Early Childhood Education | BSED |
| Economics | BA; BS |  |
| Educational Studies | BES | Early Childhood; Exercise Science; Professional Educational |
|  | Studies |  |
| Electrical Engineering | BSEE |  |
| Elementary Education | BSED |  |
| English | BA |  |
| History | BA |  |
| Information Systems | BS |  |
| Interdisciplinary Studies | BIS |  |
| Liberal Studies | BLS |  |
| Mathematics | BA; BS |  |
| Mechanical Engineering | BSME |  |
|  |  |  |

##  <br> Graduate Degrees IGraduate Certinates | <br> Undre- Fograms e instruc

Undergraduate Degrees (Majors)

| Media Studies | BS |  |
| :---: | :---: | :---: |
| Modern Language | BA | Concentrations in French, German, Japanese and Spanish (pending CBHE approval) |
| Music | BA; BM | Elective Studies in Bus (BM only); Performance (BM only) |
| Music Education | BM |  |
| Nursing | BSN |  |
| Philosophy | BA |  |
| Physical Education | BSED | PK-9; PK-12 |
| Physics | BA; BS | Astrophysics (BS only); Engineering Physics (BS only); General Physics (BS only); Geographics; Medical Physics (BS only) |
| Political Science | BA |  |
| Psychology | BA |  |
| Public Policy and Administration | BSPPA |  |
| Secondary Education | BSED | Business Education; English; Mathematics; Modern Foreign Language-French; Modern Foreign Language-German; Modern Foreign Language-Spanish;; Modern Foreign Language- Japanese; Music; Science-Biology; ScienceChemistry; Science-Physics; Social Studies-Economics; Social Studies-History; Social Studies-Poli Science; Social Studies-Psychology; Social Studies-Sociology |
| Special Education | BSED | Emotionally Disturbed; Learning Disability; Mentally Retarded |
| Social Work | BSW |  |
| Sociology | BA; BS |  |
| Studio Art | BFA | Drawing; General Fine Arts; Graphic Design; Photography; Painting; Printmaking; Art Education |
| Theatre and Dance | BA |  |

## Undergraduate Certificates and Minors

All of the majors above may be taken as minors. The following lists additional minors, and certificates rray also serve as minors. Not all minors are appropriate to all degrees, however; please check with your advisor before selecting a minor or certificate.

- Accounting Post-Baccalaureate Certificate
- Advertising Certificate
- Africana Studies Certificate
- American Politics Minor
- Arcaheology Certificate
- Biochemistry Certificate
- Biotechnology Certificate
- Comparative Politics Minor
- Conservation Biology Certificate
- Creative Writing Certificate
- Disaster and Risk Management Certificate
- East Asian Studies Certificate
- Environmental Studies Certificate
- Eilm Studies Certificate
- Gender Studies Certificate
- Gerontological Studies
- Greek Studies Certificate
- History of Science \& Technology Minor
- Honors College Certificate
- International Affairs Certificate
- International Business Certificate
- International Relations Minor
- Jazz Studies Minor
- Labor Studies Certificate
- Latin American Studies Certificate
- Literacy
- Mathematics Education K-5 Minor
- Modern European Studies Certificate
- Modern Language and Study Abroad Certificate
- Neuroscience Certificate
- Nonprofit Arts Organization Management \& Leadership (Inactive)
- Nonprofit Organization Management \& Leadership Certificate
- Philosophy of Science and Technology Minor
- Photographic Studies certificate
- Political Theory Minor
- Professional Writing Certificate
- Public Administration Minor
- Public Policy Minor
- Public Relations Certificate
- Statistics Minor
- Studies in Religions Certificate
- Irauma Studies Certificate
- Teaching English to Speakers of Other Languges P-12 Minor
- Technical Writing Certificate
- Professional Writing Certificate
- Urban Education P-5 Minor
- Urban Politics Minor
- Women and Politics Minor


## Other Instructional Areas

In addition to the degrees and emphasis areas above, many departments offer specializations in several subject areas.

- American Studies
- Arabic
- Astronomy
- Athletic Coaching
- Atmospheric Science
- Black Studies
- Chinese
- Dance
- Educational Foundations
- Educational Technology
- Employee Training and Development
- Ensemble.Performance
- Ethics
- Exercise Science Education
- Geology
- Interpersonal Communication
- Jazz Studies
- Legal Studies
- Literature
- Medical Physics
- Organizational Communications
- Pre Engineering
- Pre-Health Sciences
- Pre-Law
- Pre-Veterinary Science
- Probability and Statistics
- Public Affairs Journalism
- Radio and Television
- Reserve Officer Training Corps


## Graduate Degrees

| Program | Degree | Emphasis Area |
| :--- | :--- | :--- |


| Accounting | MACC |  |
| :---: | :---: | :---: |
| Adult and Higher Education | MED | Adult Education; Higher Education |
| Applied Mathematics | PHD | Computer Science; Mathematics |
| Biochemistry and Biotechnology | MS |  |
| Biology | MS | Animal Behavior; Biochemistry; Biotechnology; Conservation Biology; Development; Ecology; Evolution; Genetics; Molecular and Cellular Biology; Physiology; Plant Systematics; Population Biology; Tropical Biology |
| Biology | PHD | Biochemistry; Environmental Studies; Molecular Biology and Biotechnology; Plant Systematics |
| Business_Administration | MBA | Accounting; Finance; Information Systems; Management; Marketing; Logistics \& Supply Chain Management; Operations Management |
| Business Administration | PHD | Information Systems; Logistics \& Supply Chain Management |
| Chemistry | MS; PHD | Biochemistry; Inorganic; Organic; Physical |
| Communication | MA |  |
| comouter Science | MS |  |
| Counseling | MED | Community Counseling; Elementary; Secondary |
| Creative Writing | MFA |  |
| Criminology and Criminal Justice | MA; PHD |  |
| Economics | MA | Business Economics; General Economics |
| Education | EDD | Adult \& Higher Education; Educational Administration; Counselor Education; Teaching-Learning Processes |
| Education | PHD | Counseling; Educational Leadership and Policy Studies; Educational Psychology; Teaching-Learning Processes |
| Educational Administration | EDS |  |
| EducationalAdministration | MED | Community Education; Elementary Administration; Secondary Administration |
| Elementary Education | MED | General; Early Childhood; Reading |
| English | MA | American Literature; English Literature; Linguistics |
| Gerontology | MS |  |
| History | MA | Museum Studies |
| Information Systems | MS |  |
| Mathematics | MA |  |
| Music Education | MME |  |
| Nursing | MSN | Adult Nurse Practitioner; Family Nurse Practitioner; Neonatal Nurse Practitioner; Nurse Educator; Nurse Leader; Pediatric Nurse Practitioner; Women's Health Nurse Practitioner |
| Nursing | PHD; DNP |  |
| Philosophy | MA |  |
|  |  |  |

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| Physics | MS | Applied Physics; Astrophysics |
| :--- | :--- | :--- |
| Physics | PHD |  |
| Political Science | MA | American Politics; Comparative Politics; International <br> Politics; Political Process and Behavior; Public Admin and <br> Public Policy; Urban and Regional Politics |
| Political Science | PHD |  |
| Psychology | MA |  |
| Psychology | PHD | Behavioral Neuroscience; Clinical-Community Psychology; <br> Industrial and Organizational Psychology |
| Public Policy Administration | MPPA | Health Policy; Local Government Mgmt; Managing Human <br> Resources and Organization; Nonprofit Organization Mgmt; <br> Policy Research and Analysis |
| School Psychology | EDS |  |
| Secondary Education | MED | General; Curriculum and Instruction; Middle Level <br> Education; Reading; Teaching English to Speakers of <br> Other Languages |
| Special Education | MED | Early Childhood Special Education; Autism and <br> Developmental Disabilities; Cross Categorical Disabilities |
| Social Work | MSW |  |
| Vision Science | MS; PHD |  |

## Professional Degree

| Program | Degree |
| :--- | :--- |
| Optometry | OD |

## Graduate Certificates

- Autism
- Biotechnology
- Business Administration
- Gerontology
- Human Resource Management
- Institutional Research
- International_Studies
- Local Government Management
- Logistics and Supply Chain Management
- Long-term Care Administration
- Marketing Management
- Museum Studies
- Non Profit Organization Management and Leadership
- Post MSN Adult Nurse Practitioner
- Post MSN Eamily Nurse Practitioner
- Post MSN Nurse Practitioner Certificate
- Post MSN Pediatric Nurse Practitioner
- Program Evaluation and Assessment
- Psychology - Clinical Re-specialization
- Secondary School Teaching
- Teaching English to Speakers of Other Languages
- Teaching of Writing
- Irauma Studies
- Tropical Biology and Conservation
- Gender Studies


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## UMSL Home

This section includes admission and academic policies for students seeking to study in undergraduate programs at the University of Missouri-St. Louis.

## Admission

Admission policies and procedures vary according to each applicant's educational goals and prior educational experiences. This section contains information for First Time Freshmen, Iransfer Students, Returning UMSL Students, Visiting Students, Non-Degree Students, and UMSLExpress for senior citizens. The Office of Admissions contains links to applications for all categories of applicants.

## Admission for First-Time Freshmen

The University of Missouri System has a uniform policy for admission of freshman students to its four campuses. The procedure for regular admission from high school is based on high school class rank, performance on a standardized college aptitude test, and required high school units.

## Application Procedures

Students applying as first time freshmen (i.e., students applying directly from high school) need to submit the following:

## 1. A completed Undergraduate Application

- Application information available from the Office of Admissions website, by phone 314-516-5451, email admissions@umsledu, or in person (351 Millennium Student Center).

2. Application Fee of $\$ 35.00$ ( $\$ 40.00$ for international students) may be paid by:

- A check or money order made payable to UMSL
- A credit card during the online application procedure
- Cash by appearing in person at the office of the Registrar in 351 Millennium Student Center.


## 3. High School Transcript and Class Rank.

A transcript must be sent directly from your high school to the UMSL Office of Admissions. The transcript should indicate class rank (if the school computes it), all coursework, and, when available, date of graduation. College aptitude test scores are required and may be submitted via this transcript or directly from the testing agency.

## Students from Non-Ranking High Schools

Students applying for Undergraduate Admission who attend high schools that do not rank graduating seniors must present an ACT Composite score of 24 or higher or an SAT composite score (Critical Reading + Math) of 1090 or higher.

## 4. College Aptitude Test

Freshman admission requires that a test score be submitted from one of the following:

- American College Testing Program (ACT) The ACT is administered at many locations across the country. Information is available from http://wwwactstudentiorgL, or your high school counselor.
- Scholastic Aptitude Test (SAT) The SAT is administered at many locations across the country. Testing information is available on the Collegeboard website

When to Apply
Qualified applicants are admitted and notified by letter of their admission in the order that completed applications are received. Applications are accepted after September 1 for the next fall semester on the basis of six or more high school semesters.

Admission Requirements

Any high school graduate may be admitted with evidence indicating he or she meets the following requirements:

At least 17 units of credit (One unit=one year in class) as follows:

- English: Four units. Two units emphasizing composition or writing skills. One of the remaining tno units may be in speech or debate.
- Mathematics: Four units (Algebra 1 and higher).
- Science: Three units not including general science, one of the three units must be a laboratory zourse.
- Social Studies: Three units.
- Fine Arts: One unit.
- Foreign Language: Two units of a single foreign language.
- Math and foreign language units may be accepted from middle/junior high school.

In addition to the 17 -unit requirement, each applicant will be evaluated on high school rank and test score (ACT or SAT). Applicants with a composite ACT score of 24 or SAT of 1100 will be admitted without regard to class rank. Class rank will be used to determine eligibility for admission when the applicant's ACT score is from 17 to 23 (SAT is 820 to 1080).

If the ACT Composite score is $\mathbf{1 7}$ to $\mathbf{2 3}$ or the total of SAT Critical Reading and Math scores is $\mathbf{8 2 0}$ to $\mathbf{2 0 8 0}$, the applicant must meet the following high school class rank requirement to qualify for admission.

| ACT | SAT Total <br> Critical Reading, Math | High School Class <br> Percentile Rank |
| :--- | :---: | :---: |
| 23 | $1050-1080$ | 48 |
| 22 | $1020-1040$ | 54 |
| 21 | $980-1010$ | 62 |
| 20 | $940-970$ | 69 |
| 19 | $900-930$ | 78 |
| 18 | $860-890$ | 86 |
| 17 | $820-850$ | 94 |

## Automatic Admission

## Applicants that

A. Rank in the top $10 \%$ of the graduating class of a Missouri high school; and
B. Complete the college preparatory curriculum, which includes at least 17 units of credit (four units each of English and math, three units of social studies, two units of a single foreign language, and one unit of fine art); and
C. Submit an ACT/SAT score.

Will be eligible for automatic admission to any campus of the University of Missouri.
Applicants that
A. Graduate from a Missouri high school that does not rank its graduates; but
B. Have taken a college preparatory curriculum which includes at least 17 units of credit (four units each of English and math, three units of social studies, three units of science, two units of a single foreign language, and one unit of fine art); and
C. Achieve a 3.5 GPA on a 4.0 scale in these core courses; and
D. Submit an ACT/SAT score.

Will be eligible for automatic admission to any campus of the University of Missouri.

## Admission Appeals

Applicants who do not meet the minimum admissions criteria may still be admitted, depending on evidence of likely success and campus enrollment objectives. Additional factors considered for admission may include:

Additional factors considered for admission may include:

- Completion of a rigorous llege preparatory curriculum.
- Evidence of hardship or unusual circumstances that hindered academic performance
- Significant work experience and/or family responsibilities.
- Improvement over time in high school academic record
- Students who fall short of the admission criteria have the option to submit a letter of appeal to address one or more of the factors above. The appeal letter should be addressed to the Admissions Appeals Committee, and additional letters of support are encouraged from teachers, counselors, or principals.

For additional information regarding admission requirements, contact the Office of Admissions at 314-5165451 or by e-mail at admissions@umsledu.

## Acceptance.

Upon graduation, applicants must submit a final high school transcript indicating their class rank and graduation date, First time freshmen may be required to take a placement examination in mathematics.

## Advanced Standing for Entering Freshmen.

UMSL grants credit hours to entering freshmen who, through their performance on College Board Advanced Placement Tests and faculty administered tests, demonstrate proficiency in certain college level courses such as biology, chemistry, English, foreign languages, history, mathematics, political science, and physics. For further information and applications, contact College Board Placement. AP Services by phone (888) 225-5427 or email apexams@info, collegeboard, org. The score reporting institution code number for the University of Missouri St. Louis is 6889. College Board will send the scores directly to the Director of Admissions.

## Dual Credit

Accredited programs such as the Advanced Credit Program at the University of Missouri-St. Louis enable qualified high school juniors and seniors the opportunity to earn college credits while completing high school. Eurther information about the Advanced Credit Program may be obtained online or by calling 314-516-7005.

Dual High School/University Enrollment
Superior high school students may be admitted in a special student category to take one or more university courses on campus during their junior or senior years of high school or during the summers. Students must submit a dual enrollment application and a recommendation from the counselor or principal. Students are admitted on the evidence of academic excellence. Admission is limited and governed by available space, and students must meet the prerequisites for the course or courses selected. After reviewing the Dual Enrollment website, students or counselors may contact the College of Arts and Sciences at 314-516-5501 for more information.

## College Level Examination Program

Applicants may earn advanced credit through the College Level Examination-Program (CLEP). CLEP offers subject examinations for credit in specific areas. These examinations can be taken any time, provided the student has not taken a college credit course in the test area. Consultation with a UMSL advisor is highly recommended before taking an exam. CLEP tests are given in the Campus Testing Center by appointment only. Contact the Campus Testing Center at $314-516-6396$, in person in 412 SSB, or through their website.

## Credit for Military Service

Credit may be allowed for service training programs conducted by the various Armed Forces branches. The American Council of Education's recommendations in A Guide to the Evaluation of Educational Experiences in the Armed Services generally serve as a basis for granting such credit. To count toward a degree, the credit granted must be appropriate to the student's curriculum.

## Probationary Admission

It may be possible for applicants who do not meet the regular admission standards to be admitted on a trial basis. Applicants who do not meet minimum admission requirements can submit a letter of appeal to request probationary admission. The Admission Appeals Committee reviews each letter of appeal and makes decisions on a case-by-case basis.

## High School Equivalency Applicants

Individuals may seek admission on the basis of passing the General Education Development (GED) test with a minimum score of 2500 (for tests taken after January 1, 2002; minimum score of 250 required for tests taken prior to January 1, 2002).

In addition, the following must be submitted:

- A completed on-line Underaraduate Application
- A $\$ 35$ non-refundable Application Fee ( $\$ 40$ for international students)
- ACT composite score of at least 24 or SAT Composite of at least 1090
- A high school transcript if ACT/SAT scores are included on the transcript.

Home-Schooled Students

UMSL welcomes home-schooled students. To be admitted for undergraduate admission, home-schooled applicants must present the following:

- A completed Undergraduate Application (available online).
- A $\$ 35$ non-refundable Application Fee ( $\$ 40$ for international students)
- ACT Composite score of at least 24 or SAT Composite of at least 1090
- A copy of course of study or transcript reflecting all coursework and grades earned (if available), as well as a statement and date of graduation or completion
- If the home-schooled applicant has not completed all units required for graduation (completion), a testscore report of the General Education Development (GED) test with a minimum composite score of 2500 (for tests taken after January 1, 2002; minimum score of 250 for tests taken prior to January 1, 2002) must be presented.


## Admission Information for Prospective Students With Prior College Credit

UMSL values transfer students, defined as a student transferring from another college or university with at least 24 earned semester hours of college-level work.

A transferring student who has completed fewer than 24 hours must apply under the procedures for admission to the freshman class with the additional requirement that they submit official transcripts frcm all college-level courses attempted at previous institutions that document at least a 2.0 overall grade point average ( 4.0 system).

Students transferring from other colleges and universities with at least 24 hours must submit the following information:

- A completed online Undergraduate Apolication
- A $\$ 35$ non-refundable Application Fee ( $\$ 40$ for international students)
- Official transcripts from all colleges/universities attended. Hand-carried credentials are not accepted.

All credentials submitted for admission become the property of the university.

## Suspended and Dismissed Transfer Students

It is the practice of the Office of Admissions at the University of Missouri-St. Louis to uphold any suspension or dismissal decision offered to a student from another institution. Students suspended will be required to sit out for one year from the date of suspension before enrolling in UMSL. In addition, students must still meet the minimum admission requirements of a 2.0 gpa . A student may have to attend another institution in order to increase his/her GPA. Students who have been dismissed from another institution may not enroll at the University.

Students who have been dismissed from a specific college or school within another institution will need to show proof that they are still eligible to enroll and/or are back in good standing at the previous institution in order to enroll with UMSL.

Additionally, students who are suspended/dismissed from another UM institution shall not be admissible until after one year from the date of the suspension/dismissal. Even though a student is removed from suspension, the student must still meet the minimum admission requirements of a 2.0 gpa .

## Missouri State Transfer Agreement.

Although transfer students should be aware that requirements for degrees vary from institution to institution so some transferred credits may not apply to UMSL programs, UMSL has attempted to minimize the los: of credits by adhering to the Missouri Coordinating Board of Higher Education (CBHE) Articulation Agreement. The agreement outlines statewide undergraduate general education requirements that satisfy the general requirements for students transferring into UMSL and students transferring out of UMSL to other public universities in the state.

UMSL requires mathematics and writing proficiency beyond the general requirements in the CBHE State nent. Please refer to the GeneralEducation requirements for details.

## Transfer Credit

The articulation agreement among public institutions within the state of Missouri governs transfer of credit to UMSL from colleges and universities within the state of Missouri. These guidelines also apply to students; transferring to UMSL from schools located outside Missouri. Advanced standing in the form of credit hours may be allowed for work satisfactorily completed in another public or private college or university of recognized standing located in the state of Missouri, as long as the work satisfies the requirements of tre student's major.

The transcript at each institution includes all courses attempted. Grades of D or better earned in college-level work at an accredited or approved institution of higher education should receive full credit when transferred to UMSL. The university, however, will treat all grades on courses attempted on the same basis as that of a UMSL student. For example, if a program requires a UMSL student to repeat a specified course having earned
a $D$ grade, a transfer student will also be required to repeat the same course if it carries a $D$ grade.
To maximize transfer credits from community colleges, UMSL has transfer guides and articulation agreements with area colleges. Should community college students have any question about the transferability of courses not in the articulation agreement, they should contact the appropriate Iransfer Coordinator, preferably prior to taking a course.

## Advanced Standing

Advanced standing includes credit by examination, examination that may or may not appear on a transfer student's transcripts, including College-Board Advanced Placement (AP), the College-Level Examination Program (CLEP), and Defense Activity for Non-Traditional Education Support (DANTES). It also includes credit by portfolio review (Bachelor of Fine Arts only). These lower-division credits may not apply at the senior level. For examination credit, students should submit appropriate verification documents to the Office of Admissions before their first semester at UMSL. Students interested in the portfolio review should contact the Art and Art History Department. Early attention to these matters is essential to avoid unnecessary course work or repeats that can lead to loss of credit. If examinations are completed at a later date, verification documents should be submitted as soon as they are available.

Shortly after all official transcripts and other verifications are on file, students' previous academic records are evaluated to determine which courses are applicable, and students receive a written report of the results. Degree checks determining whether courses meet a specific degree requirement and whether courses are accepted as a part of the student's academic major are made in the office of the appropriate dean or advisor. Should there be any question concerning applicability of any courses, students should discuss this with that advisor.

## Associate Degree Transfers from Community Colleges

A student admitted to the university and holding an associate degree applicable toward the baccalaureate degree will be accepted in junior standing. Students fulfilling the general education requirements outlined by the Missouri Coordinating Board of Higher Education and certified by the sending institution will have met the lower division general education requirements at UMSL. Students with AA degrees from Missouri institutions that include a CBHE approved general education core may transfer more than 64 credit hours for lower division courses. Any additional lower division course credits above 64 credit hours must be applicable to the baccalaureate degree or must be a prerequisite for an upper division course in the major. However, this does not exempt the student from meeting specialized lower-division degree requirements of specific departments. Courses completed in the associate degree program are evaluated for application to specific degree requirements by the same criteria used for transfer students from other colleges and universities.

## Transfers Without an Associate Degree

Transfer applicants who do not have an associate degree will have their transcripts evaluated on a course-bycourse basis and will be allowed to transfer a maximum of 60 credit hours from two year institutions. Students who have fulfilled the general education requirements outlined by CBHE and certified by the sending institution will meet UMSL's general education requirements.

## Transfers Within the University of Missouri System.

Students must be in good standing at another campus of the University of Missouri to be eligible for admission. Students not in good standing will not be admissible until after one year from the date of the suspension/dismissal. Students must meet the minimum admission requirements of a 2.0 gpa in order to be admitted.

Any course that leads to an undergraduate degree on any campus of the University of Missouri shall be accepted in transfer toward the same degree on any campus of the university offering that degree. Grades, including D and F grades, and honor points earned in such courses will also transfer and will be included in the cumulative grade point averages. Unresolved problems related to transferability of credit may be appealed to the office of the appropriate dean.

Students within the last 30 hours of graduation may take a limited number of courses at another campus in the UM system, provided the last 15 hours are taken at UMSL and the work is approved by their respective dean and department.

## Midwest Student Exchange

The Midwest Student Exchange Program is an initiative designed by the Midwestern Higher Education Commission to increase interstate educational opportunities for students in its member states. The program enables residents of Indiana, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, and Wisconsin to enroll in the institutions and specified programs located outside their home state at reduced tuition levels. Contact Admissions for more information.

## Students from Other Countries

Prospective students living outside the United States and its possessions should contact the Office of International Student and Scholar Services (below) at least one year before the date of desired admission for information about application to the university. Applicants will be expected to supply official original
secondary and college/university transcripts from all schools attended as well as other official original documents. International students must also pay a $\$ 40$ application fee. All students should make arrangements to take the Test of English as a Foreign Language (TOEFL) well in advance of their admission date.

Since 1998, all students in F-1 and J-1 status have been required to purchase an inexpensive insurance policy with coverage for illness and accidents, billed to the student's UMSL account. For details contact:

```
Office of International Student and Scholar Services
261 Student Millennium Center
One University Boulevard
St. Louis, MO 63121-4400
Phone: 314-516-5229
Email: iss@umsledu
Or visit the Office of International Students website
```


## Returning UMSL Students

Students wishing to return to the University will be required to complete a returning student application and provide official transcripts from other colleges and universities attended since last enrolled as a UMSL student. Students returning must have a minimum 2.0 cumulative gpa.
The returning student application is available online or by calling the Office of Admissions at 314-516-5451.

## Admission for Students Not Seeking a UMSL Degree

## Visiting Students

A visiting student is one who has completed at least one semester at another institution and plans to return to that college or university after attending UMSL. To qualify as a visiting student, applicants must be an actively enrolled student at another college or university. Visiting_student apolications are available on line. No application fee required. Transcripts are not required for visiting students. At the end of the session, students must request that their grades be reported by transcript to their respective schools. Financial zid is not available for visiting students.

## Non-Degree-Seeking Students

A non-degree-seeking student is someone interested in taking classes but not wanting a degree from UMSL. Often these are students who have degrees but want to take additional undergraduate classes for personal or professional development. To become a non-degree-seeking student, applicants complete the application for admission and mark "non-degree-seeking." No application fee required. No transcripts are required; however, the admission applies only for that particular semester. To attend for another semester, the student must reapply.

Students wishing to become degree-seeking must meet the minimum transfer student requirements of 24 transferable, college-credit hours at a 2.0 gpa. Students may not switch from non-degree to degree-seeking after the first four weeks of the semester.

The non-degree application is available on-line, in person at 351 Millennium Student Center, or by callirg 314-516-5451. Financial aid is not available for non-degree seeking students.

## UMSL Express

UMSL Express provides Missouri's senior citizens (65 and older) easy access to undergraduate courses without limit on an audit (not for credit) space-available basis. Graduate courses are not available through this program. Students are subject to: non-refundable $\$ 25$ registration fee, a parking fee, and course-related fees. Former UMSL Express students who reapply for the program must again pay the registration fee. UMSL Express applicants may obtain a registration form on-line, in person at 351 Millennium Student Center, or by calling 314-516-5451. Students should complete and return the form with proof of age to the Office of Admissions on the day before classes are scheduled to begin.

## Unfergraduate Study

## UMSL. Home

This section includes admission and academic policies for students seeking to study in undergraduate programs at the University of Missouri-St. Louis.

## Admission

Admission policies and procedures vary according to each applicant's educational goals and prior educational experiences. This section contains information for First Time Freshmen, Iransfer Students, Returning UMSL Students, Visiting Students, Non-Degree Students, and UMSL_Express for senior citizens. The Office of Admissions contains links to applications for all categories of applicants.

## Admission for First-Time Freshmen

The University of Missouri System has a uniform policy for admission of freshman students to its four campuses. The procedure for regular admission from high school is based on high school class rank, performance on a standardized college aptitude test, and required high school units.

## Application Procedures

Students applying as first time freshmen (i.e., students applying directly from high school) need to submit the following:

## 1. A completed Undergraduate Application

- Application information available from the Office of Admissions website, by phone 314-516-5451, email admissions@umsledu, or in person ( 351 Millennium Student Center).

2. Application Fee of $\$ 35.00$ ( $\$ 40.00$ for international students) may be paid by:

- A check or money order made payable to UMSL
- A credit card during the online application procedure
- Cash by appearing in person at the office of the Registrar in 351 Millennium Student Center.


## 3. High School Transcript and Class Rank.

A transcript must be sent directly from your high school to the UMSL Office of Admissions. The transcript should indicate class rank (if the school computes it), all coursework, and, when available, date of graduation. College aptitude test scores are required and may be submitted via this transcript or directly from the testing agency.

## Students from Non-Ranking High Schools

Students applying for Undergraduate Admission who attend high schools that do not rank graduating seniors must present an ACT Composite score of 24 or higher or an SAT composite score (Critical Reading + Math) of 1090 or higher.

## 4. College Aptitude Test

Freshman admission requires that a test score be submitted from one of the following:

- American College Testing Program (ACT) The ACT is administered at many locations across the country. Information is available from httpi//www.actstudent.ora/, or your high school counselor.
- Scholastic Aptitude Test (SAT) The SAT is administered at many locations across the country. Testing information is available on the collegeboard website


## When to Apply

Qualified applicants are admitted and notified by letter of their admission in the order that completed applications are received. Applications are accepted after September 1 for the next fall semester on the basis of six or more high school semesters.

## Admission Requirements

Any high school graduate may be admitted with evidence indicating he or she meets the following requirements:

At least 17 units of credit (One unit=one year in class) as follows:

- English: Four units. Two units emphasizing composition or writing skills. One of the remaining two units may be in speech or debate.
- Mathematics: Four units (Algebra 1 and higher).
- Science: Three units not including general science, one of the three units must be a laboratory :ourse.
- Social Studies: Three units.
- Fine Arts: One unit.
- Foreign Language: Two units of a single foreign language.
- Math and foreign language units may be accepted from middle/junior high school.

In addition to the 17-unit requirement, each applicant will be evaluated on high school rank and test score (ACT or SAT). Applicants with a composite ACT score of 24 or SAT of 1100 will be admitted without regard to class rank. Class rank will be used to determine eligibility for admission when the applicant's ACT score is from 17 to 23 (SAT is 820 to 1080).

If the ACT Composite score is $\mathbf{1 7}$ to $\mathbf{2 3}$ or the total of SAT Critical Reading and Math scores is $\mathbf{8 2 0}$ to $\mathbf{1 . 0 8 0}$, the applicant must meet the following high school class rank requirement to qualify for admission.

| ACT | SAT Total <br> Critical Reading, Math | High School Class <br> Percentile Rank |
| :--- | :---: | :---: |
| 23 | $1050-1080$ | 48 |
| 22 | $1020-1040$ | 54 |
| 21 | $980-1010$ | 62 |
| 20 | $940-970$ | 69 |
| 19 | $900-930$ | 78 |
| 18 | $860-890$ | 86 |
| 17 | $820-850$ | 94 |

## Automatic Admission

## Applicants that

A. Rank in the top $10 \%$ of the graduating class of a Missouri high school; and
B. Complete the college preparatory curriculum, which includes at least 17 units of credit (four units each of English and math, three units of social studies, two units of a single foreign language, and one unit of fine art); and
C. Submit an ACT/SAT score.

Will be eligible for automatic admission to any campus of the University of Missouri.

## Applicants that

A. Graduate from a Missouri high school that does not rank its graduates; but
B. Have taken a college preparatory curriculum which includes at least 17 units of credit (four units each of English and math, three units of social studies, three units of science, two units of a single foreign language, and one unit of fine art); and
C. Achieve a 3.5 GPA on a 4.0 scale in these core courses; and
D. Submit an ACT/SAT score.

Will be eligible for automatic admission to any campus of the University of Missouri.

## Admission Appeals

Applicants who do not meet the minimum admissions criteria may still be admitted, depending on eviderce of likely success and campus enrollment objectives. Additional factors considered for admission may incluce:

Additional factors considered for admission may include:

- Completion of a rigorous llege preparatory curriculum.
- Evidence of hardship or unusual circumstances that hindered academic performance
- Significant work experience and/or family responsibilities.
- Improvement over time in high school academic record
- Students who fall short of the admission criteria have the option to submit a letter of appeal to address one or more of the factors above. The appeal letter should be addressed to the Admissions Appeals Committee, and additional letters of support are encouraged from teachers, counselors, or principals.

For additional information regarding admission requirements, contact the Office of Admissions at 314-5165451 or by e-mail at admissions@umsledu.

## Acceptance.

Upon graduation, applicants must submit a final high school transcript indicating their class rank and graduation date. First time freshmen may be required to take a placement examination in mathematics.

## Advanced Standing for Entering Freshmen.

UMSL grants credit hours to entering freshmen who, through their performance on College Board Advanced Placement Tests and faculty administered tests, demonstrate proficiency in certain college level courses such as biology, chemistry, English, foreign languages, history, mathematics, political science, and physics. For further information and applications, contact College Board Placement. AP Services by phone (888) 225-5427 or email apexams@info, collegeboard,org. The score reporting institution code number for the University of Missouri St. Louis is 6889 . College Board will send the scores directly to the Director of Admissions.

## Dual Credit

Accredited programs such as the Advanced Credit Program at the University of Missouri-St. Louis enable qualified high school juniors and seniors the opportunity to earn college credits while completing high school. Furtherinformation about the Advanced Credit Program may be obtained online or by calling 314-516-7005.

## Dual High School/University Enrollment

Superior high school students may be admitted in a special student category to take one or more university courses on campus during their junior or senior years of high school or during the summers. Students must submit a dual enrollment application and a recommendation from the counselor or principal. Students are admitted on the evidence of academic excellence. Admission is limited and governed by available space, and students must meet the prerequisites for the course or courses selected. After reviewing the DualEnrollment website, students or counselors may contact the College of Arts and Sciences at 314-516-5501 for more information.

## College Level Examination Program

Applicants may earn advanced credit through the College Level Examination Program (CLEP). CLEP offers subject examinations for credit in specific areas. These examinations can be taken any time, provided the student has not taken a college credit course in the test area. Consultation with a UMSL advisor is highly recommended before taking an exam. CLEP tests are given in the Campus Testing Center by appointment only. Contact the Campus Testing Center at 314-516-6396, in person in 412 SSB, or through their website.

## Credit for Military Service

Credit may be allowed for service training programs conducted by the various Armed Forces branches. The American Council of Education's recommendations in A Guide to the Evaluation of Educational Experiences in the Armed Services generally serve as a basis for granting such credit. To count toward a degree, the credit granted must be appropriate to the student's curriculum.

## Probationary Admission

It may be possible for applicants who do not meet the regular admission standards to be admitted on a trial basis. Applicants who do not meet minimum admission requirements can submit a letter of appeal to request probationary admission. The Admission Appeals Committee reviews each letter of appeal and makes decisions on a case-by-case basis.

## High School Equivalency Applicants

Individuals may seek admission on the basis of passing the General Education Development (GED) test with a minimum score of 2500 (for tests taken after January 1, 2002; minimum score of 250 required for tests taken prior to January 1, 2002).

In addition, the following must be submitted:

- A completed on-line Undergraduate Application
- A $\$ 35$ non-refundable Application Fee (\$40 for international students)
- ACT composite score of at least 24 or SAT Composite of at least 1090
- A high school transcript if ACT/SAT scores are included on the transcript.


## Home-Schooled Students

UMSL welcomes home-schooled students. To be admitted for undergraduate admission, home-schoolec applicants must present the following:

- A completed Undergraduate Application (available online).
- A $\$ 35$ non-refundable Application Fee ( $\$ 40$ for international students)
- ACT Composite score of at least 24 or SAT Composite of at least 1090
- A copy of course of study or transcript reflecting all coursework and grades earned (if available), as well as a statement and date of graduation or completion
- If the home-schooled applicant has not completed all units required for graduation (completion), a testscore report of the General Education Development (GED) test with a minimum composite score of 2500 (for tests taken after January 1, 2002; minimum score of 250 for tests taken prior to January 1, 2002) must be presented.


## Admission Information for Prospective Students With Prior College Credit

UMSL values transfer students, defined as a student transferring from another college or university with at least 24 earned semester hours of college-level work.

A transferring student who has completed fewer than 24 hours must apply under the procedures for admission to the freshman class with the additional requirement that they submit official transcripts frcm all college-level courses attempted at previous institutions that document at least a 2.0 overall grade point average ( 4.0 system).

Students transferring from other colleges and universities with at least 24 hours must submit the following information:

- A completed online Undergraduate Application
- A $\$ 35$ non-refundable Application Fee ( $\$ 40$ for international students)
- Official transcripts from all colleges/universities attended. Hand-carried credentials are not accepted.

All credentials submitted for admission become the property of the university.

## Suspended and Dismissed Transfer Students

It is the practice of the Office of Admissions at the University of Missouri-St. Louis to uphold any suspension or dismissal decision offered to a student from another institution. Students suspended will be required to sit out for one year from the date of suspension before enrolling in UMSL. In addition, students must still meet the minimum admission requirements of a 2.0 gpa . A student may have to attend another institution in order to increase his/her GPA. Students who have been dismissed from another institution may not enroll at the University.

Students who have been dismissed from a specific college or school within another institution will need to show proof that they are still eligible to enroll and/or are back in good standing at the previous institution in order to enroll with UMSL.

Additionally, students who are suspended/dismissed from another UM institution shall not be admissible until after one year from the date of the suspension/dismissal. Even though a student is removed from suspension, the student must still meet the minimum admission requirements of a 2.0 gpa .

## Missouri State Transfer Agreement.

Although transfer students should be aware that requirements for degrees vary from institution to institation so some transferred credits may not apply to UMSL programs, UMSL has attempted to minimize the los:s of credits by adhering to the Missouri Coordinating Board of Higher Education (CBHE) Articulation Agreement. The agreement outlines statewide undergraduate general education requirements that satisfy the general requirements for students transferring into UMSL and students transferring out of UMSL to other public universities in the state.

UMSL requires mathematics and writing proficiency beyond the general requirements in the CBHE State nent. Please refer to the General Education requirements for details.

## Transfer Credit

The articulation agreement among public institutions within the state of Missouri governs transfer of credit to UMSL from colleges and universities within the state of Missouri. These guidelines also apply to students transferring to UMSL from schools located outside Missouri. Advanced standing in the form of credit hou's may be allowed for work satisfactorily completed in another public or private college or university of recognized standing located in the state of Missouri, as long as the work satisfies the requirements of the student's major.

The transcript at each institution includes all courses attempted. Grades of $D$ or better earned in college-level work at an accredited or approved institution of higher education should receive full credit when transferred to UMSL. The university, however, will treat all grades on courses attempted on the same basis as that of a UMSL student. For example, if a program requires a UMSL student to repeat a specified course having earned
a $D$ grade, a transfer student will also be required to repeat the same course if it carries a $D$ grade.
To maximize transfer credits from community colleges, UMSL has transfer ouides and articulation agreements with area colleges. Should community college students have any question about the transferability of courses not in the articulation agreement, they should contact the appropriate Iransfer Coordinator, preferably prior to taking a course.

## Advanced Standing

Advanced standing includes credit by examination, examination that may or may not appear on a transfer student's transcripts, including College Board Advanced Placement (AP), the College-Level Examination Program (CLEP), and Defense Activity for Non-Traditional Education Support (DANTES). It also includes credit by portfolio review (Bachelor of Fine Arts only). These lower-division credits may not apply at the senior level. For examination credit, students should submit appropriate verification documents to the Office of Admissions before their first semester at UMSL. Students interested in the portfolio review should contact the Art and Art History Department. Early attention to these matters is essential to avoid unnecessary course work or repeats that can lead to loss of credit. If examinations are completed at a later date, verification documents should be submitted as soon as they are available.

Shortly after all official transcripts and other verifications are on file, students' previous academic records are evaluated to determine which courses are applicable, and students receive a written report of the results. Degree checks determining whether courses meet a specific degree requirement and whether courses are accepted as a part of the student's academic major are made in the office of the appropriate dean or advisor. Should there be any question concerning applicability of any courses, students should discuss this with that advisor.

## Associate Degree Transfers from Community Colleges

A student admitted to the university and holding an associate degree applicable toward the baccalaureate degree will be accepted in junior standing. Students fulfilling the general education requirements outlined by the Missouri Coordinating Board of Higher Education and certified by the sending institution will have met the lower division general education requirements at UMSL. Students with AA degrees from Missouri institutions that include a CBHE approved general education core may transfer more than 64 credit hours for lower division courses. Any additional lower division course credits above 64 credit hours must be applicable to the baccalaureate degree or must be a prerequisite for an upper division course in the major. However, this does not exempt the student from meeting specialized lower-division degree requirements of specific departments. Courses completed in the associate degree program are evaluated for application to specific degree requirements by the same criteria used for transfer students from other colleges and universities.

## Transfers Without an Associate Degree

Transfer applicants who do not have an associate degree will have their transcripts evaluated on a course-bycourse basis and will be allowed to transfer a maximum of 60 credit hours from two year institutions. Students who have fulfilled the general education requirements outlined by CBHE and certified by the sending institution will meet UMSL's general education requirements.

## Transfers Within the University of Missouri System.

Students must be in good standing at another campus of the University of Missouri to be eligible for admission. Students not in good standing will not be admissible until after one year from the date of the suspension/dismissal. Students must meet the minimum admission requirements of a 2.0 gpa in order to be admitted.

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## Returning UMSL Students

Students wishing to return to the University will be required to complete a returning student application and provide official transcripts from other colleges and universities attended since last enrolled as a UMSL student. Students returning must have a minimum 2.0 cumulative gpa.
The returning student application is available on line or by calling the Office of Admissions at 314-516-5451.

## Admission for Students Not Seeking a UMSL Degree

## Visiting Students

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A non-degree-seeking student is someone interested in taking classes but not wanting a degree from UMSL. Often these are students who have degrees but want to take additional undergraduate classes for personal or professional development. To become a non-degree-seeking student, applicants complete the application for admission and mark "non-degree-seeking." No application fee required. No transcripts are required; however, the admission applies only for that particular semester. To attend for another semester, the student must reapply.

Students wishing to become degree-seeking must meet the minimum transfer student requirements of 24 transferable, college-credit hours at a 2.0 gpa . Students may not switch from non-degree to degree-seeking after the first four weeks of the semester.

The non-degree application is available on-line, in person at 351 Millennium Student Center, or by calling 314-516-5451. Financial aid is not available for non-degree seeking students.

## UMSL Express

UMSL Express provides Missouri's senior citizens ( 65 and older) easy access to undergraduate courses without limit on an audit (not for credit) space-available basis. Graduate courses are not available through this program. Students are subject to: non-refundable $\$ 25$ registration fee, a parking fee, and course-related fees. Former UMSL Express students who reapply for the program must again pay the registration fee. UMSL Express applicants may obtain a registration form on-line, in person at 351 Millennium Student Center, or by calling 314-516-5451. Students should complete and return the form with proof of age to the Office of Admissions on the day before classes are scheduled to begin. demic Policies

## UMSL Home

The Faculty Senate determines academic policies for undergraduate studies at the University of Missouri-St. Louis. These policies govern all students at UMSL, but most programs have additional policies for their majors.

## Courses and Grades

## Course Numbering

Each course bears a distinguishing number that identifies it within the department or academic unit and indicates, broadly, the expected level of students taking the course.

To understand the course level, refer to the following guidelines:

## Course Numbers Explanation

1-999
Courses that do not count toward the minimum requirements for any degree,

Lower Division:
1000-1999 Courses open to undergraduate students, primarily focused toward freshmen; courses count toward the minimum for given degrees.

2000-2999
Courses open to undergraduate students, primarily focused toward sophomores; courses count toward the minimum for given degrees

Upper Division:
3000-3999
Courses open to undergraduate students, primarily focused toward junior; courses count toward the minimum for given degrees.
4000-4999 Courses open to undergraduate and graduate students, primarily focused toward seniors; courses count toward the minimum for given undergraduate degrees; depending on the specific program, courses may count for a given graduate degree.

Graduate:
5000-5999
Graduate courses; also open to certification candidates and undergraduate seniors with permission from the Dean of the Graduate School. Courses count toward the minimum for given graduate degrees.

Graduate courses open to master's degree and doctoral students. Courses count toward the minimum for given graduate degrees.

Graduate courses open to doctoral students and master's degree students with special permission. Courses count toward the minimum for specific graduate degrees.

## Optometry:

8000-8999
Courses open to optometry degree seeking students.

## Credit Hours

The university credit unit is the semester hour, which represents a subject pursued one period weekly for one semester of approximately 16 weeks or for a total of approximately 16 periods for one term. Generally, a course valued at three semester hours meets for three periods weekly for one semester, a two credit course two periods a week for a semester, and so on. Normally, the lecture or recitation period is 50 minutes long and the laboratory period one hour and 50 minutes.

The number of credit hours is listed as units in the online Schedule of Courses. If the credit is variable (to be determined in consultation with the instructor) it is shown by minimum and maximum units, such as

Research 1-3 units. In the Bulletin, credit hours are included in parentheses after each course title e.g., Research (2-8).

## Grading System

The grading system available to all faculty at UMSL consists of:

$$
\begin{aligned}
& \mathrm{A}=4.0 \\
& \mathrm{~A}-=3.7 \\
& \mathrm{~B}+=3.3 \\
& \mathrm{~B}=3.0 \\
& \mathrm{~B}-=2.7 \\
& \mathrm{C}+=2.3 \\
& \mathrm{C}=2.0 \\
& \mathrm{C}-=1.7 \\
& \mathrm{D}+=1.3 \\
& \mathrm{D}=1.0 \\
& \mathrm{D}=0.7 \\
& \mathrm{~F}=0 \\
& \mathrm{EX}=\mathrm{Excused} \\
& \mathrm{DL}=\text { Delayed } \\
& \mathrm{FN}=\text { Failure/Non Participation }
\end{aligned}
$$

Faculty have full discretion in using full-letter grades, plus/minus grades, or any combination of full-let:er and plus/minus grades. The student's grade point average is computed by dividing the total quality points (number of credit hours for a course, multiplied by the grade value received) by the number of hours taken (excluding grade modified hours). Students at UMSL may have three separate Grade Point Averages. Tte first is the Campus GPA, which is computed by dividing the quality points earned from the grades of each course taken through UMSL by the total course hours attempted at UMSL. Students who have attended any of the other three universities within the University of Missouri System will also have a System GPA, which is computed by dividing the quality points earned from every course taken from a campus within the UM System. In addition, transfer students from outside the UM System will also have a transfer GPA, which is computed from all courses the student has taken outside the UMSL campus or the UM System. It is calculated by dividing the quality points of all courses by the hours attempted.

Unless a specific request is made through the Registrar's Office, the University of Missouri System does not distribute grade reports to students via postal mail. Final course grades can be obtained electronically by any of the following methods:

To access grades through the My Gateway system, students must know Single Sign On (SSO) ID and password, available through MyGateway.

Students may also view their grades on MyView, by following this path: Self Service > Student Center > Grade Tab under Academic History; select semester.

Students may request a printed copy of the grade report at no charge. Once requested, the grade report will be mailed to the official address of record. Requests may be made by phone, mail, e-mail, fax, or in person; contact information is available at the Registration website.

## Failure for Non-Participation.

When students do not complete any graded assignments, but do not officially withdraw from the course or the university, instructors assign an FN. The F for Non-participation cannot be changed to a grade.

## Education majors.

Professional education courses must be completed with a grade point average of 2.50 . Since no grade lower than a C 2.0 can be applied to the degree, a C- grade is not acceptable.

## Delayed Grade.

A student whose work is incomplete at the end of any semester and who has, in the instructor's judgment, sufficient reasons for failing to complete the work, may, with the approval of the instructor and department chairperson, be assigned a delayed grade. Such work must be made up no later than one semester afte• the incomplete grade is given, or the grade automatically becomes $F$. The dean may, in unusual circumstances, extend this time limitation (summer session is not counted as a semester). Instructors inform the regist ar of a change in a delayed grade only via a special form.

## Failure/Non participation

When students do not complete any graded assignments, but do not officially withdraw from the course or the university, instructors may assign an FN. The F for Non-Participation cannot be changed to a grade and will be treated in GPA calculations as an F.

## Examinations.

Examinations may be given only at regular class meeting times or as designated by the Senate Committee on

Curriculum and Instruction.

## Final Examinations.

The period designated for final examinations is an important component of the academic term. It provides faculty with a final opportunity to evaluate student learning and attainment of course objectives. Faculty members are encouraged to meet with students during the final examination period.

1. A faculty member who gives an in-class final examination may give this examination only on the day and at the time designated in the official final examination schedule. A majority vote of the students to the contrary does not change this policy.
2. A student may submit a written request for a change in the scheduled time of the final examination for a limited number of documented hardship reasons. These reasons include, but are not limited to, being scheduled to take more than two examinations on the same day, illness, military obligations, and religious practices. Except for emergencies, this request should be presented directly to the instructor at least two weeks before classes conclude. If the request is denied, the student may request additional consideration from the chairperson/area coordinator/program director and, if denied, to the dean of the college sponsoring the course.

## Satisfactory/Unsatisfactory Option.

Undergraduate students may take up to 18 credit hours on a satisfactory/ unsatisfactory (S/U) grading basis. This includes courses taken as electives or those that satisfy general education requirements. Most courses required for a specific degree may not be taken on a satisfactory/ unsatisfactory basis. Academic departments may designate other courses within their jurisdiction that may not be taken under the option.

A satisfactory grade " S " is recorded when an instructor assigns the grade of $\mathrm{A}, \mathrm{A}-, \mathrm{B}+, \mathrm{B}-, \mathrm{C}+$, or $\mathrm{C}-$, and has no numerical value in computing students' cumulative grade point average; however, it does satisfy credit-hour-for graduation requirements. An unsatisfactory grade " $U$ " is recorded when an instructor assigns the grades of $D+, D, D-$, or $F$. A course assigned a " $U$ " grade will not satisfy credit hours for graduation. Grades will be recorded on transcripts as $S$ or $U$.

Students register for courses in the normal manner and may exercise the satisfactory/unsatisfactory option before the end of the first four weeks of a regular semester (or the first two weeks of a summer session). Requests for this option are made through the appropriate dean's office. Instructors are not informed of students taking courses on a satisfactory/unsatisfactory basis until submitting course grades.

## Audit

Audit has no numerical value in computing students' cumulative grade point average, nor does it satisfy any credit-hour graduation requirements.

## Repeating Courses.

Students may not repeat for grade point average or credit hour purposes courses in which grades of A, A B+, B, B , C + , C, or C have been earned. All grades earned will affect the calculation of students' cumulative grade point average; the course hours, however, will be counted only once in calculating hours toward a degree. (See Grade Modification.)

## Grade Modification.

When the grade received in an initial attempt in a course at UMSL is a $D+, D, D$, or $F$, the grade may be replaced in the calculation of the GPA by the grade received in a second or subsequent attempt of the same course at UMSL. All grades received in second and subsequent attempts will be included in GPA calculations. A maximum of five classes may be dropped from the calculation of the student's GPA. All attempts of a given course will appear on the official transcript with the grade(s) earned. The transcript will have an explanation that states that the GPA is calculated using all grades earned in a course except the initial attempt when a course has been repeated and grade modified.

Note: Grade modification is not automatic. After completing the second or subsequent attempt of the course to be modified, students must process the necessary paperwork with an academic adviser in the academic unit in which the student is currently enrolled.

## Transcripts

The registrar will furnish transcripts to a student upon receipt of a completed and signed transcript request form online or in person in the Records Office, 269 MSC. Transcripts are furnished to third parties only if students have filed written consent with the Registrar's Office. Iranscripts may also be requested online. There is a charge for each transcript.

Transcripts are not issued to or for students who have financial obligations to any university within the UM System until those obligations are paid in full.

## Enrollment and Graduation Policies

Course Schedules

The Schedule of Courses contains the specific courses offered each semester with their meeting times and locations. This schedule is available online

Course schedules are generally published in mid-March for the fall semester, mid-October for the spring semester, and mid-January for the summer semester.

The university reserves the right to cancel without notice any course listed in the Bulletin or the Schedule of Courses for any semester or to withdraw any course that that does not have adequate enroliment.

## Prerequisites for a Course

Students are expected to review all courses when registering for them to assure that they meet all prerequisites. When the prerequisites include courses, a minimum grade of C - is required to meet the prerequisite. Only the department offering the course with the prerequisite can make an exception to this requirement. A course with an "academic standing" prerequisite--for example, "senior standing"-- requires that students have the class standing stated, in the example, only seniors can take that class.

## Course Load

A normal full time semester course load is 15 semester credit hours. Minimum full time enrollment is 12 hours each semester, fall, spring, and summer. Students who have demonstrated the ability to carry more than 18 hours may do so with the approval of their dean.

## Attendance

Students are expected to attend class regularly, and, in accordance with the UMSL Bylaws, faculty may establish penalties for excessive absences. Students absent for more than three successive classes may be reported to the dean. Students should tell their dean's office of an extended absence. An absence know in advance shouid be reported to the instructors of courses that will be missed. Makeup of examinations or work missed is allowed at the instructor's discretion. Students excused from class for valid reasons by their deans shall be permitted, if possible, to make up work missed; the dean must have notified the instructor in vriting.

## Dropping/Adding Courses

To add courses to their original enrollment, students must get approval from their advisers. Students may not enter courses after the first week of a regular semester, the first 4 days of an 8 week session, or the first 3 days of a four week session.

Courses may be dropped, without approval and without receiving a grade, through the fourth week of a regular semester, the second week of an eight week session and the first week of a four week session. Spring, summer, and fall session calendars include specific deadlines. Students who officially drop one or some of their classes may have fees reassessed and/or refunded based on the current fee reassessment: schedule.

Students may withdraw from a course with an "Excused" grade, providing they are passing the course and receive the approval of their instructor, and dean's office representative. Otherwise, a failing grade is given. Students not attending classes who fail to drop officially receive an F or FN grades, depending the level of participation in class. After the allowable period, "Excused" grades are given only in exceptional instances where the instructor's approval and dean's approval are given. These grades are recorded on the students' official records. If an F or FN grade is recorded, it is computed in the student's grade point average. No partial credit is granted to students who withdraw from a course during any semester or otherwise fail to complete the work required for full course credit. Please refer to the Semester Calendar to determine allowable timelines.

## Section Changing

Section changing is normally completed during the first week of a regular semester the first 4 days of an eight week session and the first three days of a four week session. Approvals may not be necessary during tris time. However, after the first week of a regular semesterthe first four days of an eight week session and the first three days of a four week session, a section change form must be obtained from the department $0^{-}$ dean's office. The signature of both instructors is required. The form is to be submitted to the Registration Office, 351 Millennium Student Center.

## Change of Major

To change academic majors, students should consult their adviser and the dean's office. Students admit:ed to one college or school may pursue work in others under the conditions set forth by the faculty. The chairyerson of a student's major department shall determine which courses in other colleges or schools, or even other institutions, shall apply as credit toward the degree.

Students who wish to change a major must submit a change of major form. These forms may be obtained in their College Advising office, the Registrar's Office, or the Center for Student Success, 225 Millennium Sudent Center.

## Withdrawing from the University after Classes Begin

After classes begin, students may withdraw from the university by completing the withdrawal form, available in the dean's office. During the first four weeks of a regular semester students may withdraw from the
university without receiving grades. After this period, grades of $F$ or "Excused" are issued, based on whether the student is passing or failing. After the regular semester's twelfth week, "Excused" grades are given only in exceptional instances with the instructor's and the dean's approvals. These grades are recorded on the student's official record at the end of the term. An F grade is counted in computing the grade point average. No partial credit is granted to students who withdraw from school during any semester or otherwise fail to complete the work required for full course credit. Students who stop attending classes without officially withdrawing from the university are issued an F or an FN grade. Any F grades are counted in computing grade point averages. Fall, spring, and summer session calendars list specific withdrawal dates.

## Academic Probation, Suspension, and Dismissal

Students whose campus cumulative grade point average falls below 2.0 , will be placed on University Academic Probation. If students' campus cumulative GPA remains under 2.0 after serving two semesters on probation (not necessarily consecutive) they may be suspended from the university. Students should consult with their respective dean's office for additional information.

Students suspended or dismissed from one school or college within the university shall not be admitted to any other school or college until they are eligible for readmission to the university. In order for suspended students to be considered for readmission to the university they must successfully complete at least one semester at an accredited post-secondary institution.

## Academic Residence

Students must be in residence for at least 24 of the last 30 hours of graded credit (exclusive of courses graded on a satisfactory/unsatisfactory basis), except under unusual circumstances, to be decided by the dean.

## Graduation

Students are expected to file a degree application form with their respective dean's office at least one year before the expected graduation date. The dean's office makes a final check to determine that all graduation requirements have been met. Students should check with the dean's office or an adviser to be sure their program fulfills the requirements of the department and college or school, as well as the university general requirements. To assure graduating at the end of a specific semester, all work for that semester and any delayed grades from previous semesters must be completed with the grades sent to the Office of the Registrar no later than the official date for submission of final semester grades.

## Academic Integrity

## Academic Dishonesty

Academic dishonesty is a serious offense that may lead to probation, suspension, or expulsion. One form of academic dishonesty is plagiarism-the use of an author's ideas, statements, or approaches without crediting the source. Academic dishonesty also includes such acts as cheating by copying information from another student's examination, take-home test, or laboratory manual. The code of student conduct is in this Bulletin and is also available in the UMSL Student Planner.

## Honor Statement

The University of Missouri-St. Louis encourages students to pursue excellence within a respectful and collegial environment and to assume responsibility for the consequences of personal actions. For that reason the university requires students to reject any type of dishonest behavior.

Honesty precludes seeking, providing, or receiving any form of unauthorized assistance on tests or any type of assignment. It requires giving credit through appropriate citation to the author of materials used in written or oral assignments.

The full Student Standard of Conduct is available on the Web and in the student planner. By registering for a class at UMSL, students agree to follow this standard of integrity.

## Confidentiality Policy

These statements are set forth as guidelines and procedures to implement the University of Missouri policy on student records developed from the federal Family Educational Rights and Privacy Act of 1974.

The University of Missouri St. Louis as charged in the act will annually inform its eligible students by including in the Student Planner, the Schedule of Courses, the UMSL Bulletin the following information:

[^0]- Records of instructional, supervisor, and administrative personnel and educational personnel anc llary thereto which are in the sole possession of the maker thereof and which are not accessible or revealed to any other person except a substitute.
- Records of the University of Missouri Police Department created for a law enforcement purpose and maintained by the police department.
- In the case of persons who are employed by the university but who are not in attendance at the university, records made and maintained in the normal course of business that related exclusively to such persons and that person's capacity as an employee where the records are not available for any other purpose.
- All records on any university student that are created and maintained by a physician, psychiatris:, psychologist, or other recognized professional or paraprofessional acting in his professional or paraprofessional capacity, or assisting in that capacity, and created, maintained, or used only in connection with the provision of treatment to the student, and are not available to anyone other than persons providing such treatment, provided, however, that such records can be personally revieved by a physician or other appropriate professional of the student's choice.

2. The University of Missouri-St. Louis recognizes "Directory Information/Public Information" to mean a student's name, address, telephone listing, e-mail, enrollment status, current level, major field of study, participation in officially recognized activities and sports, dates of attendance, degrees and awards rece ved, and the most recent previous educational agency or institution attended by the student. All students must inform the Office of the Registrar before the end of the two week period following the first day of classes if the information designated as directory information should not be released without the student's prior consent. The student privacy form is available on-line. Students may also change their privacy settings by logging in to MyView. The information listed above will become directory information or public information as of the first day of classes following the end of the two week period in a regular semester and the first clay of classes following the end of the one week period during the summer session.
3. University of Missouri-St. Louis students have access to the educational records identified in Paragraph 1 above. In accordance with Public Law 93380 as amended, the University of Missouri St. Louis will not make available to students the following materials:

- Financial records of the parents of students or any information contained therein.
- Confidential letters and statements of recommendation placed in the education records prior to January 1,1975 , if such letters or statements are not used for the purpose other than those for which they were specifically intended.
- Confidential recommendations respecting admission to the university, application for employment: and receipt of honor, or honorary recognition, where the student has signed a waiver of the student's rights of access as provided in 6.0404, the University Policy on Student Records.

4. The Director of Financial Aid, the appropriate academic dean, Assistant Vice Provost for Student Affai s: Health, Wellness, \& Counseling Services, the Vice Provost for Student Affairs, the Director of Career Placement Services, the Director of Admissions, and the Registrar are the officials responsible for the maintenance of each type of record listed in Paragraph 1.
5. Any student may, upon request, review his or her records and, if inaccurate information is included, may request the expunging of such information from the file. Such inaccurate information will then be expunged upon authorization of the official responsible for the file.
6. Students desiring to challenge the content of their record may request an opportunity for a hearing to challenge the content of the educational record in order to ensure that the record is not inaccurate, misleading, or otherwise in violation of the privacy or other rights of the student, to provide an opportunity for the correction or deletion of any such inaccurate, misleading, or otherwise inappropriate data contained therein, and to insert into such records a written explanation respecting the content of such records.
7. The university official charged with custody of the records will attempt to settle informally any disputes with any student regarding the content of the university's educational records through informal meeting: and discussions with the student.
8. Upon request of the student or the university official charged with custody of the records of the student, a formal hearing shall be conducted as follows:

- The request for a hearing shall be submitted in writing to the chancellor, who will appoint a hearing officer or a hearing committee to conduct the hearing.
- The hearing shall be conducted and decided within a reasonable period of time following the request for a hearing. The parties will be entitled to written notice 10 days prior to the time and place of the hearing.
- The hearing shall be conducted and the decision rendered by an appointed hearing official or officials who shall not have a direct interest in the outcome of the hearing.
- The student shall be afforded a full and fair opportunity to present evidence relevant to the hearing.
- The decision shall be rendered in writing within a reasonable period of time after the conclusion o: the
hearing.
- Either party may appeal the decision of the hearing official or officials to the campus chancellor. Appeal of the chancellor's decision is to the president. Appeal of the president's decision is to the Board of Curators.

9. The University of Missouri-St. Louis will not mail grade reports to parents unless the student has completed the necessary authorization in the registrar's office.
10. The University of Missouri St. Louis may permit access to or release of the educational records without the written consent of the student to the parents of a dependent student as defined in Section 152 of the Internal Revenue Code of 1954.
11. If any material or document in the educational record of a student includes information on more than one student, the student may inspect and review only such part of such material or document as relates to him or her or to be informed of the specific information contained in such part of such material.

## Academic Recognition

## Honor Societies

The following is a list of honor societies at the University of Missouri-St. Louis:
Alpha Epsilon Rho (Communication)
Alpha Mu Alpha (College of Business Administration-Marketing)
Alpha Mu Gamma (Foreign Languages and Literatures)
Alpha Phi Sigma (Criminology and Criminal Justice)
Alpha Sigma Lambda
Beta Alpha Psi (College of Business Administration, Accounting Majors)
Beta Beta Beta (Biology)
Beta Gamma Sigma (College of Business Administration)
Beta Sigma Kappa (College of Optometry)
Chi Sigma Iota (Counseling and Family Therapy)
Financial Management Association (College of Business Administration)
Golden Key National Honour Society (Campus-wide)
Kappa Delta Pi (College of Education)
Lambda Alpha (Anthropology)
Omicron Delta Epsilon (Economics)
Phi Alpha (Social Work)
Phi Alpha Theta (History)
Phi Kappa Phi (Interdisciplinary)
Pi Alpha Alpha (Public Policy Administration)
Pi Sigma Alpha (Political Science)
Psi Chi (Psychology)
Sigma Delta Pi (Spanish)
Sigma Iota Rho (International Studies)
Sigma Tau Delta (English)
Sigma Theta Tau International Honor Society of Nursing, Nu Chi Chapter (Nursing)

## Dean's List

At the end of each semester the College of Arts and Sciences, College of Business Administration, College of Education, College of Fine Arts and Communication, and College of Nursing send letters of commendation to undergraduates completing at least nine hours of graded courses with grade point averages of 3.2 or above for the semester. In addition, each college and school, on an annual basis, sends letters of commendation to part time undergraduate students who have earned a 3.2 grade point average or above in at least nine but not more than 17 graded hours during the fall and spring semesters combined.

## Who's Who Among Students in American Universities and Colleges

Eligible students may be nominated to Who's Who Among Students in American Universities and Colleges by students (themselves or others), faculty members, or administrators. Nominees are selected on the basis of scholastic ability, participation and leadership in academic and extracurricular activities, service to the university, and a promise for future usefulness. Nomination forms and further information may be obtained in room 366 Millennium Student Center or by visiting the Who's Who information page.

## Latin Honors

To graduate with Latin honors, [students must have attended UMSL for at least 56 graded hours] and must meet the following qualifications: cum laude 3.2 to 3.49 grade point average; magna cum laude 3.5 to 3.79 grade point average; summa cum laude 3.8 to 4.0 grade point average. If a student has the necessary GPA at UMSL to qualify for Latin honors but has fewer than 56 graded hours at UMSL, all credit hours and the associated grades earned within the UM System will be included when the total credit hours earned in the UM System are at least 80 graded hours. In determining one's eligibility for Latin honors, all graded hours will be
considered, including the original grade in each grade modified course. No Latin honor higher than that which is consistent with the UMSL grade point average will be awarded. All honors must be recommended by the student's major department. (Effective April 2000.)

## Office of National Scholarship Information

The mission of the Office of National Scholarship Information (ONSI) at the University of Missouri-St Louis is to provide campus wide access to merit-based scholarship information and opportunities. The most wellknown of these merit-based scholarships include the Rhodes, British Marshall, Goldwater, Udall, Truman, and Fulbright, although numerous other prestigious, and often unique, opportunities exist for outstanding students. For further information, contact the Honors College at (314) 516-5243.

## Assessment

The University of Missouri has been directed by the Board of Curators to assess the outcomes of your university education. To this end, two types of assessment are required: A test of general educational development given to a sample of incoming freshmen and graduating seniors who represent the university; and a test or project, specified by the major department, given to graduating seniors.

For its continuous quality improvements, the University also conducts periodic surveys of student engagement. As alumni, graduates are encouraged to participate in assessment by completing questior naires sent to them by the University or major department/college.

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## UMSL Home

## Registering for Classes: New Students

Newly admitted/re-admitted students are eligible to register after the close of the pre-registration period. Enrollment dates, Semester Calendars, and courses offerings can be found online at the Registration website.

## Registering for Classes: Former Students

Former UMSL students who have not been enrolled for a year must submit a reenrollment application available in the Admission's Office.

## Registering for Classes: Currently Enrolled Students

Currently enrolled students are given the opportunity to preregister, by appointment, before new or returning students. Pre-registration appointment times are sent to students' university email and can also be found by logging into MyView.

## Auditor

Students may enroll as auditors in any course with the prior consent of the instructor and dean of the college in which the auditors desire to be registered. They may be dropped from the course when, in the judgment of the instructor and dean, their record justifies such action. Auditors are charged full fees and receive no academic credit.

## Registration Cancellation

Students who have enrolled and paid their fees but do not wish to attend the university may cancel their registration any time before the first day of the semester. Cancellations may be processed at the Office of the Registrar or by logging into MyView and dropping all classes. The refund schedule for cancellation of registration after class work begins can be found on the Cashier's Office website.

## Academic Advising

Undergraduate students are admitted to the college or school that offers the degree program declared on the student's application. The university's Academic Advising Website has advising information for all undergraduate students.

Undeclared students, visiting students, and non-degree-seeking students are admitted to the College of Arts and Sciences but advised in the Center for Student Success 225 MSC.

Undeclared students are encouraged to declare a major as soon as possible since it is important to determine what specific requirements must be satisfied to complete the baccalaureate program. The Center for Student Success has workshops that assist students with their decisions.

## College of Arts and Sciences

All incoming undergraduate students are required to be advised. Advising services are available in the College Advising Office located in 303 Lucas or in their major department. Students who have deciared majors are encouraged to contact their major departments as soon as possible. Please visit the college website for a complete list of Departmental Faculty Advisors and other student resources.

Since there are specific requirements that each major must satisfy to complete a baccalaureate program, students are urged to declare their majors as soon as possible. This may be done at the time of application or later in the Office of Undergraduate Student Affairs of the College of Arts and Sciences. Once a student declares a major, the department offering the degree will assign a faculty adviser and contact the student. The adviser, usually a faculty member in the student's area of interest, will assist in selecting suitable courses and advise the student in matters relating to degree requirements.

Students with specific concerns related to the specialized degree requirements of the college, including transfer credit, should consult with the academic departments responsible for their majors. Students may also contact the Office of Undergraduate Student Affairs of the College of Arts and Sciences by phone at (314) 516-5501 for clarification on any academic issues or by e-mail at artscience@umsledu

## College of Business Administration

The College of Business Administration's office of underaraduate academic advising provides assistance to students in planning their academic careers, and in dealing with appropriate course selection, College of

Business Administration requirements, general education requirements, evaluation of transfer credit, ccurse prerequisites, school policies and regulations, and graduation requirements. Other matters related to a student's academic career should also be directed to this office.

Transfer students admitted to the College of Business Administration should contact the advising office and plan to meet with an advisor early in the semester for an evaluation of transfer credit and the planning of their degree programs.

All students are urged to make advising appointments early during each semester, prior to registration dates, to obtain approval of schedules for upcoming semesters. Advising is a continuous and ongoing process. For additional information, call 314-516 5888 or email bus underarad@umsLedu.

## College of Education

Students wishing to prepare for teaching careers should consider the following:
Students who intend to teach in elementary, early childhood, middle school, special education, secondary education, or physical education settings must apply for admission to the College of Education.

Students who intend to teach in secondary school classrooms may choose to pursue the bachelor's degree in the College of Arts and Sciences plus certification, or the B.S. in education degree, which includes Misscuri certification.

With either option, students must meet university and departmental requirements, as well as those for teacher certification in Missouri. Regardless of which option students choose, they must complete the formal application to the teacher education program, available_online. Careful planning of individual schedules is necessary to ensure selection of appropriate courses and to avoid extending programs. Students should therefore seek advisory help from the Teacher Certification and Advising Office at the earliest opportunity. Regular consultation with advisers is essential. The office provides assistance to all students interested $n$ professional education programs and certification requirements. Questions about admission to the teacrer education program, sequencing of courses, prerequisites, graduation requirements, and related matters should be directed to $314-516-5937$ or in person in Room 155 Marillac Hall, South Campus.

## College of Fine Arts and Communication

The College of Fine Arts and Communication includes the programs in Art and Art History, Communication, Music, and Theatre, Dance and Media Studies.

For advising, students may contact the Office of Undergraduate Student Affairs located in 303 Lucas, cal 314-516-5501, or visit the college's Advising Website for departmental contacts.

Students who maintain a relationship with their department have greater opportunities to meet other students with similar interests as well as to optimize their student experience.

## College of Nursing

The College of Nursing offers the bachelor of science in nursing degree (B.S.N.) for non-RNs through a touryear or accelerated program of study. RNs who are graduates of diploma or associate degree nursing programs complete a junior senior B.S.N. completion option (RN to B.S.N.). With both options (pre- or postlicensure), students must meet university and College of Nursing requirements.

Faculty maintain the right to make appropriate curriculum changes to comply with standards for accrediation and approval as stipulated by the Commission on Collegiate Nursing Education and the Missouri State Board of Nursing's minimum standards. For that reason students receive exceptional advising support from co lege advisors.

## Pierre Laclede Honors College

Honors Scholars receive both academic advising and personal counseling from the college's administrative and teaching staff throughout their undergraduate careers. During the first two years, particular attention is given to the ways in which students fulfill Honors College and university general education requirements and prepare themselves for their majors by taking the necessary prerequisites. After a major is declared, Ho רors College advisement with regard to work done for honors credit continues and is supplemented by major related advising provided by the appropriate academic unit. The college identifies candidates for major graduate fellowships and assists them in preparing their dossiers. Similar assistance is given to scholars planning to go on to graduate and professional schools or seeking career opportunities immediately upon graduation. Honors advising is housed in 106 Provincial House and is explicit on the college's Academic Advising Website.

UMSL Home

## Fee Assessment

Fees for coursework vary due to the student's residency standing, undergraduate, graduate or post-graduate status, credit hours, and the applicabillty of any course fees charged to specific courses or programs. The total per-credit-hour fee rate includes tuition, mandatory fees, and course fees. Detailed Information on tuition and fee rates and residency status can be found on the Cashier's website.

## Financial Responsibility

Each semester, a_Financial Responsibility agreement will be presented to all students. The agreement explains the billing methods, payment options and all policies related to student accounts. It is the responsibility of the student that fees and other financial obligations are paid as they become due regardless of who is making the payments. Students who need assistance in meeting financial obligations to the university should contact the Financial Aid Office in a timely manner. Students are expected to adhere to important dates and policies that impact fees. Due dates and fee reassessment dates are posted on the Cashier's website and through links on the ebill website. The non-payment of any financial obligation may result in additional collection fees, the inability to register and the withholding of student records.

## Billing

We bill you by posting a monthly student account billing statement on eBill around the 10th of any month in which there's a new charge or credit on your account. The Cashier's Office will send you and your authorized payer (if any) a billing notification email reminder to check your statement and pay any balance due. The mail.umsl.edu email address will be used for students and the authorized payers email address will be used for authorized payers.

Bills are due on the first day of each month. The minimum payment can be found at the top of the monthly billing statement or by checking the percentage due as shown in the billing schedules on the Cashier's website. If a student chooses to make the minimum payment or a partial payment, a finance charge of $1 \%$ of the Adjusted Amount Due will be assessed. The monthly $1 \%$ finance charge can be avoided by paying the balance in full. A $\$ 10$ late payment fee will be charged to student accounts which have been billed and not paid by the due date.
All fees, fines, bookstore charges, etc. must be paid by the last day of the term. After the term ends, unpaid accounts will be turned over to an outside collection agency. Collection agency fees of up to $50 \%$ of the unpaid account balance will be added to the student's account. Student accounts must be paid in full before a student will be permitted to register for upcoming semesters or receive transcripts or a diploma.

## Payment of Fees

The Cashier's office offers several payment options, including a minimum monthly payment. The minimum payment can be found at the top of the monthly billing statement or by checking the percentage due as shown in the Billing Schedule. If a student chooses to make the minimum payment or a partial payment, a finance charge of $1 \%$ of the Adjusted Amount Due will be assessed. The monthly $1 \%$ finance charge can be avoided by paying the balance in full.

The payment due date is the first day of each month. Student accounts will be subject to a $\$ 10$ late fee if payment is not received by the due date shown on the monthly billing statement. All fees, fines, bookstore charges, etc. must be paid by the last day of the term. After the semester ends, unpaid accounts will be turned over to an outside collection agency. Collection agency fees of up to $50 \%$ of the unpaid account balance will be added to the student's account. Student accounts must be paid in full before a student will be permitted to register for upcoming semesters, receive transcripts, or receive a diploma.

## Payment Options

Online - Log on to the MyView student system to make payment using a personal checking or savings account or a MasterCard, Discover or American Express credit card. ( $2.75 \%$ service charge applied to credit card payments)

Mail - Send your check or money order to the Cashier's Office at: University of Missouri - St. Louis 285 Millennium Student Center (MSC 212) One University Blvd. St. Louis, MO 63121-4400. Include studen: name and student number on the check or money order.

In person - Visit the Cashier's Office on the second floor of the Millennium Student Center in room 285 Payment in cash, check, money order or pin based MasterCard or VISA debit are accepted at the cashier stations. Credit card payments cannot be processed at the cashier stations, but are accepted online from httpi/lebillumsledu.

Payment Kiosks - Payment from a personal checking or savings account or by MasterCard, Discover, or American Express credit card can be made at any of the four payment kiosks located in the MSC. (2.75\% service charge applied to credit card payments)

Payment Drop Box - A secure payment drop box is situated just outside the Cashier's Office, room 285 of the Millennium Student Center. Only check or money order payments, please.

Any check presented to the university for payment that is returned unpaid will be assessed a $\$ 20.00$ re :urned check fee in addition to any fees that the bank may charge.

ERDPP - Employer Reimbursement Deferred Payment Program. Many companies offer tuition reimbursement to their employees. While the student is ultimately responsible for the payment of their tuition and fees. the Cashier's Office offers the ERDPP program to allow a student to take advantage of this employer benefi: by deferring payment of all, or a portion, of their tuition and related costs.

Financial Aid - If you have applied for financial aid in advance and have received an award letter, your letter describes how much of your award will be paid towards your student fees. If your financial aid does not cover all the fees, then you must pay the remainder of your student fees yourself by the due date. Financial a id that has not yet been disbursed will appear on your monthly billing statement as "Anticipated Aid". Your statement will reflect Anticipated Aid as being deducted from your Account Balance giving you an Adjusted Amoun: Due. Your Minimum Payment is a percentage of the Adjusted Amount Due plus a $1 \%$ finance charge of the Adjusted Amount Due. Students should pay either the Adjusted Amount Due or the Minimum Payment jy the due date to avoid a $\$ 10$ late payment fee.

Third Party Sponsor - When an organization, makes a commitment to pay your educational expenses, they are considered a Third Party Sponsor. If you are expecting a third party sponsor to pay your tuition and fees, you will need to have your sponsor submit a letter of authorization to the Cashier's Office. Once the sponsor's letter is received, a credit for the amount the sponsor has indicated will be applied to your student account. An invoice for this amount will then be sent to your sponsor. You are responsible for paying any charges not covered by your sponsor on time, to avoid finance and late charges or other penalties.

## Refunds

A credit balance is the result of an overpayment on a student's account from Financial Aid, loans or payments received. Credit balance refunds will be processed when a credit actually exists on the student's accoun:. Anticipated Financial Aid must be received and posted to the student's account in order for a credit to exist and for a refund to be processed.

When financial aid funds are received by the University, the funds are applied to the students account. During the Fall and Spring semesters, financial aid funds are applied to student accounts no sooner than ten dzys prior to the start of classes. During the Summer semester, financial aid funds are applied to student accounts no sooner than the day the student is actually taking the course(s) that have the hours required to receive the aid. If the student has a credit balance after financial aid funds have paid all account charges in full, the student is now eligible for a refund.

Parent-Plus Loan Refund - Credit balances resulting from the disbursement of Parent-Plus Loans will be refunded directly to the parent. The refund check is mailed to the address on file for the parent unless written instruction is submitted by the parent to the Cashier's Office authorizing the student to receive the funds.

Credit Card Refund - If a credit card payment has been made towards your student account in the past 60 days, any refund due to you will be returned to that credit card.
Drop/Withdrawal Refund - Students who are leaving school or dropping classes are responsible for canceling their registration and verifying that their classes have been dropped. Any refunding of fees will be made according to the reassessment schedule available on the Cashier's website. The refund process requires two to four weeks processing time after withdrawal or dropped classes. When a student completely withdravis from a semester and was receiving federal financial aid, the University and/or the student may be required to return some of the financial aid, awarded to the student.

Charges that students accrue prior to a refund being issued will be deducted from the refund amount.
Charges that are accrued after a refund is issued will be billed to the student on the monthly billing statement. As student accounts go into credit balance, the Cashier's office processes refunds to students by checks through the mail and by direct deposit to students personal checking or savings accounts. Students should allow 7-10 business days from the day that the refund is processed to receive a refund check in the mail. For students that have direct deposit, please allow $3-5$ business days from the day that the refund is processed to receive the refund in your bank account.

## Cancellation of Registration Due to Nonpayment of Fees

The university will attempt to notify any student whose registration is about to be administratively cancelled for nonpayment of fees prior to taking this action.
On or before the last day on which a student may enroll in a course, a cancelled student's space in a course will be given to other students on that course's wait lists. The cancelled student will be placed at the end of the course wait list.
Any student who has been administratively cancelled for nonpayment of assessed fees may not enroll in a class unless the required fees have been paid and the student has officially re-registered.
Cancelled students who re-register on or after the first day of the semester will be assessed an additional nonrefundable late registration charge.

## Fee Reassessment

Students who are leaving school or dropping classes are responsible for canceling their registration and verifying that all of their classes have been dropped. Any refunding of fees will be made according to the Eee Reassessment Schedule available on the Cashier's website. Fees reassessed may include Tuition (Educational Fee), Student Activity and Health Fee, Information Technology Fee, Special Course Fee (if applicable), and Parking Fee (if applicable). The Spring and Fall reassessment schedules only apply to regular 16 week session courses. The Summer reassessment schedules only apply to regular 4 week, 8 week and 12 week session courses. Fee reassessment for courses not in regular sessions will be based on the course's total number of calendar days (weekends and holidays included) and the number of calendar days that the student was enrolled in the course. If the meeting dates for your course are different from the regular session meeting dates, please contact the Cashier's Office as your fee reassessment for withdrawal or dropping may differ from the regular reassessment.

## Fees May Change Without Notice

The university reserves the right to modify by increase or decrease the fees charged for attendance and other services at the university, including but not limited to tuition or educational fees, at any time when in the discretion of the governing board the same is in the best interest of the University, provided that no increases can or will be effective unless approved by the governing board not less than thirty (30) days prior to the beginning of the academic term (semester, etc.) to which the fees are applicable, with all modification of fees to be effective irrespective as to whether fees have or have not been paid by or on behalf of a student prior to the effective date of the modification.

## BULLETIN

## UMSL Home

## General Education Requirements:

Students must successfully complete the general requirements of the university, the school or college in which they are enrolled, and the specific requirements of their area of specialization. Described below are the general education requirements for all degrees. Students may consult their degree audit (DARS) report for recommended general education courses in their major.

At the University of Missouri-St. Louis, General Education affords both freshmen and transfer students the opportunity to develop and apply intellectual tools and to acquire a breadth of knowledge necessary in sur challenging, technological, and diverse world. This curriculum also challenges students to investigate various disciplines as potential majors, and it prepares them for success in major fields of study. The program complies fully with the Missouri Coordinating Board of Higher Education Guidelines on Transfer and Articulation (June 2000).

## General Education Requirements

## Application of Policy to Freshmen

All students in Missouri public universities must complete the requirements of a General Education Plan totaling 42 credit hours in order to earn a baccalaureate degree,

Application of Policy to Transfer Students
Iransfer policies describe which courses may apply to UMSL's General Education requirements. In general, students who transfer to UMSL with an Associate of Arts (AA) degree from an accredited Missouri institction are considered to have completed all general education requirements. Additionally, UMSL has a Junior-Level Writing requirement and Mathematics Proficiency (explained below) beyond the general education requriement. Transfer students without an AA degree from Missouri may transfer a CBHE-approved 42-hour block of General Education courses, in accordance with the CBHE Transfer and Articulation agreement. However, those students transferring with fewer than 42 hours or from a non-participating institution will have their transcripts evaluated on a course-by-course basis.

Credit associated with military science and developmental/remedial coursework are not considered transferable to UMSL's General Education requirements.

## Application of Policy to Students Who Started Prior to Fall 2002

Students who earned 24 or more semester hours of credit* at any accredited post-secondary institutions(s) before the start of the fall 2002 semester may meet the general education requirements stipulated in the UMSL 2001-2002 Bulletin or elect to complete the current General Education Plan described below.
*Only credit that is transferable to UMSL is applicable
SKILL GOALS:
Communicating Skills (minimum 6 credit hours) [C]
Managing Information Skills (minimum 3 credit hours) [MI]
Valuing Skills (minimum 3 credit hours) [V]

## KNOWLEDGE GOALS:

Social and Behavioral Sciences Knowledge Goal (minimum 9 credit hours) [SS]
Humanities and Fine Arts Knowledge Goal (minimum 9 credit hours) [H]
Mathematics and Life/Natural Sciences (minimum 12 credit hours) [MS]
Students may take only those courses listed below for the 42 -hour General Education block. Many courses satisfy more than one goal, are designated as such, and may be counted for all of the goals listed for each specific course. Select courses that meet only a skill goal(s) without a knowledge goals have been marked with an asterisk, and it should be noted that those courses concentrate on the designated skill comprehensively.

Once students have met the required number of courses or hours under each goal, they have the
achieve the 42-hours. The university encourages students to select General Education courses to meet their individual needs and interests. Students may not take any upper-level courses or any lower-level courses that do not appear on the list of certified General Education courses to complete the 42hour block.
General Education at the University of Missouri-St. Louis offers students an exciting and challenging curriculum that develops the skills and knowledge necessary to succeed in today's changing world. The following information outlines each of the six goals and the courses that meet the competencies students must achieve to accomplish the designated skills and knowledge goals.

## GENERAL EDUCATION GOALS AND COURSES

## PLEASE NOTE:

* Course addresses skill goal(s) and no knowledge goals. The course covers the skill goal comprehensively and is suggested for those students who seek an in-depth coverage of that skill.
**Course will count for Cultural Diversity Graduation Requirement.
***Course will count for State Government/History Requirement (Honors students should check with Honors College each semester for list of Gen. Ed. Courses that meets this requirement).
GOALS:
SKILL GOALS:
COMMUNICATING (minimum 6 credit hours)
MANAGING INFORMATION (minimum 3 credit hours)
VALUING (minimum 3 credit hours)


## KNOWLEDGE GOALS:

SOCIAL AND BEHAVIORAL SCIENCES (minimum 9 credit hours)
HUMANITIES AND FINE ARTS (minimum 9 credit hours)
MATHEMATICS AND LIFE/NATURAL SCIENCES (minimum 12 credit hours)

## goal \# 1 COMMUNICATING SKILLS

The Communicating Skills Goal develops students' effective use of the English language and quantitative and other symbolic systems essential to their success in school and in the world. Students should be able to read and listen critically and to write and speak with thoughtfulness, clarity, coherence, and persuasiveness (CBHE General Education, June 2000).

Students must complete a minimum of six credit hours in the Communicating Skills area including a freshman composition course (ENGL 1100, 1110 or HONORS 1200) and one other course taken from the following list:
*comprehensive coverage of skill goal
** satisfies cultural diversity requirement
***satisfies state government requirement

| Department | Course \# | Course Title and Credit Hours |
| :--- | :--- | :--- |
| English | 1100 or | First-Year Writing* (3) |
| English | 1110 or | First-Year Writing for International Students* (3) |
| Honors | 1100 | Freshman Composition for Honors Students <br> $(3)$ |
| Select a minimum of one <br> Course: |  |  |
| Art History | 1175 | Arts \& Ideas (HIST 1175, M H LT 1175, PHIL 1175, TH DAN <br> 1175, ART HS, 1175) (3) |
| Communication | 1030 | Interpersonal Communication* (3) |
| Communication | 1040 | Introduction to Public Speaking* (3) |
| Communication | 1050 | Introduction to Mass Communication (3) |
| Biology | 1102 | Human Biology (3) |
| Chemistry | 2223 | Quantitative Analysis (3) |
| Chemistry | 2633 | Organic Chemistry Laboratory (2) |
| English | 1120 | Introduction to Literature (3) |
| English | 1130 | Topics in Literature (3) |


| English | 1170 | \|American Literary Masterpieces (3) |
| :---: | :---: | :---: |
| English | 1175 | Arts \& Ideas (HIST 1175, M H L T 1175, PHIL 1175, TH DAN 1175, ART HS, 1175) (3) |
| English | 1200 | Myth (3) |
| English | 1700 | African-American Literature (3) |
| English | 1950 | Topics in Literature (3) |
| English | 2030 | Poetry Writing (3) |
| English | 2040 | Short Story Writing (3) |
| English | 2120 | Topics in Writing (3) |
| English | 2240 | Literature of the Old Testament (3) |
| English | 2250 | Literature of theNew Testament (3) |
| English | 2310 | English Literature Before 1790I (3) |
| English | 2320 | English Literature II (3) |
| English | 2330 | Introduction to Poetry (3) |
| English | 2710 | American Literature Before 1865 (3) |
| English | 2720 | American Literature After 1865 (3) |
| English | 2810 | Traditional Grammar* (3) |
| Foreign Language | 1100 | Languages and World View (3) |
| French | 2102 | Intermediate French Language and Culture II (3) |
| French | 2180 | Readings in French(3) |
| German | 2170 | German Composition and Conversation (3) |
| German | 2180 | Readings in German (3) |
| History | 1001 | American Civilization to 1865*** (3) |
| History | 1002 | American Civilization 1865 to Present*** (3) |
| History | 1004 | The History of Women in the United States*** (3) |
| History | 1030 | The Ancient World (3) |
| History | 1031 | Topics in European Civilization to 1715 (3) |
| History | 1032 | Topics in European Civilization since 1715 (3) |
| History | 1051 | Latin American Civilization** (3) |
| History | 1061 | African Civilization To 1800** (3) |
| History | 1062 | African Civilization Since 1800** (3) |
| History | 1075 | World History to 1500 (3) |
| History | 1076 | World History since 1500 (3) |
| History | 1175 | Arts \& Ideas (HIST 1175, M H L T 1175, PHIL 1175, TH DAIJ 1175, ART HS, 1175) (3) |
| Honors | 1.110 | Honors Western Traditions: Humanities (3) |
| Honors | 1130 | Honors Western Traditions: Social \& Behavioral Sciences (3) |
| Honors | 1330 | Honors Non-Western Traditions** (3) |
| Honors | 1900 | Cross-Cultural Readings (1-3) |
| Honors | 2010 | Honors Inquiries in the Humanities (3) |
| Honors | 2020 | Honors Inquiries in the Fine Arts (3) |
| Honors | 2030 | Honors Inquiries in the Social and Behavioral Science (3) |
| Honors | 2050 | Honors Inquiries in Natural Sciences (3) |
| Interdisciplinary | 1999 | Big History: From the Big Bang to the Blackberry (9) |
| Japanese | 2102 | Intermediate Japanese II (5) |
| Media Studies | 1050 | Introduction to Media Studies (3) |
| Media Studies | 2218 | Public Policy in Telecommunication (3) |
| Music History \& Literature | 1175 | Arts \& Ideas (HIST 1175, M H LT 1175, PHIL 1175, TH DAN 1175, ART HS, 1175) (3) |


| Philosophy | 1175 | Arts \& Ideas (HIST 1175, M H LT 1175, PHIL 1175, TH DAN <br> 1175, ART HS, 1175) (3) |
| :--- | :--- | :--- |
| Philosophy | 2280 | Minds, Brains, and Machines (3) |
| Philosophy | 2282 | Philosophy of Science in Historical Perspective (3) |
| Spanish | 2171 | Spanish Conversation and Pronunciation (3) |
| Spanish | 2172 | Spanish Composition (3) |
| Spanish | 2180 | Readings in Spanish** (3) |
| Theatre \& Dance | 1175 | Arts and Ideas (HIST 1175, M H LT 1175, PHIL 1175, TH DAN <br> 1175, ART HS, 1175) (3) |
| Theatre \& Dance | 1210 | Fundamentals of Acting (3) |
| Theatre \& Dance | 1800 | Introduction to Theatre (3) |
| Theatre \& Dance | 1850 | Introduction to Non-Western Theatre ** (3) |
| Theatre \& Dance | 2020 | Acting for the Camera (3) |
| Theatre \& Dance | 2105 | Script Analysis (3) |
| Theatre \& Dance | 2211 | Acting Styles (3) |
| Theatre \& Dance | 2810 | History of World Theatre and Drama Through the Restoration <br> (3) |
| Theatre \& Dance | 2820 | History of World Theatre and Drama from 18th Century to <br> Contemporary Times (3) |
| Theatre \& Dance | 2840 | History of Dance to the 19th Century (3) |

## GOAL \# 2 MANAGING INFORMATION SKILLS

The Managing Information Skills Goal develops students' abilities to locate, organize, store, retrieve, evaluate, synthesize and annotate information from print, electronic, and other sources in preparation for solving problems and making informed decisions (CBHE General Education, June 2000).

Students must complete a minimum of three credit hours in the Managing Information Skills area taken from the following list:
*comprehensive coverage of the skill goal
**satisfies cultural diversity requirement
***satisfies state government requirement

| Department | Course \# | Course Title and Credit Hours |
| :--- | :--- | :--- |
| Anthropology | 1005 | Introduction to Biological Anthropology (4) |
| Anthropology | 1006 | Introduction to Non-Human Primates (3) |
| Anthropology | 1019 | Introduction to Archaeology** (3) |
| Anthropology | 1033 | World Archaeology** (3) |
| Anthropology | 2105 | Human Variation** (3) |
| Art History | 1104 | Indigenous Arts of North America** (3) |
| Art History | 2212 | Greek Art and Archaeology (3) |
| Art History | 2213 | Roman Art and Archaeology (3) |
| Art History | 2214 | Early Christian and Byzantine Art (3) |
| Art History | 2225 | Medieval Art (3) |
| Art History | 2237 | Northern European Renaissance Art (3) |
| Art History | 2245 | Baroque Art and Architecture (3) |
| Art History | 2250 | Nineteenth Century European Art (3) |
| Art History | 2265 | History of Photography (3) |
| Art History | 2270 | American Art to 1876 (3) |
| Art History | 2272 | American Art since 1876 (3) |
| Art History | 2279 | American Architecture (3) |
| Art History | 2281 | Art since 1960 (3) |


| Astronomy | 1001A | Cosmic Evolution/Introductory Astronomy (without lab) (3) |
| :---: | :---: | :---: |
| Astronomy | 1001 | Cosmic Evolution/Introductory Astronomy (with lab) (4) |
| Atmospheric Science | 1001A | Elementary Meteorology (without lab) (3) |
| Atmospheric Science | 1001 | Elementary Meteorology (with lab) (4) |
| Biology | 1202 | Environmental Biology (3) |
| Biology | 1350 | Conservation of Biodiversity (3) |
| Biology | 1811 | Introduction to Biology I: From Molecules to Organisms (5) |
| Biology | 1999 | Evolution for Everyone (3) |
| Biology | 1821 | Introduction to Biology II: Organisms and the Environment* (5) |
| Business Administration | 1590 | Personal Finance (3) |
| Business Administration | 2900 | Legal Environment of Business (3) |
| Chemistry | 1011 | Chemistry in the Environment and Everyday Living (3) |
| Chemistry | 1052 | Chemistry for the Health Professions (4) |
| Chemistry | 1062 | Organic and Biochemistry for Health Professions (2) |
| Chemistry | 1111 | Introductory Chemistry I (5) |
| Chemistry | 1121 | Introductory Chemistry II (5) |
| Chemistry | 2223 | Quantitative Analysis (3) |
| Chemistry | 2622 | Organic Chemistry II (3) |
| Chemistry | 2633 | Organic Chemistry Laboratory (2) |
| Chemistry | 3412 | Basic Inorganic Chemistry (2) |
| Computer Science | 1010 | Introduction to Computers (credit not granted for both CMF SCI 1010 and INFSYS 1800)* (3) |
| Computer Science | 1011 | Introduction to the Internet and World Wide Web (3) |
| Computer Science | 1012 | Learning to Program Using Virtual Worlds (3) |
| Criminology \& Criminal Justice | 1100 | Introduction to Criminology \& Criminal Justice (3) |
| Economics | 2410 | The Economics of Women, Men and Work (3) |
| Economics | 2800 | History of American Economic Development (3) |
| English | 1100 | First-Year Writing (3) |
| English | 1110 | First-Year Writing for International Students (3) |
| Finance | 1590 | Personal Finance (3) |
| Geography | 1001 | Introduction to Geography (3) |
| Geography | 1002 | World Regions (3) |
| Geology | 1001A | General Geology (3) |
| Geology | 1001 | General Geology (4) |
| Geology | 1002A | Historical Geology (3) |
| Geology | 1002 | Historical Geology (4) |
| History | 2800 | History of American Economic Development (3) |
| Honors | 1200 | Freshman Symposium: Cultural Traditions I** (3) |
| Honors | 1310 | Non-Western Traditions (3) |
| Honors | 2051 | Inquiries in the Sciences: Laboratory or Field Work (1) |
| Information Systems | 1800 | Computers and Information Systems (credit not granted for both INFSYS 1800 and CMP SCI 1010)* (3) |
| Media Studies | 2271 | History of American Film (3) |
| Media Studies | 2272 | Contemporary Cinema (3) |
| Physics | 1.011 | Basic Physics I (4) |
| Physics | 1.012 | Basic Physics II (4) |
| Physics | 2111 | \|Physics: Mechanics and Heat (5) |


| Physics | 2112 | Physics: Electricity, Magnetism and Optics (5) |
| :--- | :--- | :--- |
| Political Science | 1450 | Introduction to Labor Studies 4 (3) |
| Political Science | 1500 | Introduction to Comp. Politics (3) |
| Political Science | 1550 | Women and Politics in the Developing World (3) |
| Political Science | 1820 | Global Issues (3) |
| Political Science | 1990 | The City (3) |
| Sociology | 1999 | The City (3) |
| Theatre \& Dance | 2820 | The History of World Theatre \& Drama from 18th Century to <br> Contemporary Times (3) |
| Theatre \& Dance | 2840 | History of Dance to the 19th Century (3) |

## GOAL \# 3 VALUING SKILL

The Valuing Skills Goal develops students' abilities to understand the moral and ethical values of a diverse society and to understand that many courses of action are guided by value judgments about the way things ought to be. Students should be able to make informed decisions through identifying personal values and the values of others and through understanding how such values develop (CBHE General Education, June 2000).

Students must complete a minimum of three credit hours in the Valuing Skills area taken from the following list:
**satisfies cultural diversity requirement
***satisfies state government requirement

| Department | Course \# | Course Title and Credit Hours |
| :--- | :--- | :--- |
| Anthropology | 1011 | Introduction to Cultural Anthropology** (3) |
| Anthropology | 1025 | World Cultures (3) |
| Anthropology | 1037 | The Wonders of Greece: Introduction to Greek History and <br> Culture (3) |
| Anthropology | 1052 | The Olympic Games: Ideals \& Reality (3) |
| Anthropology | 2117 | Greek History \& Culture** (3) |
| Anthropology | 2120 | Native People of North America (3) |
| Art History | 1101 | Ideas in Art History (3) |
| Art History | 1102 | Art of Egypt and the Ancient Near and Middle East (3) |
| Art History | 1104 | Indigenous Arts of North America** (3) |
| Art History | 2212 | Greek Art and Archaeology (3) |
| Art History | 2213 | Roman Art and Archaeology (3) |
| Art History | 2214 | Early Christian and Byzantine Art (3) |
| Art History | 2225 | Medieval Art (3) |
| Art History | 2237 | Northern European Renaissance Art (3) |
| Art History | 2245 | Baroque Art and Architecture (3) |
| Art History | 2250 | Nineteenth Century European Art (3) |
| Art History | 2265 | History of Photography (3) |
| Art History | 2270 | American Art to 1876 (3) |
| Art History | 2272 | American Art since 1876 (3) |
| Art History | 2279 | American Architecture (3) |
| Art History | 2281 | Art since 1960 (3) |
| Biology | 1202 | Environmental Biology (3) |
| Biology | Business Administration | 1590 |
| Business Administration | 1900 | Personal Finance (3) |
| Business Administration | 2900 | Legal Environment of Business (3) |
|  |  |  |
|  |  |  |


| Chinese | 2191 | Special Topics in Chinese Literature (3) |
| :---: | :---: | :---: |
| Criminology \& Criminal Justice | 1110 | Theories of Crime (3) |
| Criminology \& Criminal Justice | 1120 | Criminal Law (3) |
| Criminology \& Criminal Justice | 1130 | Criminal Justice Policy (3) |
| Criminology \& Criminal Justice | 1150 | Violence in America (3) |
| Criminology \& Criminal Justice | 1200 | Foundations of Law (POL SCI 1200) (3) |
| Criminology \& Criminal Justice | 2251 | Youth Gangs (3) |
| Criminology \& Criminal Justice | 2260 | Corrections (3) |
| Criminology \& Criminal Justice | 2265 | Capital Punishment (3) |
| Economics | 1000 | Introduction to the American Economy (3) |
| Economics | 1001 | Principles of Microeconomics (3) |
| Economics | 2010 | The Business Firm: History, Theory and Policy (3) |
| Economics | 2610 | The Economics of Professional Sports (3) |
| English | 1120 | Introduction to Literature (3) |
| English | 1200 | Myth (3) |
| English | 2280 | Contemporary World Literature** (3) |
| English | 2340 | Introduction to Drama (3) |
| Finance | 1590 | Personal Finance (3) |
| Gender Studies | 2230 | Psychology of Gender (3) |
| Geography | 2001 | Cultural Geography (3) |
| Gerontology | 2280 | Psychology of Death and Dying (3) |
| History | 1003 | African-American History*** (3) |
| History | 2102 | Introduction to Women's and Gender Studies (3) |
| History | 2117 | Greek History and Culture (3) |
| Honors | 1201 | Freshman Symposium: Cultural Traditions II (3) |
| Honors | 1230 | American Traditions*** (3) |
| Honors | 1310 | Non-Western Traditions Series -Humanities (3) |
| Honors | 1330 | Non-Western Traditions-Social Sciences (3) |
| Honors | 2310 | Cultural Diversity in the Humanities** (3) |
| Honors | 2330 | Cultural Diversity in the Social Sciences** (3) |
| Japanese | 2191 | Special Topics in Japanese Culture (3) |
| Media Studies | 1060 | Introduction to World Cinema (3) |
| Media Studies | 1110 | Introduction to Radio and Television Broadcasting (3) |
| Music History \& Literature | 1001 | Introduction to Music (3) |
| Music History \& Literature | 1010 | History of Western Music I (3) |
| Music History \& Literature | 1020 | History of Western Music II (3) |
| Music History \& Literature | 1080 | Introduction to Irish Traditional Music (3) |
| Music History \& Literature | 1090 | Non-Western Music I** (3) |
| Music History \& Literature | 1110 | Introduction to Irish Traditional Music in North America (3) |
| Music History \& Literature | 1130 | Introduction to Music Theatre (3) |
| Music History \& Literature | 1140 | Popular Music in America (3) |
| Music History \& Literature | 1150 | Drumming Cultures of the World (3) |
| Music History \& Literature | 1160 | Musical Journey Through Latin America (3) |
| Music History \& Literature | 1170 | Musical Journey Through the Far East (3) |
| Music History \& Literature | 1180 | Musical Journey Through Africa (3) |
| Music History \& Literature | 1190 | Musical Journey of the Native North American (3) |
| Music Theory \& Composition | 1301 | Theory of Music I (3) |
| Music Theory \& Composition | 1311 | Theory of Music II (3) |
|  |  |  |


| Music Theory \& Composition | 2301 | Theory of Music III (3) |
| :---: | :---: | :---: |
| Music Theory \& Composition | 2311 | Theory of Music IV (3) |
| Philosophy | 1090 | Telecourse: Philosophy and Other Disciplines (3) |
| Philosophy | 1091 | Telecourse: Significant Figures in Philosophy (3) |
| Philosophy | 1110 | Western Philosophy I (3) |
| Philosophy | 1111 | Western Philosophy II (3) |
| Philosophy | 1120 | Asian Philosophy ** (3) |
| Philosophy | 1125 | Islamic Philosophy** (3) |
| Philosophy | 1130 | Approaches to Ethics (3) |
| Philosophy | 1150 | Major Questions in Philosophy (3) |
| Philosophy | 1160 | Logic and Language (3) |
| Philosophy | 1185 | Philosophy of Religion (3) |
| Philosophy | 2251 | Sexual Ethics (3) |
| Philosophy | 2252 | Philosophical Foundations of Criminal Justice (CRIMIN 2252) (3) |
| Philosophy | 2253 | Philosophy and Feminism (3) |
| Philosophy | 2254 | Business Ethics (3) |
| Philosophy | 2255 | Environmental Ethics (3) |
| Philosophy | 2256 | Bioethics (3) |
| Philosophy | 2257 | Happiness and the Meaning of Life (3) |
| Philosophy | 2258 | Medicine, Values and Society (3) |
| Philosophy | 2259 | Engineering Ethics (3) |
| Philosophy | 2276 | Philosophy of Film (3) |
| Philosophy | 2280 | Minds, Brains and Machines (3) |
| Political Science | 1100 | Introduction to American Politics*** (3) |
| Political Science | 1200 | Foundations of Law (CRIMIN 1200) (3) |
| Political Science | 1500 | Introduction to Comparative Politics (3) |
| Political Science | 1550 | Women and Politics in the Developing World (3) |
| Political Science | 1800 | World Politics (3) |
| Political Science | 1990 | The City (3) |
| Psychology | 2205 | Human Sexuality: The Psychological Perspective (3) |
| Psychology | 2230 | Psychology of Gender (3) |
| Psychology | 2280 | Psychology of Death and Dying (3) |
| Psychology | 2285 | American Cultural \& Minority Mental Health (3) |
| Social Work | 2000 | Social Work and Social Problems (3) |
| Social Work | 2102 | Introduction to Women's and Gender Studies (3) |
| Social Work | 2200 | Social Welfare as a Social Institution (3) |
| Sociology | 1010 | Introduction to Sociology (3) |
| Sociology | 1040 | Social Problems (3) |
| Sociology | 1999 | The City (3) |
| Sociology | 2102 | Introduction to Women's and Gender Studies (3) |
| Theatre \& Dance | 2020 | Acting for the Camera (3) |
| Women \& Gender Studies | 2102 | Introduction to Women's and Gender Studies (3) |
| Women \& Gender Studies | 2253 | Philosophy \& Feminism (3) |

## GOAL \# 4 SOCIAL AND BEHAVIORAL SCIENCES KNOWLEDGE

The Social and Behavioral Sciences Knowledge Goal develops students' understanding of themselves and the world around them through the study of content and the processes used by historians and social and behavioral scientists to discover, describe, explain, and predict human behavior and social systems. Students
must understand the diversities and complexities of the cultural and social world, past and present, and come to an informed sense of self and others (CBHE General Education, June 2000).

Students must complete a minimum of nine credit hours in the Social and Behavioral Sciences Knowledge area taken from the following list:
**satisfies cultural diversity requirement
***satisfies government requirement

| Department | Course \# | Course Title | $5$ |
| :---: | :---: | :---: | :---: |
| Anthropology | 1005 | Introduction to Biological Anthropology (4) |  |
| Anthropology | 1006 | Introduction to Non-Human Primates (3) |  |
| Anthropology | 1011 | Introduction to Cultural Anthropology** (3) |  |
| Anthropology | 1019 | Introduction to Archaeology ** (3) | 45 |
| Anthropology | 1025 | Worid Cultures** (3) | \% |
| Anthropology | 1.033 | World Archaeology** (3) | 4 |
| Anthropology | 1.035 | Ancient Greek Civilization and Culture (3) | $\because 4$ |
| Anthropology | 1037 | The Wonders of Greece: Introduction to Greek History and Culture (3) |  |
| Anthropology | 1052 | The Olympic Games: Ideals and Reality (3) | - |
| Anthropology | 2105 | Human Variation** (3) |  |
| Anthropology | 2117 | Greek History and Culture ( HIST 2117) (3) | 4 |
| Anthropology | 2120 | Native People of North America (3) |  |
| Anthropology | 2121 | Symbols in American Indian Culture (3) |  |
| Business Administration | 1900 | Introduction to Personal Law (3) |  |
| Communication | 1050 | Introduction to Mass Communication (3) |  |
| Criminology \& Criminal Justice | 1100 | Introduction to Criminology and Criminal Justice (3) |  |
| Criminology \& Criminal Justice | 1110 | Theories of Crime (3) |  |
| Criminology \& Criminal Justice | 1120 | Criminal Law (3) |  |
| Criminology \& Criminal Justice | 1130 | Criminal Justice Policy (3) |  |
| Criminology \& Criminal Justice | 1150 | Violence in America (3) |  |
| Criminology \& Criminal Justice | 2251 | Youth Gangs (3) |  |
| Criminology \& Criminal Justice | 2260 | Corrections (3) |  |
| Criminology \& Criminal Justice | 2265 | Capital Punishment (3) |  |
| Economics | 1000 | Introduction to the American Economy (3) | 4 |
| Economics | 1001 | Principles of Microeconomics (3) | \% |
| Economics | 1002 | Principles of Macroeconomics (3) | \#4 |
| Economics | 1500 | Entertainment Economics: The Movie Industry (3) | +3: |
| Economics | 2010 | The Business Firm: History, Theory and Policy (3) | W. |
| Economics | 2410 | The Economics of Women, Men and Work (3) |  |
| Economics | 2610 | The Economics of Professional Sports (3) | 4. |
| Economics | 2800 | History of American Economic Development (3) | \% |
| Geography | 1001 | Introduction to Geography (3) | \% |
| Gender Studies | 2230 | Psychology of Gender (3) |  |
| Geography | 1002 | World Regions (3) | \% |
| Geography | 2001 | Cultural Geography (3) | 4- |
| Gerontology | 2280 | Psychology of Death and Dying (3) | \% |
| History | 1.001 | American Civilization to 1865*** (3) | \% |
| History | 1.002 | American Civilization 1865-Present *** (3) |  |
| History | 1003 | African-American History*** (3) |  |
| History | 1004 | The History of Women in the United States*** (3) |  |
| History | 1030 | The Ancient World (3) | (x) |


| History | 1031 | Topics in European Civilization to 1715 (3) |
| :---: | :---: | :---: |
| History | 1032 | Topics in European Civilization since 1715 (3) |
| History | 1041 | East Asian Civilization to 1800** (3) |
| History | 1042 | East Asian Civilization from 1800** (3) |
| History | 1051 | Latin American Civilization** (3) |
| History | 1052 | Mexican Civilization** (3) |
| History | 1061 | African Civilization To 1800** (3) |
| History | 1062 | African Civilization Since 1800** (3) |
| History | 1075 | World History to 1500 (3) |
| History | 1076 | World History since 1500 (3) |
| History | 1175 | Arts \& Ideas (HIST 1175, M H L T 1175, PHIL 1175, TH DAN 1175, ART HS, 1175) (3) |
| History | 2102 | Introduction to Women's and Gender Studies (3) |
| History | 2117 | Greek History and Culture (3) |
| History | 2800 | History of Economic Development (3) |
| Honors | 1130 | Western Traditions--Social Science (3) |
| Honors | 1230 | American Traditions*** (3) |
| Honors | 1330 | Non-Western Traditions--Social Science (3) |
| Honors | 2030 | Honors Inquiries in Social and Behavioral Sciences (3) |
| Honors | 2330 | Cultural Diversity in the Social Sciences** (3) |
| Interdisciplinary | 1999 | Big History: From the Big Bang to the Blackberry (3) |
| Media Studies | 1050 | Introduction to Media Studies (3) |
| Philosophy | 2251 | Sexual Ethics (3) |
| Political Science | 1.100 | Introduction to American Politics*** (3) |
| Political Science | 1.450 | Introduction to Labor Studies (3) |
| Political Science | 1500 | Introduction to Comparative Politics (3) |
| Political Science | 1550 | Women and Politics in the Developing World (3) |
| Political Science | 1800 | World Politics (3) |
| Political Science | 1820 | Global Issues (3) |
| Psychology | 1003 | General Psychology (3) |
| Psychology | 1268 | Human Growth and Development (3) |
| Psychology | 2205 | Human Sexuality: The Psychological Perspective (3) |
| Psychology | 2230 | Psychology of Gender (3) |
| Psychology | 2280 | Psychology of Death and Dying (3) |
| Psychology | 2285 | American Cultural \& Minority Mental Health (3) |
| Social Work | 2000 | Social Work and Social Problems (3) |
| Social Work | 2102 | Introduction to Women's and Gender Studies (3) |
| Social Work | 2200 | Social Welfare as a Social Institution (3) |
| Sociology | 1010 | Introduction to Sociology (3) |
| Sociology | 1040 | Social Problems (3) |
| Sociology | 2102 | Introduction to Women's and Gender Studies (3) |
| Women \& Gender Studies | 2102 | Introduction to Women's and Gender Studies (3) |

## GOAL \# 5 HUMANITIES AND FINE ARTS KNOWLEDGE

The Humanities and Fine Arts Knowledge Goal develops the students' understanding of the ways in which humans have addressed their condition through imaginative work in the humanities and fine arts; to deepen their understanding of how that imaginative process is informed and limited by social, cultural, linguistic, and historical circumstances; and to appreciate the world of the creative imagination as a form of knowledge (CBHE General Education, June 2000).

Students must complete a minimum of nine credit hours from the Humanities and Fine Arts Knowledge area taken from the following list:
**satisfies cultural diversity requirement

| Department | Course \# | Course Title |
| :---: | :---: | :---: |
| Art History | 1100 | Introduction to Western Art (3) |
| Art History | 1101 | Ideas in Art History (3) |
| Art History | 1102 | Art of Egypt and the Ancient Near and Middle East (3) |
| Art History | 1104 | Indigenous Arts of North America** (3) |
| Art History | 1105 | Introduction to the Arts of Africa (3) |
| Art History | 1108 | Introduction to Arts of Asia (3) |
| Art History | 1175 | Arts \& Ideas (HIST 1175, M H LT 1175, PHIL 1175, TH DAN 1175, ART HS, 1175) (3) |
| Art History | 2211 | Art and Archeology of the Ancient World (3) |
| Art History | 2212 | Greek Art and Archaeology (3) |
| Art History | 2213 | Roman Art and Archaeology (3) |
| Art History | 2214 | Early Christian and Byzantine Art (3) |
| Art History | 2225 | Medieval Art (3) |
| Art History | 2235 | European Art and Architecture 1300-1800 (3) |
| Art History | 2237 | Northern European Renaissance Art (3) |
| Art History | 2240 | French Art and Architecture 1400-1715 (3) |
| Art History | 2245 | Baroque Art and Architecture (3) |
| Art History | 2250 | Nineteenth Century European Art (3) |
| Art History | 2255 | Modern Art** (3) |
| Art History | 2265 | History of Photography (3) |
| Art History | 2270 | American Art to 1876 (3) |
| Art History | 2272 | American Art since 1876 (3) |
| Art History | 2279 | American Architecture (3) |
| Art History | 2281 | Art since 1960 (3) |
| Chinese | 2191 | Special Topics in Chinese Culture (3) |
| English | 1120 | Introduction to Literature (3) |
| English | 1130 | Topics in Literature (3) |
| English | 1170 | American Literary Masterpieces (3) |
| English | 1175 | Arts \& Ideas (HIST 1175, M H L T 1175, PHIL 1175, TH DAN 1175, ART HS, 1175) (3) |
| English | 1200 | Myth (3) |
| English | 1700 | African-American Literature (3) |
| English | 1710 | Native American Literature (3) |
| English | 1950 | Topics in Literature (3) |
| English | 2030 | Poetry Writing (3) |
| English | 2040 | Short Story Writing (3) |
| English | 2120 | Topics in Writing (3) |
| English | 2240 | Literature of the Old Testament (3) |
| English | 2250 | Literature of the New Testament (3) |
| English | 2280 | Contemporary World Literature (3) |
| English | 2310 | English Literature Before 1790 (3) |
| English | 2320 | English Literature II (3) |
| English | 2330 | Introduction to Poetry (3) |
| English | 2340 | Introduction to Drama (3) |
| English | 2710 | American Literature Before 1865 (3) |

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| English | 2720 | \|American Literature After 1865 (3) |
| :---: | :---: | :---: |
| Foreign Language | 1100 | Language and World View (3) |
| French | 2102 | Intermediate French Language and Culture II (3) |
| French | 2180 | Readings in French (3) |
| German | 2170 | German Conversation and Composition (3) |
| German | 2180 | Readings in German (3) |
| Honors | 1110 | Western Traditions (3) |
| Honors | 1111 | Western Cultural Traditions and Critical Thinking (3) |
| Honors | 1200 | Freshmen Symposium: Cultural Traditions I (3) |
| Honors | 1201 | Freshman Symposium: Cultural Traditions II (3) |
| Honors | 1210 | American Traditions in Humanities (3) |
| Honors | 1310 | Non-Western Traditions Series Humanities** (3) |
| Honors | 1900 | Independent Cross-Cultural Readings (1-3) |
| Honors | 2010 | Inquiries in the Humanities (3) |
| Honors | 2020 | Inquiries in the Fine and Performing Arts (3) |
| Honors | 2310 | Cultural Diversity in the Humanities** (3) |
| Interdisciplinary | 1999 | Big History: From the Big Bang to the Blackberry (3) |
| Japanese | 2102 | Intermediate Japanese 11 (5) |
| Japanese | 2150 | Classical Japanese Literature in Translation (3) |
| Japanese | 2191 | Special Topics in Japanese Culture (3) |
| Media Studies | 1060 | Introduction to World Cinema (3) |
| Media Studies | 1070 | Introduction to Cinema (3) |
| Media Studies | 1110 | Introduction to Radio and Television Broadcasting (3) |
| Media Studies | 2271 | History of American Film (3) |
| Media Studies | 2272 | Contemporary Cinema (3) |
| Music History \& Literature | 1001 | Introduction to Music (3) |
| Music History \& Literature | 1010 | History of Western Music I (3) |
| Music History \& Literature | 1020 | History of Western Music II (3) |
| Music History \& Literature | 1060 | Introduction to African-American Music (3) |
| Music History \& Literature | 1070 | Introduction to Jazz (3) |
| Music History \& Literature | 1080 | Introduction to Irish Traditional Music (3) |
| Music History \& Literature | 1090 | Non-Western Music I (3) |
| Music History \& Literature | 1110 | Introduction to Irish Traditional Music in North America (3) |
| Music History \& Literature | 1130 | Introduction to Music Theatre (3) |
| Music History \& Literature | 1140 | Popular Music in America (3) |
| Music History \& Literature | 1150 | Drumming Cultures of the World (3) |
| Music History \& Literature | 1160 | Musical Journey Through Latin America (3) |
| Music History \& Literature | 1170 | Musical Journey Through the Far East (3) |
| Music History \& Literature | 1175 | Arts \& Ideas (HIST 1175, M H L T 1175, PHIL 1175, TH DAN 1175, ART HS, 1175) (3) |
| Music History \& Literature | 1180 | Musical Journey Through Africa (3) |
| Music History \& Literature | 1190 | Musical Journey of the Native North American (3) |
| Music Theory \& Composition | 1301 | Theory of Music I (3) |
| Music Theory \& Composition | 1.311 | Theory of Music II (3) |
| Music Theory \& Composition | 2301 | Theory of Music III (3) |
| Music Theory \& Composition | 2311 | Theory of Music IV** (3) |
| Philosophy | 1.090 | Telecourse: Philosophy and Other Disciplines (3) |
| Philosophy | 1.091 | Telecourse: Significant Figures in Philosophy (3) |


| Philosophy | 1110 | Western Philosophy I (3) |
| :---: | :---: | :---: |
| Philosophy | 1111 | Western Philosophy II (3) |
| Philosophy | 1120 | Asian Philosophy** (3) |
| Philosophy | 1125 | Islamic Philosophy** (3) |
| Philosophy | 1130 | Approaches to Ethics (3) |
| Philosophy | 1150 | Major Questions in Philosophy (3) |
| Philosophy | 1160 | Logic and Language (3) |
| Philosophy | 1175 | Arts \& Ideas (HIST 1175, M H L T 1175, PHIL 1175, TH DAN 1175, ART HS, 1175) (3) |
| Philosophy | 1185 | Philosophy of Religion (3) |
| Philosophy | 2252 | Philosophical Foundations in Criminal Justice (CRIMIN 2252) (3) |
| Philosophy | 2253 | Philosophy and Feminism (3) |
| Philosophy | 2254 | Business Ethics (3) |
| Philosophy | 2255 | Environmental Ethics (3) |
| Philosophy | 2256 | Bioethics (3) |
| Philosophy | 2257 | Happiness and the Meaning of Life (3) |
| Philosophy | 2258 | Medicine, Values and Society (3) |
| Philosophy | 2259 | Engineering Ethics (3) |
| Philosophy | 2276 | Philosophy of Film (3) |
| Philosophy | 2280 | Minds, Brains and Machines (3) |
| Spanish | 2171 | Spanish Conversation and Pronunciation (3) |
| Spanish | 2172 | Spanish Composition (3) |
| Spanish | 2180 | Readings in Spanish |
| Theatre \& Dance | 1175 | Arts \& Ideas (HIST 1175, M H L T 1175, PHIL 1175, TH DAN 1175, ART HS, 1175) (3) |
| Theatre \& Dance | 1210 | Fundamentals of Acting (3) |
| Theatre \& Dance | 1800 | Introduction to Theatre 1 (3) |
| Theatre \& Dance | 1850 | Introduction to Non-Western Theatre (3) |
| Theatre \& Dance | 2020 | Acting for the Camera (3) |
| Theatre \& Dance | 2105 | Script Analysis (3) |
| Theatre \& Dance | 2211 | Acting Styles (3) |
| Theatre \& Dance | 2810 | History of World Theatre and Drama Through the Restoration (3) |
| Theatre \& Dance | 2820 | The History of World Theatre \& Drama from 18th Century to Contemporary Times (3) |
| Theatre \& Dance | 2840 | History of Dance to the 19th Century (3) |

## GOAL \# 6 MATHEMATICS AND LIFE/NATURAL SCIENCES KNOWLEDGE

The Mathematics and Life/Natural Sciences Knowledge Goal develops students' abilities in the areas of mathematics and sciences. In mathematics, the goal develops the students' understanding of fundamental mathematical concepts and their applications. Students should develop a level of quantitative literacy that would enable them to make decisions and solve problems and which could serve as a basis for continued learning. To meet this goal, students must have one mathematics course that has the same prerequisiters) and level of rigor as college algebra. In the life and natural sciences, this goal develops the students' understanding of the principles and laboratory procedures of life and physical sciences and to cultivate treir abilities to apply the empirical methods of scientific inquiry. Students should understand how scientific discovery changes theoretical views of the world, informs our imaginations, and shapes human history. Students should also understand that science is shaped by historical and social contexts (CBHE General Education, June 2000). Students must complete a minimum or twelve credit hours in the Mathematics ard Life/Natural Sciences Knowledge area.

## Note: All students are required to earn a C-or better in a college-credit mathematics course

(MATH 1020 or higher meets this requirement at UMSL), or achieve a score of $\mathbf{2 6}$ or higher on the Missouri Math Placement Test. Students should check the current schedule of courses for more details regarding math proficiency and placement.

| Department | Course \# | Course Title |
| :---: | :---: | :---: |
| Anthropology | 1005 | Introduction to Biological Anthropology (4) |
| Astronomy | 1001A | Cosmic Evolution/ Introductory Astronomy (without lab) (3) |
| Astronomy | 1001 | Cosmic Evolution/ Introductory Astronomy (with lab) (4) |
| Astronomy | 1011 | Planets and Life in the Universe (3) |
| Astronomy | 1012 | The Violent Universe and the New Astronomy (3) |
| Astronomy | 1050 | Introduction to Astronomy I (3) |
| Astronomy | 1051 | Introduction to Astronomy II (3) |
| Astronomy | 1121 | The Search for Extraterrestrial Life (3) |
| Atmospheric Sclence | 1001A | Elementary Meteorology (without lab) (3) |
| Atmospheric Science | 1001 | Elementary Meteorology (with lab) (4) |
| Biology | 1012 | General Biology (3) |
| Biology | 1013 | General Biology Laboratory (2) |
| Biology | 1102 | Human Biology (3) |
| Biology | 1131 | Human Anatomy and Physiology I (4) |
| Biology | 1141 | Human Anatomy and Physiology II (4) |
| Biology | 1162 | General Microbiology (3) |
| Biology | 1202 | Environmental Biology (3) |
| Biology | 1350 | Conservation of Biodiversity (3) |
| Biology | 1811 | Introductory Biology I: From Molecules to Organisms (5) |
| Biology | 1821 | Introductory Biology II: Organisms and the Environment (5) |
| Biology | 1999 | Evolution for Everyone (3) |
| Chemistry | 1011 | Chemistry in the Environment and Everyday Living (3) |
| Chemistry | 1052 | Chemistry for Health Professions (4) |
| Chemistry | 1062 | Organic and Biochemistry for Health Professions (2) |
| Chemistry | 1111 | Introductory Chemistry I (5) |
| Chemistry | 1121 | Introductory Chemistry II (5) |
| Chemistry | 2223 | Quantitative Analysis (3) |
| Chemistry | 2612 | Organic Chemistry (3) |
| Chemistry | 2622 | Organic Chemistry II (3) |
| Chemistry | 2633 | Organic Chemistry Laboratory (2) |
| Chemistry | 3412 | Basic Inorganic Chemistry (2) |
| Geology | 1001A | General Geology (without lab) (3) |
| Geology | 1001 | General Geology (with lab) (4) |
| Geology | 1002A | Historical Geology (without lab) (3) |
| Geology | 1002 | Historical Geology (with lab) (4) |
| Honors | 2050 | Inquiries in the Natural Sciences (3) |
| Honors | 2051 | Inquiries in the Sciences: Laboratory or Field Work (1) |
| Interdisciplinary | 1999 | Big History: From the Big Bang to the Blackberry (3) |
| Mathematics | 1020 | Contemporary Mathematics (3) |
| Mathematics | 1030 | College Algebra (3) |
| Mathematics | 1035 | Trigonometry (2) |
| Mathematics | 1100 | Basic Calculus (3) |
| Mathematics | 1102 | Finite Mathematics (3) |
| Mathematics | 1105 | Basic Probability and Statistics (3) |
| Mathematics | 1150 | Structure of Mathematical Systems (3) |


| Mathematics | 1800 | Analytic Geometry and Calculus I (5) |
| :--- | :--- | :--- |
| Mathematics | 2510 | Structure of Mathematical Systems II (3) |
| Physics | 1001 | How Things Work (3) |
| Physics | 1011 | Basic Physics I (4) |
| Physics | 1012 | Basic Physics II (4) |
| Physics | 2111 | Physics: Mechanics and Heat (5) |
| Physics | 2112 | Physics: Electricity, Magnetism and Optics (5) |

## Credit Hours

All candidates for baccalaureate degrees must complete a minimum of 120 semester hours. At least 45 of these hours must be courses numbered 2000 or above (or comparable courses transferred). Students must maintain a minimum 2.0 grade point average overall, as well as in their area of specialization. Students seeking two degrees must meet all degree and residency requirements of each degree.

## Other Requirements

## Mathematical Skills

Proficiency in the basic mathematical skills area should be satisfied before the student completes $\mathbf{2 4}$ ho urs of course work. Proficiency can be obtained in either of the following ways.

Completing, with a grade of C- or better, a college degree credit mathematics course. Scoring 26 or higher on the Missouri Math Placement Test (MMPT). The MMPT covers mathematics through the college algebra level.
*The first two college credit mathematics courses that the university offers which satisfy mathematics proficiency are MATH 1020: Contemporary Mathematics and MATH 1030: College Algebra. MATH 1020 i; designed as a terminal mathematics course for students who do not plan to take calculus. MATH 1030 is required for all students who want to go on to calculus. The prerequisite for enrolling in MATH 1020 or MATH 1030 is a satisfactory score on the math placement test. This test must be taken not earlier than six months before enrolling in the course.

Study guides for the UMSL Math Placement Test and the MMPT (as well as the UMSL Trigonometry Test, which is not needed for minimum math proficiency) are available on the university's home page, under math placement information/math practice test, as well as at the circulation desk of the Thomas Jefferson Library (file number 991). Students will need to make their own copies. Math placement test dates are published in the Schedule of Courses and on the math placement website.

## Advanced Expository Writing

Effective fall semester 1985, students must also complete ENGL 3100, Advanced Expository Writing, or ts equivalent, with a grade of C - or above.

## American History and Government

Students must satisfactorily complete a course or courses in American history or government taken at UMSL or at other colleges or universities in Missouri. Transfer students should check with the dean's office of their division to find out if they have fulfilled this requirement.

The requirement may be satisfied by one of the following courses:
CRIMIN 1100, Introduction to Criminology and Criminal Justice (Criminology majors may not use this course to satisfy the state requirement.)
HIST 1001, American Civilization I (3)
HIST 1002, American Civilization II (3)
HIST 1003, African-American History (3)
HIST 1004, The History of Women in the United States (3)
HIST 2007, The History of Missouri (3)
HIST 2041, Topics in American Constitutional History (3)
HIST 3002, United States History (3)
POL SCI 1100, Introduction to American Politics (3)
POL SCI 2260, Law, Politics and Society (3)
POL SCI 2280, Judicial Politics and Policy (3)
POL SCI 2290, Gender and the Law (3)
POL SCI 2300, State Politics (3)
POL SCI 2320, African Americans and the Political System (3)
POL SCI 2350, Introduction to Urban Politics (3)
POL SCI 2380, The Politics of Gender in the United States (3)
POL SCI 2400, Public Administration (3)

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POL SCI 2420, Introduction to Public Policy (3)
POL SCI 3200, Constitutional Law (3)
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POL SCI 3260, The Supreme Court (3)
POL SCI 3300, The American Presidency (3)
POL SCI 3330, Introduction to Political Behavior (3)
POL SCI 3331, Congressional Politics (3)
POL SCI 3350, Political Parties and Elections (3)
POL SCI 3450, Urban Administration (3)
POL SCI 4460, Urban Planning and Politics (3)

## Cultural Diversity Requirement.

To expand cultural awareness, students in some academic units may be required to complete a course that emphasizes Asian, African, Middle Eastern, Latin American, Pacific aboriginal, Native American, or a comparable culture. Courses that satisfy this requirement involve substantial material independent of the cultures' interactions with European cultures. If a course focuses on one facet of a culture, it must treat the topic within the context of the culture as a whole. These courses are also coded with the initials [CD] for Cultural Diversity This requirement may be met by one of the following courses:

```
ANTHRO 1011, Introduction to Cultural Anthropology (3)
ANTHRO 1019, Introduction to Archaeology (3)
ANTHRO 1021, The Body in Culture (3)
ANTHRO 1025, World Cultures (3)
ANTHRO 1033, World Archaeology (3)
ANTHRO 1041, Sex and Gender Across Cultures (3)
ANTHRO 1051, Anthropology of Sport (3)
ANTHRO 1091, Introductory Topics in Anthropology (3)
ANTHRO 2111, Cultures of East Asia (3)
ANTHRO 2114, Cultures of the Near and Middle East (3)
ANTHRO 2120, Native Peoples of North America (3)
ANTHRO 2123, Cultures of Oceania (3)
ANTHRO 2124, Cultures of Africa (3)
ANTHRO 2131, Archaeology of Missouri (3)
ANTHRO 2132, Archaeology of North America (3)
ANTHRO 2134, Archaeology of the Inca, Aztec, and Maya (3)
ANTHRO 2135, Old World Archeology (3)
ANTHRO 2138, African-American Archaeology (3)
ANTHRO 2173, Archaeology and Cultures of the Biblical World (3)
ANTHRO 2191, Special Topics in Non-Western Cultures (3)
ANTHRO 3235, Women in Subsaharan Africa: A Contemporary Perspective (3)
ART HS 1102, Art of Egypt and the Ancient Near and Middle East (3)
ART HS 1104, Indigenous Arts of North America (3)
ART HS 1105, Introduction to the Arts of Africa (3)
ART HS 1108, Introduction to Asian Art (3)
ART HS 4408, Topics in Asian Art (3)
ENGL 2280, Contemporary World Literature (3)
CHINESE 2150, Chinese Literature in Translation (3)
FGN LANG 1100, Languages and World View (3)
GEOG 2001, Cultural Geography (3)
HIST 1041, East Asian Civilization (3)
HIST 1042, East Asian Civilization (3)
HIST 1051, Latin American Civilization (3)
HIST 1061, African Civilization To 1800 (3)
HIST 1062, African Civilization Since 1800 (3)
HIST 1064, The African Diaspora since 1800 (3)
HIST 2031, Modern Japan: 1850 to the present (3)
HIST 2032, Modern China: 1800 to the Present (3)
HIST 2033, Modern History of the Asian Pacific Rim (3)
HIST 2051, History of Latin America: To 1808 (3)
HIST 2053, Modern Mexico (3)
HIST 2062, West Africa Since 1800 (3)
HIST 2063, African Diaspora to 1800 (3)
HIST 2064, African Diaspora Since 1800 (3)
HIST 3202, History of Latin America since 1808 (3)
HONORS 1330, Honors Non-Western Traditions (3)
HONORS 2310, Cultural Diversity in the Humanities (3)
HONORS 2330, Cultural Diversity in the Social Sciences (3)
JAPANESE 2150, Classic Japanese Literature in Translation (3)
JAPANESE 2191, Special Topics in Japanese Culture (3)
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M H LT 1090, Non-Western Music I (3)
MHLT 1100, Drumming Cultures of the World (3)
M H LT 1160, Musical Journey Through Latin America (3)
M HLT 1170, Musical Journey Through the Far East (3)
M H LT 1180, Musical Journey Through Africa (3)
M H L T 1190, Musical Journey Through of the North American (3)
PHIL 1120, Asian Philosophy (3)
PHIL 1125, Islamic Philosophy (3)
POL SCI 1500, Introduction to Comparative Politics (3)
POL SCI 1550, Women and Politics in the Developing World (3)
POL SCI 2520, Middle Eastern Politics (3)
POL SCI 2530, Political Systems of South America (3)
POL SCI 2540, Political Systems of Mexico, Central America, and the Caribbean (3)
POL SCI 2550, East Asian Politics (3)
POL SCI 2580, African Politics (3)
SOC WK 2330, Asians in Migration (3)
TH DAN 1850, Introduction to Non-Western Theatre (3)
Reserve Officers Training Courses
Only MIL SCI 4101 and MIL SCI 4102 may receive degree credit in Arts and Sciences and the College of fine Arts and Communication. All other Military Science courses receive no credit and they are not counted in the student's grade point average.


#### Abstract

UMSL Home The Graduate Faculty sets Graduate School policies in the Bulletin. Students should be aware that their programs might have rules and policies that are above these minimum university-wide requirements.


## Admissions

The University of Missouri-St. Louis admits qualified individuals to study for graduate degrees and certificates. Students with a bachelor's degree or the equivalent from an accredited college or university may apply for admission to the Graduate School. Applicants may be denied admission if (a) they do not meet admission standards, (b) there are no available openings, or (c) applications are incomplete at the time of the decision. Application procedures and forms are available on the Graduate School's Web site.

To receive graduate credit at the University of Missouri-St. Louis students must have been admitted to the Graduate School as Degree-seeking, Graduate Certificate, or Non-Degree seeking student before registering for classes.

## Degree-Seeking or Graduate Certificate Students

Applicants for a degree or graduate certificate program at the University of Missouri-St. Louis submit an application, official transcript documenting the baccalaureate degree and all other prior coursework, scores from examinations required by the program, and other evidence of academic and professional preparation required by the program. Such evidence may include standardized test results, letters of recommendation, transcripts of all academic work attempted, and writing samples.

When there are openings for new students, applicants are normally admitted given official evidence of (a) a baccalaureate or advanced degree from an accredited institution of higher education, (b) an undergraduate grade point average (GPA) and major field GPA of at least 2.75, (c) an acceptable score on each requisite examination, and (d) satisfactory additional materials required by the particular program. The dean of the Graduate School makes the final decision on applications, based on recommendations from the program.

## Non-Degree-Seeking Student

Applicants may seek status as Non-Degree-seeking graduate students if they are visiting students, they do not intend to pursue a degree, or they want to participate in graduate workshops or institutes. Applicants must provide an official transcript showing completion of a baccalaureate or higher degree, with a GPA of at least 2.5.

The dean of the Graduate School admits Non-Degree-seeking students only upon recommendation of the program.

A Non-Degree student must maintain a GPA of at least 3.00.
Course work completed by Non-Degree students is not regarded as work toward a degree program.
Therefore, Non-Degree students are not eligible for federal financial aid. Should a Non-Degree student apply for Degree-Seeking status and be admitted to the program the maximum hours of Non-Degree status work that can be applied to a degree program is nine semester hours. A Non-Degree student wishing to take more than nine hours may be allowed to do so contingent upon departmental recommendation. No credits taken as Non-Degree status may count as part of the residence requirement for a degree.

Non-Degree Education Certification students are exempt from the nine-hour limitation on non-degree courses because they take courses for State Department of Education certification. However, all other conditions regarding admission and registration that apply to Non-Degree students apply to Education Certification students.

Students wishing to change from Non-Degree to Degree-seeking must submit a new graduate application for review and approval by the program and the dean of the Graduate School.

## Graduate Study for Lifelong Learning

Lifelong learners often want to take graduate courses without enrolling in a specific program. They may want to prepare for admission to a graduate degree program at UMSL or elsewhere, explore a new discipline, take
courses, workshops, or institutes for career advancement, or simply undertake personal enrichment experiences. Status as a Non-Degree Graduate Lifelong Learner, or graduate post-baccalaureate, allow; students such flexibility. A Non-Degree Graduate Lifelong Learner has access not only to some graduate and undergraduate classes but also UMSL's libraries, laboratories, recreational facilities, etc.

Since graduate programs may limit the availability of their courses to students without full admission tc their program, prospective Non-Degree Graduate Lifelong Learner should check the Bulletin for course prerequisites. The graduate program director in which they wish to take courses can give prospective s:udents more information. Proarams, and directors are listed online.

The Non-Degree Graduate Lifelong Learner program is administered by the Graduate School, which normally seeks approval from the unit before admitting students.

If a Non-Degree Graduate Lifelong Learner is later accepted to a graduate program, up to 12 hours of credit taken as a non-degree graduate student may be applied to a graduate degree or certificate program ufon approval of faculty in that program. Again, communication with the program director is critical,

Applicants who submit a transcript documenting a baccalaureate degree or its equivalent from a U.S. university or a university in which instruction is in the English language may be admitted to UMSL as NonDegree Graduate Lifelong Learner.

International students residing in the United States who do not satisfy the above requirement and are seeking admission as a Non-Degree Graduate Lifelong Learner must provide the transcript and the same evidence of proficiency in English as required for international araduate admissions.

Non-Degree Graduate Lifelong Learners pay graduate educational tuition and fees regardless of whether they take graduate or undergraduate courses.

Non-degree graduate students are not eligible to receive veteran's benefits or to hold campus-sponsored assistantships. Federal financial aid may be available to some non-degree students for preparatory coursework such as teacher certification; information is available in the financial aid office.
Like all graduate students, Non-Degree Graduate Lifelong Learner must maintain a 3.0 GPA . If the cum slative GPA is less than 3.0, the student will be given one automatic probationary semester. If, after one semester of probation, the student's cumulative GPA does not reach 3.0, the student may be granted a second probationary semester only upon approval of the Dean of the Graduate School. (Summer sessions are rot counted as probationary semesters.) If the student falls to achieve a cumulative GPA of 3.0 following the second probationary semester, the student will be made ineligible to enroll as a non-degree or degreeseeking graduate student.

If at any time a student's term or cumulative GPA falls below 2.0, the Non-Degree Graduate Lifelong Learner will be ineligible to enroll as a non-degree or degree-seeking graduate student.

## Inter-University Graduate Exchange Students

Inter-University Graduate Exchange students are Washington University and St. Louis University students who enroll on their home campus for UMSL courses not offered on their own campus.

Degree-seeking graduate students at UMSL may also participate in these programs if their advisors and the Graduate School approve their requests. Certain restrictions apply.

## Unclassified Students

Students who are not qualified for admission to the Graduate School may be considered for undergraduate admission to UMSL as Unclassified Students by applying as an undergraduate non-degree student.
Unclassified Students are considered Post-baccalaureate undergraduates, are not admitted to the Graduate School, may not take graduate-level courses, and do not receive graduate credit. Credits earned by an Unclassified Student may not later be considered as graduate credits should the student subsequently ba admitted to the Graduate School.

## Enrollment in Off-Campus and Continuing Education Courses

Students who have been admitted to the Graduate School may enroll in off-campus graduate courses without further application.

Students with a baccalaureate degree who have not been admitted to the Graduate School must be app oved for admission as a Non-Degree graduate student to take Continuing Education courses for graduate crec it.

## Admission of International Students

International students must meet all requirements for admission to the Graduate School. In addition, international students whose native language is not English and who have spent less than two of the last three years in an English-speaking country are required to submit scores from an internationally accepted standardized examination before a decision is made on admission International Admissions information is available from the Office of International Student Services. Phone 314-516-5229; Fax 314-516-5636; e-mail:
iss@umsledu.
Teaching assistantships will be awarded only to students with demonstrated oral English proficiency. Normally international teaching assistants may not teach during their first semester on campus.

When it is not possible for a student to take the required examination for reasons beyond personal convenience, the program to which the student has applied may develop alternate ways for that particular student to demonstrate English language competence prior to admission. The graduate dean must approve such alternative metrics.

Applicants from other countries shall provide a summary of their educational experience as a basis of comparison of their backgrounds with those of U.S. applicants. They must also provide materials required to obtain an appropriate visa, including a statement of their financial situation and the anticipated form of support for the period of graduate study.

## Dual Enrollment for Senior Undergraduates

With the approval of the divisional and graduate deans, seniors who have a 3.0 cumulative g.p.a. and are within 15 hours of completing graduation requirements for the first bachelor's degree may dually enroll as an undergraduate and a non-degree graduate student and earn up to six semester hours of graduate credit. For students in education, the 15 hours to complete graduation requirements do not include the hours required to complete undergraduate student teaching.

Courses taken while dually enrolled may not be counted for both undergraduate and graduate degree requirements. Consult with divisional deans for additional requirements. $2+3$ students are not eligible for dual enrollment.

Dual enrollment forms must be completed and approved by the Graduate School prior to registering for the graduate level courses. Dually enrolled students are required to register for the graduate level courses using the graduate career in MyView.

## Enroliment

Students who have been admitted to the Graduate School may enroll in classes in any term within one calendar year after admission. New students are strongly urged to seek advising before registering. If an advisor is not assigned, then the graduate director in the program should be the student's first contact in the department. A current list of graduate program directors is found at the Graduate School website.

To remain in good standing, most students must enroll for at least one term each calendar year. Students not meeting this enrollment requirement will become inactive and be required to reapply. Information on reenrollment requirements is on the Graduate School Website. If students reapply and are readmitted, they will be subject to all regulations in effect at the time of readmission.

Doctoral study is an exception to the normal enrollment requirement. After they achieve candidacy, doctoral students must enroll each fall and spring semester until the degree is completed.

International students on student visas must enroll fullitime for each fall and spring semester.

## Final Semester Graduate Exam Fee

Graduate students must enroll in the semester in which they graduate. If they have completed required course work, thesis, or dissertation credits, they must enroll in "Graduate Exam".

Fulltime Study
The minimal fulltime course load is nine credit hours for a regular semester and/or the eight-week summer session.

## Graduate Equivalent Hours

In calculating credit hours for full-time enrollment, students may seek approval for the following semester hour equivalents:
1.) Three equivalency hours for holding a 0.5 FTE Graduate Teaching Assistantship, Graduate Research Assistantship, Graduate Assistantship, or Graduate Instructor position; up to two equivalency hours for appointments between 0.25 and 0.49 FTE.
2.) Three equivalency hours in the semester the student is preparing for comprehensive examinations. This semester-hour equivalency is allowed for a maximum of two semesters.
3.) Eight equivalency hours after achieving candidacy. This semester-hour equivalency is allowed for a maximum of two fall and two spring semesters.
4.) Eight equivalency hours for dissertation work. Once the graduate dean has approved a dissertation proposal, students may request equivalency hours until the eight-year time limit has expired.
5) Participation in approved required out-of-class experiences in specific programs. Please see your advisor for the approved list.

## Overloads

During the regular semester, students may not enroll in more than 12 hours. Normally no more than three
credit hours may be taken in any four-week period.
Heavier than normal loads may be permitted by the graduate dean, upon recommendation by the program, for a) students whose cumulative UMSL GPA is substantially above the program average; and b) studerits in good academic standing for whom an overioad of one course will permit them to graduate during the term in which the overload is taken. Students are normally not allowed to take an overload in their first semester in Graduate School.

## Degree Program Plans

It is expected that graduate students will consult regularly with their advisors to plan a course of study that ensures timely completion of the requirements.

At least one-half of the credits for master's, educational specialist, and doctoral degree plans must be fiom 5000-level courses and above.

Within the major department, students normally may not take a 3000 -level course for graduate credit. However, outside the department, a 3000 -level course may be taken for graduate credit with the approval of students' advisors. Advisors must seek approval from the instructor, who may assign additional work commensurate with graduate status.

Courses numbered from 0 to 2999 may not be taken for graduate credit. No course applied to an undergraduate degree may be allowed in that student's graduate degree.

## Credit for Courses Taken Prior to Enrolling in a Graduate Program at UMSL

Transfer credit shall be granted only for approved graduate courses for which a grade of at least B-, or equivalent, was achieved from an accredited institution.

Degree credit may be allowed for up to three credit hours for institutes, workshops, clinics, and Continuing Education courses only if offered by an appropriately accredited institution of higher education. Only such courses that award a letter grade may be applied to a graduate degree.

Students may transfer up to 18 hours of work on a Graduate Certificate Program Plan to a Master's or Doctoral Program Plan, if the program offering the degree approves the transfer.

## Credit for Courses Taken at Other Universities After Enrolling in a Graduate Program at UMSL.

 Graduate students admitted to UMSL must petition in advance to take courses at another institution and apply the credit toward a graduate degree at UMSL.With prior approval, regularly admitted graduate students are permitted to take a course not offered by JMSL at Washington University, St. Louis University, or Southern Illinois University-Edwardsville.

## Time Limitation

The maximum time allowed for completion of a master's or educational specialist degree is six years after the first course enrollment. Graduate work completed outside these time periods may not be included in the degree program except under extraordinary circumstances and then only after petition to and approval ty the dean of the Graduate School. An exception to the time limitation may be approved in advance with an authorized leave of absence.

## Leave of Absence

Graduate students who are forced to interrupt their studies for a period of one or more years should request a leave of absence from the university. In consultation with their advisors, students shall define the progrem modifications that the leave of absence requires. Requests must indicate the reason for leaving and the expected date of return to the university. Approval of the dean of the Graduate School is required.

The leave of absence is designed to suspend the requirement for continuous enrollment. It does not affe at the maximum time limitation set for a degree program uniess a specific exception is approved.

## Undergraduate Enrollment in 5000-Level Courses

Under special circumstances undergraduate students in good standing at UMSL may enroll in 5000-level courses for undergraduate credit. Approvals from the advisor, department chairperson, academic dean, and dean of the Graduate School are required. In rare cases, students subsequently admitted to the Graduate School may petition for graduate credit for 5000-level courses that they took as undergraduates, as long as those courses were not applied to their undergraduate degrees.

Class Attendance
Only students who have previously paid fees may attend a class. Instructors are not authorized to allow students to attend classes if fees have not been paid. Students may not register and pay fees after the prescribed dates.

Preregistration
Enrolled students may preregister for the next term during regular preregistration periods. Registration is not
complete until all university fees are paid.

## Petitioning Into or Out of a Course

Students must receive the approval of their adviser and the course instructor to enroll in or withdraw from a course after registration.

## Entering a Course in Progress

Students wishing to enter a course in progress must have the approval of the instructor and their adviser. Only under exceptional circumstances may students enter courses after the first week of the semester.

## Dropping a Course

Students may drop courses before the end of the fourth week of a regular semester or the second week of the summer session without receiving grades. At the end of this period and until the end of 12 weeks (or from the third through the sixth week of the summer session), students may withdraw from courses with "Excused" grades providing they are passing the course and have the approval of the instructor and their adviser. Otherwise, a grade of $F$ is given. Students who stop attending classes without officially dropping courses also receive grades of $F$.

## Transcripts

The registrar will furnish transcripts of credits to a student upon written request. Transcripts are furnished to students' parents or guardians or other parties or institutions only if students have filed written consent with the registrar. There is a charge per transcript. Students transferring to another University of Missouri campus may ask the UMSL Director of Admissions to furnish a transcript to the Office of Graduate Admissions at the other UM campus.

Requests for transcripts by organizations either financially supporting a student or with fee compensation programs are not honored unless the student has filed a consent form with the registrar, authorizing the release of such records.

Transcripts are not issued to or for students who have financial obligations to the university until those obligations are paid in full.

## Academic Policies

## Grades

Faculty teaching graduate courses have complete discretion in assigning grades.
Point assignments for grades are as follows;

$$
\begin{aligned}
& \mathrm{A}=4.0 \\
& \mathrm{~A}-=3.7 \\
& \mathrm{~B}+=3.3 \\
& \mathrm{~B}=3.0 \\
& \mathrm{~B}-=2.7 \\
& \mathrm{C}+=2.3 \\
& \mathrm{C}=2.0 \\
& \mathrm{C}-=1.7 \\
& \mathrm{~F}=0 \\
& \mathrm{EX}=\mathrm{Excused} \\
& \mathrm{DL}=\text { Delayed } \\
& \mathrm{IP}=\mathrm{In} \text { Progress } \\
& \mathrm{S} / \mathrm{U}=\mathrm{A} \text { or } \mathrm{B} \text { equivalent }
\end{aligned}
$$

The satisfactory/unsatisfactory (S/U) option, which is an option for undergraduate students, is not normally available in courses for graduate credit. S/U grades may be given only for specific internships, practica, or project courses as requested by a program, with prior approval from the Graduate Council. Courses on the $\mathrm{S} / \mathrm{U}$ grading system will carry no points toward calculation of the grade point average.

Students who stop attending classes without officially dropping courses receive grades of $F$.
Students may enter courses as auditors but may not change from audit to credit or credit to audit after the first week of class. Auditors are charged full fees and receive no academic credit.

## Delayed Grades

Delayed grades may be given when a student's work is of passing quality but is incomplete because of circumstances beyond the student's control. Although delayed grades do not affect a graduate student's grade point average, they are an important factor in evaluating academic progress. Delayed grades must be removed within two regular semesters after the time recorded or they automatically become $F$ grades. In such cases, course instructors may subsequently change $F$ grades to other grades on their progress in a sequential course and indicate that a grade will be assigned at the end of the sequence. Some programs assign the Delayed Grade for dissertations or theses in progress.

## Graduate Grade Appeals

In case of disputes regarding grades, graduate students shall follow the university Grade Appeal Process by first contacting the Department Chair. The policy is available on the Academic Affairs' Website.

## Grade Point Average (GPA)

UMSL calculates three types of GPA. At the end of each semester, the Term GPA is calculated on the courses attempted that semester. The Cumulative GPA on the transcript includes all courses taken at UMSL for graduate credit, including courses that may not be a part of the degree program or certificate. The Degree Program GPA includes only the grades of those courses that are part of the degree program. The Degree Program or certificate GPA must be at least 3.0 for a student to receive a graduate degree.

## Grade modification is not an option for graduate students.

Any course work transferred from other universities, including other UM campuses, will not be included in any GPA calculation.

## Probation

Failure to make adequate progress jeopardizes students' potential to complete the degree as well as their financial aid. To provide students notice of inadequate progress at the end of each semester, graduate students with a cumulative GPA below 3.0 in a minimum of nine credit hours are placed on probation. A program may also place a student on probation if it regards the student's progress as unsatisfactory. The Graduate School will inform students of their probation, with copies sent to the graduate director of the program, the Graduate Admissions Office, and the Financial Aid Office.

If at the end of the probationary semester the cumulative GPA is at least 3.0 and the student is making adequate progress toward the degree, then the probationary status is removed. A probationary student who fails to raise the cumulative GPA to 3.0 may, on the recommendation of the program, be allowed a second probationary semester.

## Dismissal

Upon recommendation of the unit, the Graduate School may dismiss any graduate student who does no: make adequate progress. A student who is on probation for more than two semesters during his/her program of study will be dismissed, unless the dean of the Graduate School approves an exception request for continuation from the advisor and/or graduate director. The Graduate School is responsible for notifying students, with copies sent to the graduate advisor, the graduate director of the program, the Graduate Admissions office, and the Financial Aid Office.

## Master's Degree Requirements

## Admission

Faculty in each master's degree program determine any eligibility standards beyond the minimum for admission to the Graduate School.

## Enrollment

All master's degree students shall be enrolled for credit for access to university resources, including advisement, data gathering, or examinations.

Full-time status for all graduate students is defined as at least nine credit hours of course work. Individual programs may require higher enrollments.

## Credit Requirements

A minimum of 30 semester hours of graduate credit is required for all master's degree programs. Specific programs may require a greater number of hours.

## Residence Requirement

The final two-thirds of the courses in a master's degree program must be completed in residence at UMSiL.

## Time Limitation

All courses included in a master's degree program, whether taken at UMSL or at another institution, shall have been completed within six years after enrollment in the first course.

## Credit From a Certificate Program

Students who have completed course credits in certificate programs may transfer those credits into a master's degree program with the program's consent, as long as the credits fall within the time limitation set for master's degrees. If the master's degree is in a different program from that awarding the certificate, then no more than one-third of the credits from the certificate program may apply to the master's degree. Mult disciplinary programs may seek programmatic exceptions to this limit when the program undergoes the approval process.

## Dual Master's Degrees

With approval of the program and the Graduate School, students who have completed one master's degree
may transfer appropriate credits to a second master's degree program. The number of transferable credits may not exceed one-third of the credit hours required by the second program. Subsequent transfers of the same courses to a third degree are not permitted.

With approval of the programs involved and the Graduate School, students may simultaneously pursue two master's degrees under the following conditions: (a) No more than one-third of the credit hours required by either program may be applied to both programs; (b) Students must obtain approval of both programs before completing 12 hours in either program.

Multi-disciplinary programs may seek programmatic exceptions to the one-third limit when the program undergoes the approval process by addressing specific allowable transfers between those two degree programs.

## Master's Degree for Doctoral Students

Doctoral students may receive a master's degree in their unit for work they have completed toward to a doctoral degree. The program establishes the requirements for such a master's degree. However, the requirements should, in principle, be similar to those for master's degrees offered by the program.

Doctoral and educational specialist students may also receive a master's degree for work they have completed toward to a doctoral or Ed.S. degree in another program provided (a) they apply no more than two-thirds of the master's degree courses to their doctoral degree program; (b) they have been admitted to the master's degree program; and (c) they have obtained the approval of the advisors from both programs and from the Graduate School. Credit from the master's degree must constitute less than half the total credits required for the doctorate.

Multi-disciplinary programs may seek programmatic exceptions to these limits when the program undergoes the approval process.

## Filing the Degree Program

A master's degree student shall file an approved program plan with the Graduate School before completing the first two-thirds of the credit hours required in the program. Students may petition the dean of the Graduate School to change the degree program after it has been filed.

Comprehensive Examination, Scholarly Paper, or Exit Project
Each program requiring a comprehensive examination for the master's degree informs the Graduate School of (a) the number of times the program will allow its students to take a comprehensive examination, and (b) the period of time that the program will allow between the first and final attempt to pass the examination.

Programs recommend Graduate Faculty members to serve on committees for capstone projects. The graduate dean shall review and may appoint the committee.

## Master's Thesis

Programs recommend Graduate Faculty members to serve on committees for capstone projects. The graduate dean shall review and may appoint the committee.

Master's degree students who write a thesis must submit to the dean of the Graduate School one copy of the thesis by the posted university deadline, normally six weeks before the end of the term in which graduation is sought. The chairperson of the thesis committee is responsible for verifying that the final draft of the thesis is acceptable to the graduate dean and the thesis committee.

Students disseminate the thesis according to current Graduate School procedures.

## Application for Master's Degree

To receive the master's degree, students who have met all degree requirements must apply for graduation by the end of the fourth week of classes during the fall or spring term or by the first day of the eight-week session during the summer term.

## Educational Specialist Degree Requirements

## Admission

Each educational specialist degree program shall determine any eligibility standards beyond the minimum for admission to Graduate School.

## Enrollment

All educational specialist degree students shall be enrolled for credit for access to university resources, including advisement, data gathering, or examinations.

Full-time status for all graduate students is defined as at least nine credit hours of course work. Individual units may require higher enrollments.

## Credit Requirements

A minimum of 60 semester hours of graduate credit is required for all educational specialist degree pro 3 rams. Individual programs may require a greater number of hours.

## Residence Requirement

Normally, at least one half of the courses in an educational specialist degree program must be completed in residence at UMSL.

## Time Limitation

All courses included in an educational specialist degree program, whether taken at UMSL or at another institution, shall have been completed within six years after enrollment in the first course.

When educational specialist students have earned a master's degree at any institution, appropriate crecits may be applied toward meeting the requirement for the specialist degree, subject to program approval. Such credits shall constitute less than half of the total credits required for the educational specialist degree. Credit for courses taken for a master's degree is exempt from the six-year time limitation.

## Filing the Degree Program

An educational specialist degree student enrolled shall file an approved program plan with the Graduate School before completing two-thirds of the credit hours required in the program. Students may petition the dean of the Graduate School to change the degree program after it has been filed.

## Comprehensive Examination, Scholarly Paper, or Exit Project

Each program requiring a comprehensive examination for the specialist degree informs the Graduate School of (a) the number of times the program will allow its students to take a comprehensive examination, and (b) the period of time that the program will allow between the first and final attempt to pass the examination.

Programs recommend Graduate Faculty members to serve on committees for capstone projects. The graduate dean shall review and may appoint the committee.

## Thesis

Programs recommend Graduate Faculty members to serve on committees for capstone projects. The graduate dean shall review and may appoint the committee.

Educational Specialist degree students who write a thesis must submit to the dean of the Graduate Schisol one copy of the thesis by the posted university deadline, normally six weeks before the end of the term in which graduation is sought. The chairperson of the thesis committee is responsible for verifying that the final draft of the thesis is acceptable to the graduate dean and the thesis committee. Students shall dissemir ate the thesis according to current Graduate School procedure.

## Doctoral Degree Requirements

## Admission

Each doctoral degree program may determine eligibility standards beyond the minimum for admission to the Graduate School.

## Credit Requirements

A minimum of 60 semester hours of graduate credit is required in every doctoral degree program. Progams may require a greater number of hours for their programs, and individual students may be required to take additional hours.

## Enrollment

Full-time status is defined as nine credit hours per semester. Programs may require higher enrollments than this. After students achieve candidacy and complete the residence requirement, they must remain enrol ed during fall and spring semesters until they complete the degree. Failure to register in any regular semester will result in termination from the Graduate School. If students so terminated decide to reapply and if they are readmitted, then they will be subject to all regulations in effect at the time of readmission, and will be required to enroll for at least one credit hour for each semester since their last enrollment.

When doctoral students are enrolled for research credit, the credit amount may vary, but the student must register for all work required, and the credit total may exceed the minimum requirements.

## Classification of Doctoral Students

There are two stages in doctoral degree work:

1. A pre-candidate is a student who has requirements to fulfill in addition to the dissertation, including course work, and/or comprehensive examinations.
2. A candidate is a student who has met all degree requirements except the completion of the dissertation.

## Time Limitation

The maximum amount of time allowed for completion of a doctoral degree is eight years after the first cuurse
enrollment.
The maximum of 12 hours of graduate credit completed as a post-master's degree student prior to admission to a doctoral program may apply toward a doctoral degree. Inclusion of such course work is subject to program approval and must have been completed within eight years of the time the doctoral degree is awarded. Exceptions to this regulation must be justified on academically defensible grounds and approved by the graduate dean prior to filing the program plan.

When doctoral students have earned a master's degree at any institution, appropriate credits may be applied toward meeting the requirement for the doctoral degree, subject to program approval. Such credits shall constitute less than half of the total credits required for the doctorate. For example, for a doctoral degree requiring 90 hours of work beyond the bachelor's degree, no more than 44 credits from a master's degree may apply to the doctoral degree. Credit for courses taken for a master's degree is exempt from the doctoral program's eight-year time limitation.

## Residence Requirement

The majority of credits used to satisfy requirements for a doctoral degree must be completed at UMSL. The residence requirement may be satisfied with dissertation credit hours, graduate institutes, and credit courses taken through Continuing Education, as well as regular courses.

Students who enter the Ed.D. or Ph.D. in Education degree programs with an Education Specialist (Ed.S.) degree from an accredited university, or with an Advanced Certificate approved by the Missouri Department of Elementary and Secondary Education, may satisfy the residence requirement by completing one-third of the required credits at UMSL.

Residency normally requires that doctoral students successfully complete a minimum of 15 hours over two consecutive terms, which may include summer. The dean of the Graduate School may grant exceptions upon recommendation by the program.

## Comprehensive Examinations

Each program will determine the number of times a comprehensive examination may be taken by a student. The department or college must file with the Graduate School a statement specifying (a) the number of times the program will allow its students to take a comprehensive examination, and (b) the maximum and/or minimum period of time the program will allow between the first and final attempt to pass the comprehensive examination.

The Comprehensive Examination Committee consists of no fewer than three members of the UMSL graduate faculty appointed by the graduate dean upon recommendation of the program.

An oral examination may not substitute for the standard written portion.

## Advisors

Upon entering the program, each doctoral student will have an assigned program advisor who is a member of the Graduate Faculty. As early as possible in a doctoral student's program, but no later than when the student achieves candidacy, the program will recommend, in consultation with the student, a doctoral dissertation advisor.

## Application for Candidacy

Doctoral students may apply for candidacy after passing all required comprehensive and language examinations, written or oral, and successfully completing all course work.

## Doctoral Dissertation Committee

The Doctoral Dissertation Committee consists of at least four members of the Graduate Faculty who can contribute their expertise to the dissertation study: the committee chair, and at least one other member from the program. A recognized scholar from outside the university may serve as a member upon the recommendation of the program and approval of the graduate dean. The graduate dean reviews and approve the committee membership and changes in the committee membership.

## Doctoral Dissertation

All doctoral degrees require a dissertation as a final component of the program. The dissertation must be written on a subject approved by the candidate's doctoral dissertation committee, must embody the results of original and significant research and must be the candidate's own work.

## Dissertation Proposal

Before a student may conduct substantial research for the dissertation the committee must approve a proposal after a formal defense. The student submits the approved proposal for review and approval by the dean of the Graduate School. An approved dissertation proposal in no way implies a contract between the university and the student. Depending on the outcome of the research, the dissertation may require substantially more work than anticipated when the proposal was approved. The termination of a line of research and the adoption of a substantially new dissertation project requires the preparation, formal defense, and acceptance by the Graduate School of a new dissertation proposal.

## Preliminary Approval

One copy of the dissertation, certified as complete and provisionally acceptable to the committee, shall be submitted to the graduate dean at least six weeks prior to commencement. The Dean of the Graduate School may seek advice and make suggestions to the committee about content and style before approving the dissertation.

## Defense of Dissertation

Normally the approved Doctoral Dissertation Committee serves as the Oral Defense of Dissertation Committee. The graduate dean may appoint one additional qualified voting member to the Defense of Dissertation Committee from the Graduate Faculty within the University of Missouri System.

After deliberating on the oral defense of the dissertation, the Defense of Dissertation Committee votes on whether the defense was successful. The defense shall be deemed unsuccessful if there are two negative votes, even if outnumbered by positive votes. An abstention will be considered a negative vote. A stucent failing an oral defense shall have the opportunity for one additional defense before the same committee. The Defense of Dissertation Committee shall determine the timing and format of the subsequent defense.

Final examinations are open to the public.
The decision of the Defense of Dissertation Committee is final. The report of the final examination is due to the Graduate School no later than two days after the examination.

## Dissertation Abstracts

Two different abstracts are required. The publishing company requires an abstract of a maximum of 350 words that is published with the announcement of the dissertation defense. The abstract forming the second page of the dissertation should be no more than 600 words.

## Dissertation Format

Only high quality copies are acceptable with the following margins throughout: left margin $11 / 2$ inches; top, bottom, and right margins, 1 inch. Final copies may be submitted electronically following current procedures on the Graduate School Electronic Thesis and Dissertation homepage or in person in Room 421 Woods rall on paper. Original hard copies of the dissertation must be typed on good quality paper, and they must be egible and neat in order to be accepted by the Graduate School.

In matter of style and documentation, the custom of the discipline shall be followed.
The chairperson of the dissertation committee is responsible for verifying that all the changes suggestec by the graduate dean and the dissertation committee have been incorporated in the final draft of the dissertation or have been discussed further with the graduate dean or the committee.

Students disseminate the dissertation according to current Graduate School procedures.

## Graduate Certificate Program Requirements

## Admission

Each graduate certificate program may determine eligibility standards beyond the minimum for admissicn to and enrollment in the Graduate School.

## Credit Requirements

A minimum of 18 hours of graduate course work is required for a graduate certificate. At least 12 of these hours must consist of courses drawn from the list of core courses for the particular certificate program. At least 12 hours must be completed as a graduate student at UMSL. At least nine hours must be at the 5000 level or above. No more than six hours may be independent study.

## Filing the Program Plan

A graduate student enrolled in a certificate program is required to file a certificate program plan with the Graduate School before completing the first two-thirds of the number of hours required in the program. Changes made in a certificate program plan after it has been filed must be submitted to the Graduate Sithool.

## BULLETIN 네

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## Fee Assessment

Fees for coursework vary due to the student's residency standing, undergraduate, graduate or post-graduate status, credit hours, and the applicability of any course fees charged to specific courses or programs. The total per-credit-hour fee rate includes tuition, mandatory fees, and course fees. Detailed Information on tuition and fee rates and residency status can be found on the Cashier's website.

## Financial Responsibility

Each semester, a Financial Responsibility agreement will be presented to all students. The agreement explains the billing methods, payment options and all policies related to student accounts. It is the student's responsibility that fees are paid and other financial obligations are met as they become due regardless of who is making the payments. Students who need assistance in meeting their financial obligations should contact the Financial Aid Office in a timely manner. Students are expected to adhere to important dates and policies that impact fees. Due dates, fee reassessment dates and office policies are posted on the Cashier's website and through links on the eBill website. The non-payment of any financial obligation may result in additional collection fees and holds on students' registration, records, or graduation.

## Billing

We bill you by posting a monthly student account billing statement on eBill around the 10 th of any month in which there's a new charge or credit on your account. The Cashier's Office will send you and your authorized payer (if any) a billing notification emall reminder to check your statement and pay any balance due. The mail.umsl.edu email address will be used for students and the authorized payers email address will be used for authorized payers.

Bills are due on the first day of each month. The minimum payment can be found at the top of the monthly billing statement or by checking the percentage due as shown in the billing schedules on the Cashier's website. If a student chooses to make the minimum payment or a partial payment, a finance charge of $1 \%$ of the Adjusted Amount Due will be assessed. The monthly $1 \%$ finance charge can be avoided by paying the balance in full. A $\$ 10$ late payment fee will be charged to student accounts which have been billed and not paid by the due date.

All fees, fines, bookstore charges, etc, must be paid by the last day of the term. After the term ends, unpaid accounts will be turned over to an outside collection agency. Collection agency fees of up to $50 \%$ of the unpaid account balance will be added to the student's account. Student accounts must be paid in full before a student will be permitted to register for upcoming semesters or receive transcripts or a diploma.

## Payment of Fees

The Cashier's Office offers several payment options, including a minimum monthly payment. The minimum payment can be found at the top of the monthly billing statement or by checking the percentage due as shown in the Billing Schedule on the Cashier's website. If a student chooses to make the minimum payment or a partial payment, a finance charge of $1 \%$ of the Adjusted Amount Due will be assessed. The monthly $1 \%$ finance charge can be avoided by paying the balance in full.

The payment due date is the first day of each month. Student accounts will be subject to a $\$ 10$ late fee if payment is not received by the due date shown on the monthly billing statement. All fees, fines, bookstore charges, etc. must be paid by the last day of the term. After the semester ends, unpaid accounts will be turned over to an outside collection agency. Collection agency fees of up to $50 \%$ of the unpaid account balance will be added to the student's account. Student accounts must be paid in full before a student will be permitted to register for upcoming semesters or receive transcripts or a diploma.

## Payment Options

Online - Log on to the MyView student system to make payment using a personal checking or savings account or a MasterCard, Discover, or American Express credit card.(2.75\% service charge applied to credit card payments)

Mail - Send your check or money order to the Cashier's Office at: University of Missouri - St. Louis 285 Millennium Student Center (MSC 212) One University Blvd. St. Louis, MO 63121-4400. Include student name and student number on the check or money order.

In person - Visit the Cashier's Office on the second floor of the Millennium Student Center in room 285. Payment in cash, check, money order or pin based MasterCard or VISA debit are accepted at the cashie:r stations. Credit card payments cannot be processed at the cashier stations, but are accepted online from http://ebll.umsledu.

Payment Kiosks - Payment from a personal checking or savings account or by MasterCard, Discover, or American Express credit card can be made at any of the four payment kiosks located in the MSC. ( $2.75 \%$ service charge applied to credit card payments)

Payment Drop Box - A secure payment drop box is situated just outside the Cashier's Office, room 285 of the Millennium Student Center. Only check or money order payments, please.

Any check presented to the university for payment that is returned unpaid will be assessed a $\$ 20.00$ returned check fee in addition to any fees that the bank may charge.

ERDPP - Employer Reimbursement Deferred Payment Program. Many companies offer tuition reimbursement to their employees. While the student is ultimately responsible for the payment of their tuition and fees, the Cashier's Office offers the ERDPP program to allow a student to take advantage of this employer benefit by deferring payment of all, or a portion, of their tuition and related costs.

Financial Aid - If you have applied for financial aid in advance and have received an award letter, your letter describes how much of your award will be paid towards your student fees. If your financial aid does not cover all the fees, then you must pay the remainder of your student fees yourself by the due date. Financial aid that has not yet been disbursed will appear on your monthly billing statement as "Anticipated Aid". Your statement will reflect Anticipated Aid as being deducted from your Account Balance giving you an Adjusted Amount Due. Your Minimum Payment is a percentage of the Adjusted Amount Due plus a $1 \%$ finance charge of the Adjusted Amount Due. Students should pay either the Adjusted Amount Due or the Minimum Payment by the due date to avoid a $\$ 10$ late payment fee.

Third Party Sponsor - When an organization, makes a commitment to pay your educational expenses, they are considered a Third Party Soonsor. If you are expecting a third party sponsor to pay your tuition and fees, you will need to have your sponsor submit a letter of authorization to the Cashier's Office. Once the spensor's letter is received, a credit for the amount the sponsor has indicated will be applied to your student account. An invoice for this amount will then be sent to your sponsor. You are responsible for paying any charges not covered by your sponsor on time, to avoid finance and late charges or other penalties.

## Refunds

A credit balance is the result of an overpayment on a student's account from Financial Aid, loans or payments received. Credit balance refunds will be processed when a credit actually exists on the student's account. Anticipated Financial Aid must be received and posted to the student's account in order for a credit to exist and for a refund to be processed.

When financial aid funds are received by the University, the funds are applied to the students account. During the Fall and Spring semesters, financial aid funds are applied to student accounts no sooner than ten days prior to the start of classes. During the Summer semester, financial aid funds are applied to student accounts no sooner than the day the student is actually taking the course(s) that have the hours required to rece ve the aid. If the student has a credit balance after financial aid funds have paid all account charges in full, the student is now eligible for a refund.

Parent-Plus Loan Refund - Credit balances resulting from the disbursement of Parent-Plus Loans will be refunded directly to the parent. The refund check is mailed to the address on file for the parent unless written instruction is submitted by the parent to the Cashier's Office authorizing the student to receive the funds.

Credit Card Refund - If a credit card payment has been made towards your student account in the past 50 days, any refund due to you will be returned to that credit card.

Drop/Withdrawal Refund - Students who are leaving school or dropping classes are responsible for canceling their registration and verifying that their classes have been dropped. Any refunding of fees will be made according to the reassessment schedule available on the Cashier's website. The refund process requires two to four weeks processing time after withdrawal or dropped classes. When a student completely withdraw's from a semester and was receiving federal financial aid, the University and/or the student may be required to return some of the financial aid, awarded to the student.
Charges that students accrue prior to a refund being issued will be deducted from the refund amount.

Charges that are accrued after a refund is issued will be billed to the student on the monthly billing statement. As student accounts go into credit balance, the Cashier's office processes refunds to students by checks through the mail and by direct deposit to students personal checking or savings accounts. Students should allow $7-10$ business days from the day that the refund is processed to receive a refund check in the mail. For students that have direct deposit, please allow 3-5 business days from the day that the refund is processed to receive the refund in your bank account.

## Cancellation of Registration Due to Nonpayment of Fees

The university will attempt to notify any student whose registration is about to be administratively cancelled for nonpayment of fees prior to taking this action. On or before the last day on which a student may enroll in a course, a cancelled student's space in a course will be given to other students on that course's wait lists. The cancelled student will be placed at the end of the course wait list.

Any student who has been administratively cancelled for nonpayment of assessed fees may not enroll in a class unless the required fees have been paid and the student has officially re-registered. Cancelled students who re-register on or after the first day of the semester will be assessed an additional nonrefundable late registration charge.

## Fee Reassessment

Students who are leaving school or dropping classes are responsible for canceling their registration and verifying that all of their classes have been dropped. Any refunding of fees will be made according to the Fee Reassessment Schedule available on the Cashier's Website. Fees reassessed may include Tuition (Educational Fee), Student Activity and Health Fee, Information Technology Fee, Special Course Fee (if applicable), and Parking Fee (if applicable). The Spring and Fall reassessment schedules only apply to regular 16 week session courses. The Summer reassessment schedules only apply to regular 4 week, 8 week and 12 week session courses. Fee reassessment for courses not in regular sessions will be based on the course's total number of calendar days (weekends and holidays included) and the number of calendar days that the student was enrolled in the course. If the meeting dates for your course are different from the regular session meeting dates, please contact the Cashier's Office as your fee reassessment for withdrawal or dropping may differ from the regular reassessment.

## Fees May Change Without Notice

The university reserves the right to modify by increase or decrease the fees charged for attendance and other services at the university, including but not limited to tuition or educational fees, at any time when in the discretion of the governing board the same is in the best interest of the University, provided that no increases can or will be effective unless approved by the governing board not less than 30 days prior to the beginning of the academic term (semester, etc.) to which the fees are applicable, with all modification of fees to be effective irrespective as to whether fees have or have not been paid by or on behalf of a student prior to the effective date of the modification.

## UMSL Home <br> Academic Resources

## The Writing Lab

The Writing Lab offers free tutorial assistance to students working on papers for their classes. No appointment is necessary, and tutors are prepared to help both undergraduate and graduate students in all the disciplines. Issues covered in the lab include organization, sentence clarity, development, grammar, anc usage.

## English-as-a-Second Language

The English-as-a-Second Language (ESL) program provides assessment and supplementary ESL course:s for international students. Courses are listed under Languages and Cultures Department.

## Mathematics Lab

The Math Lab offers individual assistance on a walk-in basis to students needing help with any mathem atics from basic math through calculus or mathematical skills required for a course in another discipline. Stuclents or prospective students who are preparing to take the Mathematics Placement Test or C-Base Exam may come to the lab for help. Review materials for the C-Base Exam are also available on general reserve in the Thomas Jefferson Library. Test dates and practice math placement exams are available from the Department of Mathematics and Computer Science.

The Math Lab also offers a three-credit hour (not toward a degree) course in Intermediate Algebra and a zero-credit workshop in Beginning Algebra as semester-long lecture classes or independent study courses with flexible beginning and ending options. Schedules for the courses can be found in the current Schedule o: Courses in MyView.

## Campus Testing Center

The Campus Testing Center provides a controlled environment for students to take make-up exams or 00 test under conditions where special accommodations are needed and authorized by the Office of Disability Access Services. Students unable to take campus-level exams (e.g. Math Placement) during regularly schedule 1 group sessions may take them in the center for a fee. All testing is by appointment by calling 314-516-ij396 or emailing assessctr@umsledu.

## Cashier's Office

The Cashier's Office helps students and their families meet their financial obligations to the university. The office produces accurate and timely invoices to collect and process payments, issue refunds, and to ensure that funds are deposited without delay. Staff are available in person at 285 Millennium Student Center, by phone at (314) 516-5151, or my email at umslcash@umsledu for inquiries about student accounts.

## Distance Learning

## Campus Support Offered Online

As a service to its students, most of whom do not live close to campus, UMSL offers several services on ine or by phone. Online services for registration, fee-payment, testing, advising/financial aid, book sales, and administrative support are services offered through the university's integrated systems, MyView. Before a student is admitted, MyView allows candidates to apply online, explore the course catalog, and access online services, including MyGateway. The student portal on MyGateway lists links to tools that students often need, including links for an enrollment certification letter, class schedule, DARS report, e-bill student account, email forwarding address, creating a friendly e-mail address, accessing grades and GPA, online testing appointments, registration times, and both the online and telephone registration systems. Advising links include academic advising, academic calendars, choosing a major, the Bulletin, course schedules, final exam schedule, and policies. Library holdings are also available through technology. Students can conduct reference searches via telecommunications, and entire texts of an increasing number of periodicals are now available online.

## MyGateway

The lines between on-campus and off-campus learning is blurring as UMSL faculty increasingly use techrology
to communicate with students. Most classes at UMSL use MyGateway, whether students take the class on campus, online, or at an off-campus site. Tutorials are available on the campus's Information Technology Services website.

## Off-Campus Classes

Because of the campus's close relations with community colleges, schools, businesses, agencies, and hospitals in the region, some programs are offered at these sites for students' convenience. Most courses in off-campus programs have an instructor on site, but sometimes courses are delivered with technology at the same time (synchronously) as courses on campus. This allows students across the region to take class together without having to drive long distances. Course locations are included in the class schedule available to students and the public on MyView.

Online Education
UMSL's online courses and programs are offered asynchronously through MyGateway. The majority of courses require some on-campus activities, so students must consult the schedule of courses for any on-campus requirements.

## Faculty Senate and University Assembly

The Eaculty Senate has primary responsibility for making educational policy decisions to create a rigorous, innovative, student-oriented environment for learning, research, and community service. The Senate and University Assembly together and through their committees advise the chancellor and other senior administrators on matters related to students, faculty and staff.

The Faculty Senate has 40 faculty members, 30 representing departments and 10 elected at large. In addition, three administrators are non-voting members. The voting members of the University Assembly consist of the elected members of the Senate; the president; the chancellor; the vice chancellor for academic affairs; the dean of the graduate school; the vice provost for student affairs; the dean of continuing education; student representatives equal in number to one-third of the faculty members of the assembly; and three staff members, including the president of the Staff Association. Non-voting members consist of vice chancellors and vice provosts not already included, deans of all colleges, the dean of libraries, and the president of the Student Government Association. The Faculty Senate meets monthly between September and May and the Assembly meets in alternate months during the year. Information about the Faculty Senate and University Assembly are available on the Senate's Web site.

## Institutional Safety

The mission of the University of Missouri-St.__ouis police department is to work cooperatively with the university community and within the framework of the Constitution, enforce the laws, preserve the peace, and provide a safe environment for the campus.

The police department is an internationally accredited department committed to professional management and to providing services in a manner that is responsive to community concerns. We pledge to be sensitive to the needs of those it serves.

The police department, located in the TeleCommunity Center serves the students, faculty, and staff by providing yearround dedicated police service to the campus community. The police are trained to give emergency aid in the event of accident or illness. All incidents should be reported immediately to the police department, telephone by calling 314-5165155. All 516 campus phones are programmed to connect directly to the police when dialing 911. The police department and dispatch center operate 24 hours a day. Emergency telephones on campus include the red A HotLine phones, which are located in every building. In addition, there are a number of outdoor emergency blue phones that connect directly to the police dispatcher.

All members of the campus community are strongly encouraged to call the police for an escort if they feel uncomfortable walking to their car at night. For information regarding services, contact the police by calling 314-516 5155. Students are encouraged to add the campus police phone number to their cell phones in case of emergencies on campus 3145165155.

## Parking and Transportation

Parking enforcement and issuing faculty, staff and guest permits is the responsibility of the Parking and Transportation Department These permits may be obtained at the Parking and Transportation office, located at 7700 Florissant Road. Information on traffic regulations, parking, and campus maps can be obtained at the Parking and Transportation's web site.

Parking and Transportation provides limited emergency vehicle service (due to dead battery, empty fuel tank, flat tire, etc.), at no charge, to vehicles on campus. Any person requiring such service should call 314-5165155.

## Career Services

Career Services assists students and recent graduates with planning, creating, implementing and evaluating career development and job search strategies by working in partnership with employers and the campus community.

Career Readiness/Coaching, Career Counseling \& Exploration and other programs are available to all degree seeking students and recent graduates of UMSL. Career Services hours are Monday through Thursday, 3 a.m. to 5:30 p.m. and Friday, $8 \mathrm{a} . \mathrm{m}$. to 5:30 p.m. For more information, call (314) 516-5111, or visit 278 Millennium Student Center.

## Career Readiness/Coaching

Make an appointment with a Career Services Coordinator to get assistance in your job search. A professional is available to assist in guiding students and alumni in the job search for internships/co-ops and full-time degree-related positions.

## Career Counseling \& Exploration

Meet with a staff member to evaluate your career development. Career development services are designed to help you with choosing a major and/or career. We offer career assessments, on-line resources and individual assistance to guide you in your career decision-making. Visit the Career Services website to access a variety of job search related information. Click on the Occupational Outlook Handbook to get job outlook information, access "What can I do with this major?" to help connect majors with careers, review salary survey information, and link to numerous job search related links.

## Job Leads

We have a web-based software system that enables students and alumni to conduct a job search on-line $24 / 7$. You will have access to job leads (internships, co-op, part-time degree-related and full-time degreerelated positions), on-campus interview opportunities and resume referrals to employers. To be activated in this system, click on UMSLCareerKey at the Career Services website. General, non-degree-related employment opportunities that are received in Career Services are available on the Career Services website under "Off Campus Opportunities."

## On-Campus Jobs

Career Services assists students with connecting to on-campus job opportunities (jobs posted through the federal work-study program and jobs posted by individual departments that are open to all students).

## Job Fairs

Career Services holds three annual job fairs: UMSL Fall Internship \& Job Fair (for all majors); UMSL Spring Internship \& Job Fair in the Spring Semester (for all majors); UMSL Teacher Job Fair (for teaching candidates). Admission is free to UMSL students/alumni who pre-register.

## Weekly Workshops

Register on-line for workshops related to the job search process, including Resume Writing, Interviewing Skills, and Job Search Strategies.

## Special Programs

Other special programs are held throughout the year. This includes Classroom \& Student Organization Presentations, Etiquette Banquet, and Job Search Strategies Teacher Panel.

## Internship/Cooperative Education Positions

Internships and Co-ops give students the opportunity to combine classroom studies with work experience in a field related to their education and career goals. These degree related positions offer students an excellent opportunity to gain professional job experience and earn money to help with expenses while in school. Through these opportunities, students begin to understand what career choices they might make, gain valuable contacts in their field, and, in many cases, get paid for their work. They graduate with a college degree and an impressive resume. Career Services, and academic departments work with students and employers to ensure that positions are linked to curriculum and career development. These opportunities are available to UMSL students at all levels in all majors. Contact Career Services for more information at 5165111, or visit 278 Millennium Center.

In addition to internships available through Career Services, internships and practica are available through many academic departments. Academic advisors can provide information about the requirements for these experiences, some of which are summarized below.

## College of Arts and Sciences

## Anthropology

ANTHRO 4325-4329, Internship in Cultural Anthropology, Archaeology, Folklore, Museum Studies, Physical Anthropology - elective, for credit; placement with outside organizations; junior standing required. Positions available on competitive basis as lab and research assistants, teachers/facilitators, and interns/assistant; optional, noncredit.

The Human Origin and Cultural Diversity program offers internships in educational anthropology and divarsity
education.

## Biology

BIOL 3699, Undergraduate Internship in Biotechnology - optional as part of certificate program, for credit or noncredit, enrollment in certificate program required.
BIOL 4299, Practicum in Conservation - required as part of certificate program, for credit, enrollment in certificate program required.

Chemistry and Biochemistry
Opportunities are available to pursue research with faculty members for credit during the academic year, normally while enrolled in CHEM 3905. Stipends may be available in some cases. Expanded opportunities are available in the summer through the Research Experience for Undergraduates Program, which is typically funded by the National Science Foundation and local industry. In some cases students may conduct CHEM 3905 research at a local company through collaborative arrangement between a faculty members and an industrial chemist.

Criminology and Criminal Justice
CRIMIN 3280, Internship in Criminology and Criminal Justice - elective, for credit.
Economics
ECON 4990, Internship in Applied Economics; not required; 3 hours maximum.
English
ENGL 4890, Independent Writing Project - internships offered in areas such as journalism, public relations, advertising, publishing, and technical writing; for credit, enrollment in Writing Certificate Program required.

## Languages and Cultures

Paid, noncredit positions as tutors in language lab available on a competitive basis. Students of German can apply for summer noncredit internships abroad in the German-American Student Exchange Program at the Study Abroad Office.

## History

HIST 4001, Special Readings - internships occasionally available with historical agencies; department chair and/or undergraduate coordinator must approve to obtain credit.

## Mathematics and Computer Science

Career-related work arrangements for students majoring in math and/or computer science are primarily administered through Career Services located in 278 Millennium Student Center. These positions are paid and non-credit-bearing.

## Physics and Astronomy

The department funds research internships in the department in both physics and astronomy. The awards are competitive, and preference is given to students who have completed the PHYSICS $2111 / \mathbf{2 1 1 2}$ sequence.

## Political Science

POL SCI 3940, Public Affairs Internship - required, for credit, for bachelor of science in public administration program. It may also count as an elective, for credit, within the bachelor of arts in political science program and is open to all majors. Placements include municipal, state, and federal governmental agencies, nonprofit organizations, courts, and political campaign offices.

Psychology
PSYCH 3295, Selected Projects in Field Placement - elective, for credit.
PSYCH 3390, Research Assistant.
Social Work
SOC WK 4800 and 4850, Supervised Field Experience in Social Work I and II - required, for credit, admission to B.S.W. program and prior consent of instructor are required.

## Sociology

SOC 4385, Internship in Sociology - elective, for credit.

## College of Business Administration

Career Services works in partnership with the College of Business Administration to assist students in securing career-related work arrangements for students majoring in all areas of business. These positions can be paid or unpaid and credit bearing or non-credit bearing. Those students choosing to receive academic credit through one of the courses listed below must contact the college of Business Administration Internship Coordinator in Room 469 SSB, by phone at 314-516-6117, or by email.

ACCTNG 3490, Internship in Accounting
BUS AD 3090, Internship in Business Administration

BUS AD 3289, Internship Practicum in International Business
BUS AD 3990, Internship in Business Law
FINANCE 3590, Internship in Finance
INFSYS 3890, Internship in Management Information Systems
LOG OM 3390, Internship in Logistics \& Operations Management
MGMT 3690, Internship in Management
MKTG 3790, Internship in Marketing

## College of Education

Internships (4989) are required for 3 hours credit for most undergraduate programs and Student Teaching (4990 and 4991 ) is required for 12 hours credit in all teacher certification programs. For more information, contact the Teacher Certification and_Advising_Office at Deborah_Ballard@umsledu or at 314-516-6710.

## College of Fine Arts and Communication

Art
ART HS 3387, Professional Internship for Art History majors only elective, for credit.
ART HS 3388, St. Louis Art Museum Internship for Studio Art or Art History majors only - competitive position elective for credit.

## Communication

COMM 1193, Practicum in Applied Communication
COMM 4393, Internship in Applied Communication

## Media Studies

On-campus positions, as available:
MEDIA ST 1194, Practicum In Journalism
MEDIA ST 1195, Practicum In Advertising
MEDIA ST 1196, Practicum In Radio
MEDIA ST 1197, Practicum In Television/Film
MEDIA ST 1198, Practicum in Media Studies
Elective for credit, Senior standing, 3.0 GPA, and faculty recommendation required; off-campus positions:
MEDIA ST 3394, Internship in Journalism
MEDIA ST 3395, Internship in Advertising
MEDIA ST 3396, Internship in Radio
MEDIA ST 3397, Internship in Television/Film
MEDIA ST 3398, Internship in Media Studies

## Music

PRACTM 4920, Internship - required, for credit, enrollment in bachelor of music business required.
Department sponsored internships available for all majors at St. Louis area arts institutions.

## Joint Engineering Program

UMSL/Washington University Joint Undergraduate Engineering Program career-related work arrangements for students majoring in all areas of engineering are primarily administered through Career Services. These positions are paid and non-credit-bearing.

## College of Nursing

Clinical courses are required in both the undergraduate and graduate programs. These experiences are linited to nursing majors only.

Pierre Laclede Honors College
Internships chosen by Honors College students, or arranged by their major departments, are valuable opportunities to broaden educational experience while also meeting the honors independent study requirement for graduation. Visit Career Services, 278 Millennium Student Center, or call 314 516-5111 for more information on these programs and other work arrangements available.

## Alumni Association

The_AlumniAssociation sponsors several scholarships for UMSL students, provides special funding for carnpus projects, and works as an organization to obtain increased public support for the university. Membership in the Alumni Association is open to all graduates and former students with payment of modest dues. For more information, call 314-516 5833.

The Alumni Center, located at 7956 Natural Bridge Road across the street from the main campus entranse, offers students, faculty, staff, and alumni a gathering place for community receptions and other social events. Contact the Alumni Center at 314-516 5722 for reservations.

## Bulletin 2011-2012: University Services

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## University Libraries Home Page

Christopher R. Dames, Interim Dean of Libraries
M.S., University of Missouri-St. Louis
M.L.S., Kent State University

Marilyn L. Rodgers, Associate Dean of Libraries
Reference Leadership Team
M.A.L.S., University of MissouriColumbia

Clinton Berry, Reference Librarian
M.A., University of Missouri-St. Louis;
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The University Libraries support the educational objectives of the university and meet the teaching, research, and informational needs of the campus community. Housed in three locations-the Thomas Jefferson Library and the St. Louis Mercantile Library at UMSL (north campus) and the Ward E. Barnes Library (south campus)-the Libraries' collections consist of more than one million volumes, 3,000 periodical subscriptions, 1.2 million U.S. government documents, over 1.3 million items in microform, and numerous special and manuscript collections. In addition, patrons have access to over 70,000 full-text online journals.

21 million items from the libraries of the four campuses of the University of Missouri, as well as the other institutions belonging to the MOBIUS consortium, can be identified in the MERLIN/MOBIUS online catalogs. Through the MERLIN/MOBIUS catalogs, users can request items from other institutions to be transferred to UMSL for check-out. A full range of services, including interlibrary loan, reference assistance, library instruction and access to a large number of databases are also available through the Libraries

## Western Historical Manuscript Collection and University Archives

William M. (Zelli) Fischetti, Associate Director Western Historical Manuscript Collection and University Archives
M.A., University of Missouri-St. Louis

Kenneth F. Thomas, Senior Manuscript Specialist, Western Historical Manuscript Collection M.A., University of Missouri-St. Louis

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M.A., University of Missouri-St. Louis

Nancy McIlvaney, Manuscript Specialist
M.A., University of Missouri-St. Louis

The Western Historical Manuscript Collection contains primary source materials for research in many fields including local history, the environment, labor history, women's history, politics, and black history. The collection is open to the university community and the general public. Material from the other three campus WHMC collections may be borrowed for research use at UMSL. A catalog of the holdings of the other branches of WHMC is available.

The archives contain official records, campus publications, student newspapers, photographs, and other material on the history of the University of Missouri St. Louis. Located on Level 2 in the Thomas Jefferson Library, the office is open for reference service Monday through Friday, 8 a.m. to $4: 45$ p.m. and until 9 p.m. on Tuesday. Archival and manuscript material does not circulate.

# BULLETIN 2011 <br> 2015 

Study Abroad Programs

## UMSL Home

## Center for International Studies Home Page

## Study Abroad Programs

The University of Missouri St. Louis is committed to broadening students' understanding of different cultures and preparing them for the global community in which we live. One of the most successful ways of achieving this global mindset is to study overseas. The opportunity to live and study in a different culture is an enriching experience, both academically and personally.

The Office of Study Abroad in the Center for International Studies provides UMSL students with opporturities to study at over 80 different universities in more than 30 countries around the globe. Most programs run for an academic year, semester, or summer. Two to three week-long faculty-led programs are offered during the winter intersession and summer. Through individual advising at the Center's Study Abroad Office, stude tts can find the program best suited to their personal, academic, and career goals. Internship possibilities are also available for qualified students.

## Fees and Financial Aid

The cost of the program depends on the services provided and the country and city of study. For most programs, participants continue to pay UMSL fees plus airfare, room and board, and spending money. Students are usually housed in dormitories or are assisted in finding apartments. In most cases, students are able to use their UMSL financial aid toward a study abroad program. Study abroad scholarships are available for qualified applicants through the Center for International Studies.

## Application

Generally, applications are due in mid-February for summer, fall and academic year programs, and mid September for winter intersession and spring semester programs. Students should plan to spend at least: one or two months researching a program before applying.

Participant selection is based on academic achievement, faculty recommendations, approval of the proposed course of study via the department/divisional advisory process, and for some programs, proficiency in the foreign language of instruction. Most programs are designed for undergraduate students in their junior or senior years of study; however, a limited number of programs for freshmen, sophomores, and graduate students are available.

## Student Teaching Abroad

Teacher Education students may be able to student teach in Fuxin, China or Seoul, South Korea during the fall or spring semesters. In addition to meeting the other requirements for student teaching, students complete an application form for one of the sites.



## BULLETIN <br> シाI <br> $2(1) 2$

UMSL Home<br>Word Doc for Editing<br>Army ROTC Home Page Air Force_ROTC Home Page

Students interested in Reserve Officer Training Corps programs may enroll in either the Army ROTC program at UMSL or the Air Force ROTC program sponsored at UMSL through Saint Louis University. These programs provide undergraduate and graduate students with the opportunity to combine academic study with a military officer training program.

For further information concerning the Army ROTC program, contact the Military Science Department, telephone 314-516-7681 or check out our Website. For information on the Air Force ROTC program, contact the Aerospace Science Department at Saint Louis University, telephone 977-8227

## Army ROTC

The purpose of the Military Science Department is to develop young men and women into junior commissioned officers for positions of responsibility in the Army Reserve, Army National Guard, or Active Army.

## Benefits

Army ROTC offers UMSL students:

1) A challenging, important, well paid job at graduation in one of the many professional fields that the modern Army has to offer. Army officers serve in such fields as intelligence, military police, communications, engineering, transportation management, finance, combat arms, hospital administration, nursing, and research and development. Starting salary with allowances of an active duty second lieutenant is approximately $\$ 41,000$. Within four years he/she should be promoted to captain with a salary and allowances of nearly $\$ 67,000$. Reserve officers attend one weekend per month and an annual two week training camp.
2) College financing. All advance course and Army ROTC scholarship students receive $\$ 300-500 / \mathrm{month}$ stipend. Only scholarship students receive $\$ 1200$ per year for books and supplies. Also, advance course students may join the Reserves as an office trainee and receive pay while in college.
3) Full-time enrolled students may compete for the Army ROTC scholarship. The scholarship pays full tuition and mandatory fees plus $\$ 1,200.00$ per year for books and supplies.
4) Option of two careers. Upon graduation and commissioning as officers in the U.S. Army, students may fulfill their obligation by serving on active duty or reserve duty. Reserve officers spend one weekend a month being a soldier. Officers who serve on active duty receive 30 days paid vacation every year, free medical and dental care, travel, and the opportunity to pursue advanced degrees with educational assistance from the Army on a fully funded or partially funded basis.

## The Program

College students who complete the ROTC program earn commissions as second lieutenants in the U.S. Army. The ROTC program may be completed in several different ways as outlined below.

1) Four Year Program. The military science program is traditionally offered as a four year program. It is best to start as a freshman, but special arrangements can be made for those who start as sophomores. The first two years of military science are voluntary without service obligation, and are designed to give students a perspective on their leadership ability and what the Army can offer them. The student who decides to continue in ROTC and pursue a commission signs an agreement with the Department of the Army to accept a commission upon completion of the last two years of military science. In return the Army agrees to provide a subsistence allowance (up to $\$ 5,000$ ) and to provide all necessary uniforms and military science books.
2) Two Year Program. The two year program is designed to provide greater flexibility in meeting the needs of students desiring commissions in the U.S. Army. UMSL students who did not participate in the four year program and junior college transfer students are eligible for enrollment. Basic prerequisites for entering the two year program are:
A) The students must be in good academic standing (minimum 2.0 GPA) and pass an Army medical examination.
B) The student must have two academic years of study remaining (undergraduate, graduate, or combination). The student will attend a four week summer camp to catch up with the students in the four year program. Attendance at the basic camp does not obligate the student in any way and is only intended to give the student a look at Army life and opportunities. The student will be paid approximately $\$ 750$ for attendance at basic camp.

## Veterans

Veterans of any of the armed forces may qualify for advanced placement and should contact the Military Science Department for details.

## Scholarships

The Army ROTC currently has scholarships in effect, which pay full tuition and mandatory fees plus $\$ 1,203.00$ per year for books and supplies, and provide $\$ 300-500 /$ month for the academic year. These scholarships cover either four, three, or two years. UMSL freshmen and sophomores should apply in January for the twoand three year scholarships. Scholarship students may incur a four year active duty obligation; however, they may request reserve duty to serve with the Army National Guard or Reserve.

## Qualifications

All students who desire to enter the Army Reserve Officer Training Corps must be U.S. citizens, in good physical condition, and have high moral character. Students must be at least 17 years old to enroll and $n$ jt over 34 when they receive their commission. If the student will be older than 34 at the time of earning a degree, it is possible to be accepted into Army ROTC with a waiver. Additional qualifications to be admitted into the advanced course include an academic average of $C$ or better and passing an Army medical examination.

## Academics

UMSL Army Reserve Officers Training Corps academics consist of two parts:

1) Earning a degree in the student's chosen academic subject.
2) Completing 22 credit hours (four year program) or 12 credit hours (two year program) of the militar!' science curriculum. The courses in military science are college level academic courses which receive full academic credit toward the student's elective degree requirements in the College of Business Administration and the College of Education. The curriculum consists of classroom instruction and a leadership laboratory in which students receive leadership experience.

## Leadership Laboratory

Leadership laboratory is required of all students enrolled in military science courses. Classes are two hour; every Thursday afternoon from 4 p.m. to 6 p.m., unless otherwise designated. In addition, students atterd one field training exercise each semester. Leadership laboratory develops individual military skills and leadership ability through participation in drill and ceremonies, survival training, mountaineering, field training exercises, and exposure to progressively greater responsibilities within the Cadet Corps organization.

## Graduate Study

The Army realizes the importance of a graduate degree for its personnel. There are several programs available to assist ROTC graduates in obtaining an advanced degree. The Army sends selected second lieutenants immediately to graduate school (with full pay and allowances) to pursue advanced degrees in engineering and the physical sciences. Other officers may postpone active duty for two years to continue graduate study. Students who are accepted into medical school may take up to four years to complete their studies. There are numerous opportunities for an officer to complete a master's degree in service and receive financial assistance from the Army.

## Special Training

Selected volunteers may attend one of several special schools during the summer: the Airborne Course at Fort Benning, GA; Air Assault School at Fort Campbell, KY; or the Northern Warfare School in Alaska. Successfut course completion earns the coveted badge (such as the jump wings or air assault wings) associated witt each school. Special cadet troop leadership training is available on a limited basis. Students participating $n$ the program live and work with an active Army unit during part of one summer.

## Cadet Activities

Army ROTC students may participate in many extracurricular activities during the year. Social activities
include the Army Military Ball, picnics, and informal parties. Army ROTC students also support various campus and community service activities. Interested students also participate in the Drill Team, Color Guard, Air Rifle Team, and Ranger Challenge Team.

## Course Descriptions

## Military Science

## MIL SCI 1101 Introduction to ROTC (2)

Make your first new peer group at college one committed to performing well and enjoying the experience. Increase self-confidence through team study and activities in basic drill, physical fitness, rappelling, leadership reaction course, first aid, making presentations and basic marksmanship. Learn fundamental concepts of leadership in a profession in both classroom and outdoor laboratory environments.

MIL SCI 1102 Introduction to Leadership (2)
Learn/apply principles of effective leading. Reinforce self-confidence through participation in physically and mentally challenging exercises with upper division ROTC students. Develop communication skills to improve individual performance and group interaction. Relate organizational ethical values to the effectiveness of a leader.

MIL SCI 2201 Self/Team Development (3)
Learn/apply ethics-based leadership skills that develop individual abilities and contribute to the building of effective teams of people. Develop skills in oral presentations, writing concisely, planning of events, coordination of group efforts, advanced first aid, land navigation and basic military tactics. Learn fundamentals of ROTC's Leadership Development Program.

MIL SCI 2202 Individual/ Team Military Tactics (3)
Introduction to individual and team aspects of military tactics in small unit operations. Includes use of radio communications, making safety assessments, movement techniques, planning for team safety/security and methods of pre-execution checks. Practical exercises with upper division ROTC students. Learn techniques for training others as an aspect of continued leadership development.

MIL SCI 3301 Leading Small Organizations I (3)
Series of practical opportunities to lead small groups, receive personal assessments and encouragement, and lead again in situations of increasing complexity. Uses small unit defensive tactics and opportunities to plan and conduct training for lower division students both to develop such skills and as vehicles for practicing leading.

## MIL SCI 3302 Leading Small Organizations II (3)

Continues methodology of MIL SCI 3301 or permission of instructor. Analyze tasks; prepare written or oral guidance for team members to accomplish tasks. Delegate tasks and supervise. Plan for and adapt to the unexpected in organizations under stress. Examine and apply lessons from leadership case studies. Examine importance of ethical decision making in setting a positive climate that enhances team performance.

MIL SCI 4401 Leadership Challenges and Goal Setting (3)
Prerequisite: MIL SCI 3302 or permission of instructor. Leadership and Management, begins with a series of lessons enabling the students to make informed career decisions as they prepare for accession into the United States Army. The lessons concentrate on Army operations, training management, communications, counseling, leadership skills, and they support the final transition from cadet to lieutenant.

## MIL SCI 4402 Officership/Transition to Lleutenant (3)

Prerequisite: MIL SCI 3401 or permission of instructor. Transition to Lieutenant completes the evolution from cadet to lieutenant by focusing on three areas: first, students are given a basic foundation in military law; second, students build on previous courses to successfully negotiate case studies and practical exercises; third, students will complete a Senior Leadership Project whereby students integrate, apply, and demonstrate their knowledge of military operations.

MIL SC 4411 Advanced Military Science Studies 5 (3)
Prerequisites: MIL SCI 4401 or permission of instructor. An in-depth study of the role of the officer in the United States Army.

MIL SC 4412 Advanced Military Science Studies 6 (3)
Prerequisites: MIL SCI 4401 or permission of instructor. A study of how the United States Army officer develops the leadership traits necessary to lead soldiers into battle.

## MIL SC 4413 Military Medical Technologies Independent Study (3)

Prerequisites: MIL SCI 4402. This course explores how medical advances have improved soldiers' chances of surviving battlefield injuries from the Civil War to the Iraq War. Also explores how soldiers are now surviving more catastrophic injuries and what the implications are on long term health care for these soldiers both physically and mentally.

## Air Force ROTC

The objective of the Air Force Reserve Officer Training Corpsis to qualify students for appointment as active duty second lieutenants in the United States Air Force. However, any student may enroll in the freshman/ sophomore level aerospace studies courses, and students may also enroll in the junior/senior level courses with permission of the professor of aerospace studies.

UMSL offers the two and four year AFROTC programs through an agreement with Saint Louis University. The four year program is tailored for students with three or more years of undergraduate studies remaining. Students with junior standing or above may apply for entry into the two year program. Entry into the two year program is competitive and is based on standardized test scores, academic major, grade point: average, physical examination, personal interview with the professor of aerospace studies, and successful completion of a summer field training session at an Air Force base. Applicants must be full time students and must remain in good academic standing.

## Reserve Officer Training Corps

The AFROTC Program is divided into the general military course (GMC), the freshman/sophomore level curriculum; and the professional officer course (POC), the junior/ senior level curriculum. The GMC covers two main themes; the Air Force today and the Air Force way. The courses of the POC emphasize the professional development of the future Air Force officer. The curriculum covers Air Force leadership and management and preparation for active duty. Field trips to Air Force bases supplement classroom instruction and familiarize the cadet with Air Force operations and organization.

## To be commissioned, AFROTC students/cadets must:

1) Pass a medical exam at a military medical facility.
2) Obtain a favorable evaluation on an Armed Forces personal history security investigation.
3) Flying applicants must complete commissioning requirements before age $261 / 2$, and nonflying applicants must complete commissioning requirements by age 30 . However, the age limit for nonflying applicants may be extended to age 35 for outstanding individuals.
4) Be of good character (as determined by a favorable record with law enforcement authorities).
5) Successfully complete all AFROTC course requirements.
6) Complete at least a baccalaureate degree.

Air Force ROTC textbooks are loaned to all AFROTC students without charge. Students in the POC will receive a monthly subsistence allowance of $\$ 150$ per month for a maximum of 20 months, an Air Force uniform, in excess of $\$ 700$ for the summer field training course, and a travel allowance to and from the training location.

In addition to the AFROTC courses offered for academic credit, the Aerospace Studies Department sponsors the Arnold Air Society and Angel Flight. Arnold Air Society is a national honorary service organization, and membership is open to anyone interested in bringing to the local community a better understanding of the Air Force mission and its leaders.

AFROTC field training is offered during the summer months at selected bases throughout the United States, usually between a student's sophomore and junior years. Students in the four year program participate $\mathbf{n}$ four weeks of field training. Major areas of study include junior officer training, aircrew/aircraft orientation, career orientation, survival training, base functions and Air Force environment, and physical training. Students applying for entry into the two year program must successfully complete six weeks of field training prior to enrollment in the professional officer course. The major areas of study included in the six week field training program are essentially the same as those conducted at four week field training, plus the academic curriculum of the general military course including leadership laboratory. POC cadets are eligible for a $\$ 1,000$ per semester federal AFROTC scholarship.

Leadership Laboratory is taken once per week throughout the student's enrollment in AFROTC. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop each student's leadership potential. Leadership laboratory involves a study of Air Force customs and courtesies, drill and ceremonies, career opportunities in the Air Force, and the life and work of an Air Force junior officer. It also includes field trips to Air Force installations throughout the United States.

Other training volunteers may attend various special cadet training programs such as light aircraft trainin j, parachute jump training, and advance cadet training. Students participating in the latter work with an Air Force unit during part of the summer.

The Air Force offers four , three , and two year scholarships to qualified students. These scholarships pay
tuition, certain fees, and textbook cost. Scholarship recipients receive $\$ 150$ per month subsistence allowance. For further information on the Air Force ROTC program at UMSL, call (314) 977 8227, or at Southern Illinois University at Edwardsville (SIUE), call (618) 6923180.

## Aerospace Studies

The Aerospace studies program is divided into two parts: the general military course, the freshman/sophomore level curriculum, and the professional officer course, the junior/senior level curriculum. The GMC covers two main themes: the Air Force today and the Air Force way. The courses of the POC emphasize the professional development of the future Air Force officer. The curriculum covers Air Force leadership and management and preparation for active duty. Field trips to Air Force bases supplement classroom instructions and familiarize the cadet with Air Force operations and organizations.

Leadership laboratory is taken two hours per week throughout the student's enrollment in the AFROTC. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop each student's leadership potential. The first two years of the leadership laboratory includes a study of Air Force customs and courtesies, drill and ceremonies, issuing military commands, instructing, directing and evaluating the preceding skills, studying the environment of an Air Force officer and learning about areas of opportunity available to commissioned officers. The last two years of lab consist of activities classified as advanced leadership experiences. They involve planning and controlling military activities of the cadet corps, preparation and presentation of briefings and other oral and written communications, and providing interviews, guidance, and information which will increase the understanding, motivation, and performance of other cadets.

AFROTC cadets must also successfully complete supplemental courses to enhance their utility and performance as commissioned officers. These include university courses in English composition and mathematical reasoning. Specific courses are designated by the professor of aerospace studies.

Cadets in the four year program participate in four weeks of field training. Cadets in the two- or three-year programs (exception for prior AF service) must attend the six-week FT session, which is identical to the fourweek program plus 90 hours of GMC curriculum. Field training is offered during the summer months at selected bases throughout the United States, usually between a student's sophomore and junior years. Major areas of study include Air Force orientation, officer training, aircrew/aircraft orientation, survival training, base functions, and physical training.

Students applying for entry into the two- or three- year program must successfully complete six weeks of field training prior to enrollment in the professional officer course. The major areas of study included in the sixweek field training program are essentially the same as those conducted at four week field training, plus the academic curriculum of the general military course including leadership laboratory. No direct academic credit is awarded for field training.

Federal scholarships are available for AFROTC cadets--any academic major may apply. Applications are to be submitted by detachment personnel to Headquarters Reserve Officers Training Corps, Maxwell Air Force Base, AL.

Participation in AFROTC is not required to take aerospace courses.
Lower Division (General Military)
Aerospace studies courses (AERO 1001 through AERO 1002) are basic courses designed to acquaint students with the United States Air Force and the opportunities available as an officer. Grades earned in these courses will be computed in the student's overall grade point average, but credit hours for these courses will not be included in the total hours for graduation.

## Course Descriptions

## AERO 1001/1002 The Air Force Today (2)

A survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. Leadership Laboratory is mandatory for AFROTC cadets, and it complements this course by providing students with followership experiences. Classroom activity, two hours per week; Leadership Laboratory two hours per week, each semester.

## AERO 2001/2002 The Air Force Way (2)

Survey course designed to facilitate the transition from Air Force ROTC cadet to Air Force ROTC candidate. Featured topics include: Air Force heritage, Air Force leaders, Quality Air Force, an introduction to ethics and values, introduction to leadership, group leadership problems, and continuing application of communication skills. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with their first opportunity for applied leadership experiences discussed in class. Classroom activity, two hours per week; Leadership Laboratory two hours per week, each semester.

## Upper Division(Professional Officer) Courses

Aerospace Studies courses AERO 3001 through AERO 4002 are advanced courses designed to improve communication and management skills required of Air Force officers. Credit hours of these courses may be included in the hours needed for graduation at the discretion of individual departmental chairpersons.

## AERO 3001/3002 Air Force Leadership and Management (3)

The study of leadership and quality management fundamentals, professional knowledge, Air Force doctrine, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory leadership laboratory complements this course by providing advanced leadership experiences in officer type activities, giving students the opportunity to apply leadership and management principles of this course. Classroom activity, three hours per week; Leadership Laboratory two hours per week, each semester.

## AERO 4001/4002 Preparation For Active Duty (3)

Examines the national security process, regional studies, advanced leadership ethics, Air Force doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this; structure, continued emphasis is given to refining communication skills. An additional Leadership Laboratory complements this course by providing advanced leadership experiences, giving students the opportunity to apply leadership and management principles of this course. Classroom activity, three hours per week; Leadership Laboratory two hours per week, each semester.

## Field Training

Field Training provides leadership and officership training in a military environment, which demands conformity to high physical and moral standards. Within this structured environment, cadets are screened for officer potential as measured against field training standards. Motivation and professional development is achieved through various programs such as flight orientation, marksmanship, and survival training. Students in the four year program participate in four weeks of field training. Field training is offered during the summer months at selected bases throughout the United States, usually between a student's sophomore and junior years. Major areas of study include: Air Force Orientation, Officer Training, aircrew/aircraft orientation, survival training, base functions and physical training.

## BULLETIN <br> 2018

## Division of Student Affairs

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The Office of the Vice Provost for Student Affairs, located in 301 Woods Hall 314-516-5211, offers assistance and a wide variety of services to students. The office is responsible for administering the Student Conduct Code, confidentiality of student records, and the Discrimination Grievance Procedure for Students as well as all of the student service operations below.

## Admissions

The Office of Admissions is located in 351 Millennium Student Center, 314-5165451. The Admissions Office is generally the first point of contact for information and assistance with planning for the college decision process. The Office of Admissions arranges tours of campus, sponsors open houses throughout the year for both firsttime freshmen and transfers, and processes admission applications. Prospective students and families as well as applicants can arrange to meet personally with admission counselors. Counselors will provide information on applying for financial aid and scholarships, placement tests, and new student orientation.

## Athletics

## Intercollegiate Sports

The Iritons 314-516-5661 compete at the NCAA Division II level and are members of the Great Lakes Valley Conference. The women's intercollegiate athletic program includes basketball, soccer, tennis, volleyball, golf, and softball. The men's intercollegiate athletic program includes basketball, soccer, golf, baseball, and tennis. Scholarships are available for both men and women in all sports. Both men's and women's athletic teams have brought both local and national recognition to the university for more than 20 years, with one national championship and numerous trips to the NCAA Tournament in several sports. UMSL students with validated IDs are admitted free to all home athletic contests.

## Recreational Sports

Campus Recreation 314-516-5125 provides students, faculty, staff, and alumni with recreational sports programs geared toward the interests of the entire university community. Current intramural activities include touch football, basketball, volleyball, racquetball, golf, tennis, bowling, softball, hoc soc, fun run, soccer, indoor floor hockey, and weight lifting. The office encourages the campus community to suggest additional sports.

## Facilities

The athletic and exercise areas in the Mark Twain Building 314-516-5641 are available for use by the university community at specified hours. During the regular semester, the building is open seven days a week and on specified evenings. Facilities include basketball, volleyball, badminton, and handball/racquetball courts, an aerobic dance room, and an NCAA regulation swimming pool. The facilities also include two conditioning and fitness rooms with state oftheart equipment, an indoor running track suitable for walking or running, and a sauna. Outdoor facilities include baseball, softball, soccer, intramural fields, and tennis courts.

## Career Services

Career Services assists students and recent graduates with planning, creating, implementing and evaluating career development and job search strategies by working in partnership with employers and the campus community.

A professional is available in 278 Millennium Student Center or by phone 314-516-5111 to guide students and recent graduates in the job search for internships/co-ops and full-time degree-related positions.

Career development services are designed to help students choose a major and/or career. The Career Services website includes a wealth of job outlook and salary information and links to numerous job search sites. UMSLCareerKey provides students access to job leads (please see Internships for information on
internships, co-op, and part-time degree-related positions), on-campus interview opportunities, and resume referrals to employers.

Career Services holds annual internship \& job fairs with free admission to UMSL students/alumni who pre:register.

## Center for Student Success

The Center for Student Success, located in Room 225 Millennium Student Center 314-516-5300 promotes the collegiate success of students by providing quality programs and services that advance students' academic achievement, educational goals, career development and adjustment to the university. We encourage students to assume responsibility for their decisions as they move toward their goals. The Center strives to continually improve our collaborative relationships with the campus community and the quality of service provided to all students. College students face many challenges unique to their college academic experiences and will certainly have questions or concerns. The Center is committed to helping students deal with academic concerns, connect to campus resources and meet educational goals.

## Disability Access Services

Located in 144 Millennium Student Center, Disability Access Services 314-516-6554 voice or 314-516-5212 for TDD provides information, guidance, referral services, and assistance for students with disabilities.

## Provisions for Auxiliary Aids, Reasonable Accommodations, and other Services to Students with Disabilities

Since the University of Missouri is committed to equal educational opportunities for qualified students wit nout regard to disabling condition, the university will take necessary action to ensure that no qualified student with a disability is denied access to any particular course or educational program. Such action includes an assessment of the student's abilities and an evaluation of the requirements of the particular course or program.

If the University determines that some type of auxiliary aid is required, it will assist the qualified student in obtaining the necessary auxiliary aid from other sources. If the necessary auxiliary aid is not available from other sources, the university, at its option, will provide the necessary appropriate auxiliary aid.

Requests for the assessments must be made to the Program Coordinator of Disability Access Services no later than six weeks prior to the beginning of the next semester. Decisions may be appealed by following the Discrimination Grievance Procedure in the Student Planner.

The University will make reasonable modifications to its academic requirements, if necessary to comply with legal requirements ensuring that such academic requirements do not discriminate or have the effect of discriminating on the basis of a student's known and adequately documented disability, unless the requested modification would require alteration of essential elements of the program or essential elements of directl, related licensing requirements or would result in undue financial or administrative burdens. The divisiona dean's office, in cooperation with the Program Coordinator of Disability Access Services and the department through which the requirement is fulfilled, will determine the appropriate modification or substitution.

## Student Financial Aid

The Office of Student Financial Ald is located in 327 Millennium Student Center 314-516 students with applying for financial aid, including scholarships, grants, loans, and work study. In addition to regular business hours, the office is open during the evening (Mondays - Thursdays) to accommodate bo:h day and evening students. Appointments are not necessary.

To apply for aid, students must complete a Eree Application for Federal Student Aid (FAFSA). Around midApril, Student Financial Aid will begin awarding federal, state, and institutional funds to new students who have been admitted, completed the FAFSA, and we have received their official Student Aid Report (SAR) rom the Federal Processing Center. Returning UMSL students can expect to receive their financial aid awards around mid to late June

To be considered for all UMSL scholarships, students must be accepted for admission and have completed an UMSL scholarship application. There are separate forms for incoming freshmen and continuing students.

The Student Financial Aid website has useful information, including a scholarship directory that is updatec biweekly. Some departments also have scholarships for their majors, so students should contact those departments for the specific information.

## Registrar/Registration/Records

The Office of the Registrar, located in 269 Millennium Student Center, 314-516-5545 is responsible for registration, academic records, grades, transcripts, enrollment verification, veteran certification, change of name and/or address, ordering diplomas, and many other enrollment related services. No appointment is:
needed for service, and hours are convenient for both day and evening students.

## Degree Audit

The Degree Audit office, 225 Millennium Student Center, 314-516 6814, provides an automated record (DARS report) that reflects a student's progress toward degree completion. This report is very useful in planning a major, tracking graduation requirements, and investigating other areas of study. DARS reports are available online or from a student's academic adviser, who will assist in the interpretation of the audit.

## Office of Residential Life

Located in 101A Provincial House 314-516-6877, the Office of Residential Life and Housing offers contracts for 9 and 12 months for on-campus housing year-round in air-conditioned, furnished residence halls, in which 93 percent of rooms are singles. Residence Hall rates include all utilities, local phone service, cable, combination refrigerator and microwave, data communications hook-ups, and a tax-exempt declining-balance meal plan. The halls also offer a large swimming pool as well as laundry facilities, kitchenettes, common TV lounges, and the free campus shuttle.

For students who are at least 21 years of age, Mansion Hill Condominiums and University Park Apartments offer one-and two-bedroom unfurnished apartments. The complex is on the free campus shuttle route and offers swimming pool, picnic areas, recreation areas, and laundry facilities with rent billed to students' university account. Students interested in living in upper-class housing should contact the apartment coordinator at 314-524-9446.

As one of the most active and visible student organizations on campus, the Residence Halls Association (RHA) serves as the student voice for residence hall students, providing leadership opportunities and activities both on- and off-campus. Residential students are active in intramurals, student organizations, campus leadership positions, and other university activities. Tours of the UMSL residence halls are available by calling 314-5166877.

## Office of Student Life

The Office of Student Life (OSL), 366 Millennium Student Center 314-516 5291, advises and serves as a facilitator for programs and services provided to student organizations at the University of Missouri St. Louis. OSL sponsors a diverse series of educational, cultural, recreational, and social programs, services, and activities that complement the academic mission of the campus and attend to developmental needs of students at UMSL.

More than 100 student organizations at UMSL ranging in size from 13 to 500 members, address the educational, cultural, social, recreational, and spiritual co-curricular needs of the campus community. Social fraternities and sororities, performing and fine arts,academic clubs, curriculum related support groups, and other special interest clubs enhance the collegiate experience. Information regarding student organizations is available in 366 Millennium Student Center. Specific organizations may be contacted by mail through the same address.

## University Program Board

The University Program Board, a volunteer group, initiates and implements a variety of lectures and performances by comedians and musical groups throughout the year. The board also sponsors games, tournaments, and discounted tickets for local sporting events, concerts, and theater. Most campus events are free to the campus community and are subsidized by student activity fees. Membership in this organization is open to students who are interested in coordinating these types of programs.

## Student Government Association

The Student Government Association (SGA) of the University of Missouri St. Louis, housed in 366 Millennium Student Center 314-5165105, is the student governance body composed of both elected student representatives from each school and college and organizational representatives from every recognized student organization that petitions for representation. The purpose of the SGA is to represent student concerns at every level of governance within the university. This is done by ensuring adequate and capable student representation within the University Assembly, the policy making and governance body of the university.

## Student Court

The Student Court is nominated by the SGA. The seven member court rules on student appeals concerning matters such as disputes between individuals and organizations, or organizations and organizations, as well as traffic parking appeals.

## University Bookstore and Triton Tech

The University Bookstore 314-516-5763 is the headquarters for textbooks, reference materials, general reading books, supplies, gifts, Triton gifts and numerous logo items. Triton Tech, located in the bookstore, offers discounted software and hardware. In addition, UPS shipping services are available, as well as fax
services and free notary service. Each year the bookstore sponsors special events such as Annual Fashion Show, Book Signings, Student Appreciation, Book Buy Back at the end of each semester, and more. All profits from the bookstore support operating expenses of the Millennium Student Center.

## University Health, Wellness, and Counseling Services (UHWCS)

UHWCS provides services to students, faculty and staff from a holistic perspective to assist students in maintaining their optimum level of wellness so that they are able to achieve their maximum academic potential. The UHWCS receptionist arranges appointments via calls (314-516-5711) or drop-in visits at 131 Millennium Student Center. In an emergency, students can usually be seen immediately. UHWCS services are organized into three major areas: Health Services, the Wellness Resource Center, and Counseling Services.

## Health Services

Health Services staff offer the following services: Treatment of minor injury and illness, screening exams; immunizations, strep throat testing, pregnancy testing, well women's exams (including Pap smear), birth control, flu shots, urinalysis, and allergy injections. Assistance with referral to medical facilities is provided upon request and when necessary. Students and employees may call (314-516-5671) or visit 131 MSC to schedule an appointment.

Student Accident and Sickness Insurance (optional for U.S. citizens): An Accident and Sickness Insurance plan is available to students and their dependents. Information concerning premiums and coverage is available upon request from University Health Services.

Immunizations: The university requires that all newly enrolled or readmitted students born after 1956 comply with the two dose MMR(Measles, Mumps, Rubella combined) policy. If a second immunization is needed it must be the combined MMR vaccine. Meningococcal vaccine is required for students residing in campus housing. Tuberculosis (TB) screening is required for students in the following categories: lived far two months or more in Asia, Africa, Central or South America, Eastern Europe; health care workers, volunteers and employees of nursing homes, prisons or other residential institutions; or contact with a person knovin to have active tuberculosis. Proof of immunizations (copies of immunization records) should be submitted to UHWCS in 131 MSC. The immunization policy and form on the Health Services website.

## Wellness Resource Center

The Wellness Resource Center sponsors programs for smoking cessation consultation, classes, and support groups, alcohol issues support groups, sexual assault awareness, and Safe Spring Break. The center also provides information on a variety of health issues, raising awareness, and encouraging healthy lifestyle choices. In addition, blood drives held each semester offer students an opportunity to give back to their community. Students may take a health risk appraisal and get assistance with developing a personal wellness plan, which includes diet/nutrition management along with blood pressure, cholesterol and body fat percentage measurement.

## Counseling Services

Counseling Services provides personal counseling, consultation, psycho-educational workshops and presentations to classes and student groups. We take the confidentiality of your contacts with us very seriously. Except for the case of very extreme situations, both the content of counseling sessions and the fact that a student or employee has used our services are kept strictly confidential.

Personal Counseling can help students navigate through times of stress and/or overcome barriers to suczess. Some of the common issues for which students seek counseling include stress/anxiety, depression, low selfesteem, relationship or family issues, grief/loss, eating disorders, sexual assault, and a history of abuse.

Student groups and faculty are invited to call Counseling Services 314-516-5711 for speakers on such tcpics as test anxiety, assertiveness, healthy relationships, dealing with difficult people, personality styles, etc.

## Welcome Center

The Welcome Center ( 257 MSC, across from the Bookstore) is the hospitality center of the campus. Staft answer questions and provide directions to all campus offices. The center also serves as the tour headquarters for prospective students and contains information from all departments, colleges, and offices. The Welcome Center welcomes all visitors to UMSL.

## BULLETIN <br> こ(1)| <br> $2(1) 2$

## iter for International Studies

UMSL Home<br>Center for International Studies Home Page<br>Faculty

Joel Glassman, Associate Provost, Academic Affairs and Associate Professor of Political Science. Director Ph.D., University of Michigan
Adeniyi Coker, The E. Desmond Lee Professor in African and African American Studies and Professor of Theatre
Ph.D., Temple University
Michael Cosmopoulos, The Hellenic Government-Karakas Family Foundation Professor in Greek Studies and Professor of Archaeology
Ph.D., Washington University in St. Louis
Hung-Gay Fung, The Dr. Y.S. Tsiang Professor in Chinese Studies and Professor of Finance Ph.D., Georgia State University
Laura Miller, The Eiichi Shibusawa-Seigo Arai Professor in Japanese Studies and Professor of Anthropology Ph.D., University of California, Los Angeles
E. Wendy Saul, The Dr. Allen B. and Mrs. Helen S. Shopmaker Professor in Education in cooperation with Springboard and Professor for Education
Ph.D., University of Wisconsin-Madison
Eamonn Wall, The Smurfit-Stone Corporation Professor in Irish Studies and Professor of English Ph.D., City University of New York

## General Information

The Center for International Studies supports academic programs, seminars, and conferences designed to promote research in international studies, improve teaching of international studies, and encourage an interest in international affairs in the university and area communities.

The Center houses the Joint Center for East Asian Studies of UMSL and Washington University, the E. Desmond Lee Global Ethnic Collaborative, the Karakas Family Foundation Alliance for the Advancement of Hellenic Studies, and the Endowed Professorships in African/African American Studies, Chinese Studies, Greek Studies, international education, Irish Studies, Japanese Studies, the German Culture Center and the Greek Culture Center.

## Fellows

Each year a number of UMSL faculty are appointed as research Fellows.

## Study Abroad and Exchange Programs

The Study Abroad section of this Bulletin contains details about campus study abroad and international exchange programs. The center's Study Abroad Office administers those programs.

Office of International Student and Scholar Services
The office of International Student and Scholar Services provides services for international students and scholars, including admissions, visa and immigration matters, credential evaluations, health insurance, tax matters, nonacademic advising, initial campus arrival, orientation, social activities, and referrals to other campus units.

## Undergraduate Certificate Programs

The Center offers a wide variety of certificates, which provide our students the opportunity to develop expertise in international subjects. These programs usually combine course offerings from several departments so the subject is examined from a multidisciplinary approach. While most persons who earn certificates do so in the process of completing their undergraduate degree, a certificate may be completed by non-degree seeking students.

Africana Studies Certificate
Students seeking the Africana studies certificate have two options: an emphasis in African studies and an
emphasis in African diaspora studies.

## Option I. African Studies:

1) At least one course in two of the following areas a total of nine credit hours:
```
Area 1: Anthropology
ANTHRO 2124, Cultures of Africa
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Area 2: Art and Art History
ART HS 1105, Introduction to The Arts of Africa
Area 3: History
HIST 1061, African Civilization to 1800
HIST 1062, African Civilization Since 1800
Area 4: Political Science
POL SCI 2580, African Politics
2) One course from each of the following areas, a total of six credit hours:

```
Area 1: Anthropology
ANTHRO 3235, Women in Sub-Saharan Africa: A Contemporary Perspective
```


## Area 2: History

HIST 2062, West Africa Since 1800
3) An independent study course (three credit hours) in which a research paper will be written on some aspect of one of the fields offered in the program.

Option II. African Diaspora Studies

1) One course from each of the following areas, a total of six credit hours.

## Area 1: Africa

Anthropology
ANTHRO 2124, Cultures of Africa
History
HIST 1061, African Civilization to 1800
HIST 1062, African Civilization Since 1800
Area 2: Diaspora
Anthropology
ANTHRO 1005, Introduction to Biological Anthropology
History
HIST 1003, African-American History
HIST 1064, The African Diaspora Since 1800
HIST 2016, African-American History: From Slavery to Civil Rights
HIST 2017, African-American History: From Civil Rights to Black Power
2) At least one course from each of the following areas, a total of nine credit hours:

## Area 1: Africa

## Anthropology

ANTHRO 2191, Special Topics in Non-Western Cultures
ANTHRO 3235, Women in Sub-Saharan Africa: A Contemporary Perspective
Art and Art History
ART HS 1105, Introduction to the Arts of Africa
History
HIST 2062, West Africa Since 1800
Political Science
POL SCI 2580, African Politics
Area 2: Diaspora

## Communication <br> COMM 3332, Intercultural Communication

History
HIST 2015, Topics in African-American History
HIST 2063, African Diaspora to 1800
HIST 2064, African Diaspora Since 1800
Music
M H L T 1060, Introduction to African-American Music
Political Science
POL SCI 2320, African Americans and the Political System
Sociology
SOC 4360, Sociology of Minority Groups
3) An independent study course (three credit hours) in which a research paper will be written on some aspect of one of the fields offered in the program.

## East Asian Studies Certificate

1) First- and second-year Chinese, Japanese, or other appropriate Asian language ( 20 hours taken in four semesters).
2) HIST 1041 and HIST 1042, East Asian Civilization
3) One course in three of the following areas, a total of nine hours:
```
Area 1: Anthropology
ANTHRO 2111, Cultures of East Asia
ANTHRO 2191, Special Topics in Non-Western Cultures (when appropriate)
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Area 2: Art and Art History
ART HS 1108, Introduction to the Arts of Asia
ART HS 4408, Topics in Arts of Asia
Area 3: Business Administration
FINANCE 3581, Business in China
MGMT 3684, The Japanese Management System
Area 4: Foreign Languages and Literatures-Chinese
CHINESE 1005, Chinese Calligraphy and Writing in East Asia (1)
CHINESE 1199, Special Topics: Language Immersion: Chinese (1)
CHINESE 2150, Chinese Literature in Translation
CHINESE 2190, Special Readings (1-3)
CHINESE 2199, Special Topics: Language Immersion: Chinese
Area 5: Foreign Languages and Literatures-Japanese
JAPAN 1003, Japanese III
JAPAN 1005, Chinese Calligraphy and Writing in East Asia (1)
JAPAN 1199, Special Topics: Language Immersion: Japanese (1)
JAPAN 2150, Classical Japanese Literature in Translation
JAPAN 2190, Special Readings (1-3)
JAPAN 2199, Special Topics: Language Immersion: Japanese (1)
JAPAN 3201, Intermediate lapanese III
JAPAN 3202, Intermediate Japanese IV
JAPAN 3290, Special Readings (1-3)
JAPAN 4390, Special Readings (1-3)
Area 6: History
HIST 2031, Modern Japan: 1850 to Present
HIST 2032, Modern China: 1800 to Present
HIST 2033, Modern History of the Asian Pacific Rim
Area 7: Music
M H L T 1090, Non-Western Music I
Area 8: Philosophy
PHIL 1120, Asian Philosophy
Area 9: Political Science

## POL SCI 2550, East Asian Politics

Area 10: Social Work
SOC WK 2330, Asians in Migration
3) Independent Study Course: Students seeking the certificate must complete an independent study course (three credit hours) in which a research paper will be written focusing upon some aspect of East Asian Studies. The topic should be approved in advance by the Center for International Studies.

Modern European Studies Certificate (Name change pending Coordinating Board of Higher Education Approval)

1) Four semesters of college work or the equivalent in a modern European foreign language.
2) HIST 1032, Topics in European Civilization: 1715 to the Present.
3) One course each from at least four of the following areas, a total of 12 hours. Students should consult: advisers at the Center for International Studies to determine how these courses can best be arranged to neet their interests.

## Anthropology <br> ANTHRO 2192, Anthropological Perspectives on Western Culture

## Art and Art History

ART HS 2250, Nineteenth-Century European Art
ART HS 2255, Modern Art
ART HS 4445, Topics in Seventeenth-and Eighteenth-Century European Art ART HS 4455, Topics in Modern Art

Business Administration
MKTG 3787, Marketing in the European Union
Economics
ECON 3300, International Economic Analysis
English
ENGL 2280, The Contemporary World in Literature
ENGL 2320, English Literature II
ENGL 4450, The Eighteenth-Century English Novel
ENGL 4540, The Nineteenth-Century English Novel
ENGL 4580, Literature of the Late Nineteenth and Early Twentieth Centuries
ENGL 4750, Modern British Fiction
ENGL 4920, Major Works of European Fiction
History
HIST 2090, Eighteenth-Century European History
HIST 2091, Nineteenth-Century European History
HIST 2092, Europe 1900-1950: War and Upheaval
HIST 2093, Europe, 1950 - Present: Peace and Prosperity
Foreign Languages and Literatures
French
FRENCH 2110, Modern French Literature in Translation
FRENCH 2150, European Literature in Translation: Special Topics
FRENCH 3211, Contemporary French Culture
FRENCH 3281, French Literature II: Nineteenth and Twentieth Centuries
FRENCH 4353, Eighteenth-Century French Literature
FRENCH 4354, Eighteenth-Century French Theatre and Novel
FRENCH 4362, Nineteenth-Century French Novel
FRENCH 4371, Twentieth-Century French Novel
FRENCH 4375, Modern French Theatre
German
GERMAN 2180, Readings in German
GERMAN 3201, Introduction to German Literature
GERMAN 3210, German Culture and Civilization
GERMAN 3211, Topics in German Culture (when appropriate)
GERMAN 3281, German Literature and Culture II: Romanticism-Present
GERMAN 4311, Special Topics in German Culture (when appropriate)
GERMAN 4398, Survey of German Literature Part II
Modern Greek
GRK MOD 2150, Modern Greek Literature in Translation
GRK MOD 2190, Special Readings
Spanish
SPANISH 4310, Spanish Literature from 1898 to 1939
SPANISH 4311, Special Topics in Hispanic Culture
SPANISH 4315, Spanish Literature from 1939 to the Present
SPANISH 4320, Realism and Naturalism in the Nineteenth-Century Spanish Novel
SPANISH 4321, Poetry and Drama of the Nineteenth Century
SPANISH 4325, Poetry and Drama of the Golden Age
Music
M H L T 4240, Music of the Classic Period
M HLT 4250, Music of the Romantic Period
Philosophy
PHIL 1111, Western Philosophy II: Descartes to Present
PHIL 3303, Early Modern Philosophy
PHIL 3304, Kant and Nineteenth-Century Philosophy
PHIL 3305, Twentieth-Century Philosophy
PHIL 3369, The Marxist Heritage

## Political Science

POL SCI 2510, The Politics of European Union
POL SCI 2560, Russia and the New Republics
*POL SCI 3595, Studies in Comparative Politics (when appropriate)
*POL SCI 3890, Studies in International Relations (when appropriate)
*POL SCI 4510, Comparative Public Policy and Administration (when appropriate)

Independent Study Course: Students seeking the certificate must complete an independent study course (three credit hours) in which a research paper will be written focusing upon aspect of Modern European Studies. The topics should be approved in advance by the Center for International Studies.

## Greek Studies Certificate

1) Greek Language. Students must complete at least nine credit hours from the following courses.

## Ancient Greek

GRK ANC 1001, Ancient Greek I (5)
GRK ANC 1002, Ancient Greek II (5)
GRK ANC 2101, Intermediate Ancient Greek Language and Culture
GRK ANC 2151, Greek and Latin in English Today
GRK ANC 2152, A Brief Introduction to Greek and Latin in English Today (1)
GRK ANC 2190, Special Readings (1-3)
Modern Greek
GRK MOD 1001, Modern Greek I (5)
GRK MOD 1002, Modern Greek II (5)
GRK MOD 2101, Intermediate Modern Greek Language and Culture
GRK MOD 2102, Intermediate Modern Greek Language and Culture
GRK MOD 2150, Modern Greek Literature in Translation
GRK MOD 2190, Special Readings (1-3)
2) Students must complete at least nine credit hours from the following courses.

## Anthropology

ANTHRO 1037, The Wonders of Greece: Introduction to Greek History and Culture
ANTHRO 1052, The Olympic Games: Ideals and Reality
ANTHRO 2035, Ancient Greek Civilization and Culture
ANTHRO 2117, Greek History and Culture (same as HIST 2117)
ANTHRO 2190, Special Topics in Archaeology (only when appropriate)
ANTHRO 2192, Anthropological Perspectives on Western Culture (only when appropriate)
ANTHRO 3225, Ritual Death, and Sports: The Archaeology of Greek Mythology
ANTHRO 4309, Archaeological Field School (3-6) (only when appropriate)
ANTHRO 4350, Special Study (1-3) (only when appropriate)
ART HS 2211, Art and Archaeology of the Ancient World ART HS 2212, Greek Art and Archaeology

ART HS 3390, Special Study (1-10) (only when appropriate)
ART HS 4411, Topics in Ancient Art and Archaeology (only when appropriate)
ART HS 4490, Special Study (1-10) (only when appropriate)
ENGL 1200, Myth
HIST 1030, The Ancient World
HIST 2117, Greek History and Culture (same as ANTHRO 2117 and GK MOD 2772)
HIST 2291, War in Ancient Greece and Today: From Trojan War to Iraq
GRK MOD 2150, Modern Greek Literature in Translation
GRK MOD 2190, Special Readings (1-3)
Note: GRK MOD courses will count for either the language requirement or the focus area requirement but not for both.

MHLT 4270, A History of Byzantine Music and Hymnography
PHIL 3301, Ancient Philosophy
PHIL 4401, Plato
PHIL 4402, Aristotle

## International Business Certificate

1) Students must complete a minimum of 12 credit hours in some approved overseas study program focusing on international business which is approved by the College of Business Administration.
2) One course from Area 1 and one from Area 2 a total of six hours.

## Area 1: Business Administration

INTBUS 3280, The Law of International Business Transactions
INTBUS 3580/FINANCE 3580, International Corporate Finance
FINANCE 3581, Business in China
INTBUS3582/FINANCE 3582, International Investments
INTBUS 3680/MGMT 3680, International Management
MGMT 3682, Managing the Global Workforce
MGMT 3684, The Japanese Management System
MGMT 3685, Role of the Global Corporation
MGMT 3689, International Business and Society
MGMT 4689, International Strategic Management
INTBUS 3780/MKTG 3780, International Marketing
INTBUS 3787/MKTG 3787, Marketing in the European Union

## Area 2: International Studies

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ANTHRO 2111, Cultures of East Asia
ANTHRO 2114, Cultures of the Near and Middle East
ANTHRO 2124, Cultures of Africa
ECON 3300, International Economic Analysis
ECON 3320, Economic Development
POL SCI 3830, International Political Economy
POL SCI 3850, International Organizations and Global Problem Solving
SOC 3241, Globalization and its impact on Society and Culture
SOC 4354, Sociology of Business and Work Settings
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In lieu of a course from Area 2, students may substitute one course ( 3 credit hours) at the advanced level of a foreign language. Advanced level is defined as a course beyond the 13 credit hour introductory languäge sequence.
3) An independent study course is not required for this certificate option.

## International Affairs Certificate

1) Satisfactory completion of the language requirements for the degree program in which a student is enrolled.
2) POL SCI 1800, World Politics
3) A total of 12 credit hours from at least three of the following eleven areas:

## Area 1: Anthropology <br> ANTHRO 3236, Sex Trafficking in Cross-Cultural Perspectives

Area 2: Biology
BIOL 1202, Environmental Biology
BIOL 1350, Conservation of Biodiversity
BIOL 3202, Conservation Biology
Area 3: Business Administration
BUS AD 3288, Independent Study in International Business
BUS AD 3289, Practicum in International Business
BUS AD 3980, The Law of International Business Transactions
FINANCE 3580, International Finance
FINANCE 3581, Business in China
FINANCE 3582, International Investments
LOG OM 4381, International Logistics and Operations Management
MGMT 3680, International Management
MGMT 3682, Managing the Global Workforce
MGMT 3684, The Japanese Management System
MGMT 3685, Role of the Global Corporation
MGMT 3689, International Business and Society
MGMT 4689, International Strategic Management
MKTG 3780, International Marketing
MKTG 3787, Marketing in the European Union
Area 4: Communication
COMM 3332, Intercultural Communication
Area 5: Economics
ECON 3300, International Economic Analysis
Area 6: Geography
GEOG 1002, World Regions
Area 7: History
HIST 2014, American Foreign and Military Affairs, 1900-Present
HIST 2033, Modern History of the Asian Pacific Rim
HIST 2062, West Africa Since 1800
HIST 2064, African Diaspora Since 1800
HIST 2091, Nineteenth Century European History
HIST 2092, Europe, 1900-1950: War and Upheaval
HIST 2093, Europe 1900-1950: Peace and Prosperity
Area 8: Media Studies
MEDIA ST 2500, Introduction to Comparative International Media Systems
MEDIA ST 3354, Comparative Telecommunication Systems
MEDIA ST 3356, Global Media System and Trends
Area 9: Political Science
POL SCI 1820, Global Issues
POL SCI 2510, The Politics of European Union
POL SCI 2520, Middle Eastern Politics
POL SCI 2820, United States Foreign Policy
POL SCI 3830, International Political Economy
POL SCI 3850, International Organizations and Global Problem-Solving
POL SCI 3860, Studies in War and Peace
POL SCI 3890, Studies in International Relations
POL SCI 4850, International Law
Area 10: Social Work
SOC WK 2330, Asians in Migration
Area 11: Sociology
SOC 3241, Globalization and Its Impact on Society and Culture
SOC 4354, Sociology of Business and Work Settings
4) Independent Study Course: Students seeking the certificate must complete an independent study course ( 3 credit hours) in which a research paper will be written focusing upon some aspect of international affairs. The topic should be approved in advance by the Center for International Studies.

## Latin American Studies Certificate

1) Thirteen credit hours or the equivalent in Spanish.
2) Either HIST 1051, Latin American Civilization, or HIST 1052, Mexican Civilization, or SPANISH 3211, Hispanic Culture and Civilization: Spanish America.
3) A total of 12 hours from at least three of the following areas:

## Area 1: Anthropology

ANTHRO 2134, Archaeology of the Inca, Aztec, and Maya

## Area 2: History

HIST 1052, Mexican Civilization
HIST 2051, History of Latin America: To 1808
HIST 2052, History of Latin America: Since 1808
HIST 2097, History of Spain
Area 3: Political Science
POL SCI 2530, Political Systems of South America
POL SCI 2540, Political Systems of Mexico, Central America, and the Caribbean
POL SCI 3595, Studies in Comparative Politics (when appropriate to Latin America)
Area 4: Spanish
SPANISH 3211, Hispanic Culture and Civilization: Spanish America
SPANISH 3281, Introduction to Hispanic Literature: Spanish America
SPANISH 4345, Spanish-American Literature of the Twentieth Century
SPANISH 4351, Spanish-American Fiction in the Twentieth Century
4) Independent Study Course: Students seeking the certificate must complete an independent study cou se (three credit hours) in which a research paper will be written focusing upon some aspect of Latin American Studies. The topic should be approved in advance by the Center for International Studies.

## Graduate Certificate in International Studies

A Graduate Certificate in International Studies is a program of study featuring advanced multidisciplinary course work designed for individuals, including teachers and other professionals, who wish to expand their knowledge and understanding of international and cross-cultural affairs. The Certificate is sponsored by the Center for International Studies and the Departments of Economics, History, Foreign Languages and Literatures, and Political Science. A broad set of course offerings is available in these and other departments, with the flexibility for students to tailor the program to their particular interests and needs. The program has been developed as a vehicle for bringing together the resources of a distinguished faculty in international studies and for providing an opportunity for further graduate learning. Applicants to the Certificate program must meet the general requirements for admission to Graduate School as explained in the graduate study section of this Bulletin. The Certificate is awarded after completion of 18 hours, including a minimum of 12 hours drawn from a list of core courses and an additional six hours selected from a wide variety of offerin $j s$ in eight different disciplines. No more than 12 hours may be from any one discipline. Students may simultaneously earn a graduate degree and count credits earned in their degree program toward the Certificate when appropriate.

## Requirements

Students must complete at least 12 hours chosen from the following list of core courses:

## Business Administration <br> FINANCE 6580, International Finance, Investment, and Commercial Relations <br> LOG OM 5381, International Logistics and Operations Management <br> ACCTNG 5480, International Accounting

## Economics

ECON 5300, International Trade
ECON 5301, International Finance

```
History
HIST 6112, Readings in European History Since 1715
HIST 6113, Readings in East Asian History
HIST 6114, Readings in Latin American History
HIST 6115, Readings in African History
Political Science
POL SCI 6450, Proseminar in Comparative Politics
POL SCI 6451, Seminar in Comparative Politics
POL SCI 6480, Proseminar in International Relations
POL SCI 6481, Seminar in International Relations
POL SCI 6488, Studies in International Relations
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## Sociology <br> SOC 5410, Comparative Social Structures

Students must complete an additional six hours chosen from the following:

Economics<br>ECON 3300, International Economic Analysis<br>ECON 4980, Special Readings<br>English<br>ENGL 4920, Major Works Of European Fiction<br>History<br>HIST 4001, Special Readings [when appropriate]<br>Foreign Languages and Literature<br>FRENCH 4362, Nineteenth-Century French Novel<br>FRENCH 4371, Twentieth-Century French Novel<br>FRENCH 4375, Modern French Theatre<br>SPANISH 4310, Spanish Literature from 1898-1939<br>SPANISH 4315, Spanish Literature from 1939 to Present<br>SPANISH 4320, Realism and Naturalism in the Nineteenth Century Spanish Novel<br>SPANISH 4321, Poetry and Drama of the Nineteenth Century<br>SPANISH 4345, Spanish-American Literature of the Twentieth Century<br>SPANISH 4351, Spanish-American Fiction in the Twentieth Century

Music
M H LT 4250, Music of the Romantic Period
M H L T 4260, Music from 1900 to the Present
Political Science
POL SCI 4510, Comparative Public Policy and Administration POL SC 4850, International Law
POL SC 6485, Directed Readings and Research in International Relations
Note: Students may not count both BUS AD 6580 and BUS AD 3580 . No more than 12 credit hours may be from any one discipline.

# BULLETIN 2011 <br> 2012 <br> Division of Continulig Education 

## UMSL Home

## Division of Continuing Education Home Page

As the region's only public research university, UMSL serves students who are in many ways nontradition al in their demographic make-up, their approach to higher education, and their educational needs. Meeting the: needs of these nontraditional students while extending the expertise of the university to the community is the mission of the Division of Continuing Education.

Through Continuing Education, the university's colleges, schools, and centers administer a wide variety of: credit courses, noncredit programs, and problem-oriented research for the benefit of the greater St. Louis; metropolitan area and beyond. Programs are offered both on and off campus and online. Research, generally of an applied, urban-related nature, is designed to solve specific problems of client groups.

## Arts and Sciences

Continuing Education in the College of Arts and Sciences includes credit courses and noncredit programs rom the college's departmental disciplines, including courses and workshops in archaeology, microcomputers, writing, languages, history, and social and physical sciences. Interdisciplinary teaching and research prog ams deal with such fields as social work, the humanities, women's studies, and economics.

The Center for Entrepreneurship and Economic Education provides credit courses, noncredit programs and curriculum consultations to teachers and schools.

The Computer Education \& Training Center develops and teaches applied computer courses and offers a Chancellor's Certificates on the Computer, along with other certificate programs.

The Advanced Credit Program provides an enrichment experience for university-bound secondary stucents by offering freshman-level courses for college credit in selected high schools.

The Gateway Writing Project offers credit courses, noncredit programs, and a Graduate Certificate in the Teaching of Writing for elementary, secondary, and college-level teachers. The Gateway Writing Project works with schools and districts to provide professional development programs that meet their individual needs.

## Business Administration

Continuing Education credit and noncredit programs through the College of Business Administration are offered in multiple areas, including financial planning; training, facilitation and coaching best practices; organizational development; team leadership; human resource management; broad survey courses; a variety of short, targeted offerings; and customized courses designed to meet individual client needs. Several certificate programs are offered as well as preparatory courses for professional certification programs in financial planning, human resources, and project management.

## Education

The College of Education, which is accredited by the National Council for Accreditation of Teacher Education (NCATE) for the preparation of teachers, counselors, and administrators, offers an array of graduate and doctoral programs in education. Through the University's Division of Continuing Education, courses and programs are offered for both practitioners and those considering the field of education as a career. Many credit courses are available at sites throughout the metropolitan area, and professional development conferences and institutes are specially designed to help practitioners stay current in their fields of study. Programs also can be tailored to meet the specific needs of groups or organizations and can be offered on site or at other convenient places and times.

## Transition to Teaching Program

The Transition to Teaching Program provides a special certification route for individuals who currently holc bachelor degrees and who want to enter the teaching profession. The program is job-embedded and individuals work full time in classrooms while taking their certification coursework.

## Fine Arts and Communication

The College of Fine Arts and Communication offers a variety of Continuing Education activities to the community. Four endowed professorships are focused on community outreach in the arts. The award-winning E. Desmond Lee Music Education Collaborative, and other collaborative activities undertaken by the College in


BULLETIN

## UMSL Home

## College of Arts and Sciences Home Page

## General Information

The College offers a wide range of accredited baccalaureate, master's and doctoral degrees and multidisciplinary certificates through 14 departments, the School of Social Work and the Institute for Women's and Gender Studies.

Anthropology (B.A.)
Biochemistry \& Biotechnology (B.S., M.S.)
Biology (B.A., B.S., M.S., Ph.D.)
Chemistry and Biochemistry (B.A., B.S., M.S., Ph.D.)
Criminology and Criminal Justice (B.S., M.A., Ph.D.)
Economics (B.A., B.S., M.A.)
English (B.A., M.A., M.F.A.)
Foreign Languages and Literatures (B.A. in French and B.A. in Spanish)
History (B.A., M.A.)
Liberal Studies (B.L.S.)
Mathematics and Computer Science (B.A., B.S., M.A., M.S., Ph.D.)
Philosophy (B.A., M.A.)
Physics and Astronomy (B.A., B.S., M.A., Ph.D.)
Political Science (B.A., M.A., Ph.D.)
Public Policy and Administration (M.P.P.A.)
Psychology (B.A., M.A., Ph.D.)
Social Work (B.S.W., M.S.W.)
Sociology (B.A., B.S., M.A.)
Women's and Gender Studies (Certificate)
The College of Arts and Sciences consists of some 220 full-time faculty members in the following departments and school, each offering work in specific undergraduate degree programs: anthropology, biology, chemistry, criminology and criminal justice, economics, English, foreign languages and literatures, history, mathematics and computer science, philosophy, physics and astronomy, political science, psychology, social work, and sociology.
In addition the College offers a Bachelors Degree in Biochemistry and Biotechnology and a Bachelor of Science in Liberal Studies.

Graduate study degree programs, administered through the Graduate School, are also offered in the following departments of the College of Arts and Sciences: biochemistry and biotechnology, biology, chemistry, criminology and criminal justice, economics, English, history, mathematics and computer science, physics and astronomy, philosophy, political science, psychology, social work, and sociology. An interdisciplinary master's degree in public policy administration is offered in cooperation with the College of Business Administration. Specific degree requirements for both undergraduate and graduate degree programs are described in the departmental sections which follow this general information on the college.

Coursework in the evening or through on-line and/or video instruction is made available by all departments of the College and the School of Social Work. The following degree programs can be completed in the evening:

Bachelor of Arts in Biology, Chemistry, Economics, English, History, Mathematics, Physics, Political Science, Psychology, and Sociology.

Bachelor of Science in Biology, Chemistry, Computer Science, Criminology and Criminal Justice, Economics Mathematics, Physics, and Sociology.

Bachelor of Social Work
Bachelor of Liberal Studies
Consult the website of the department in which you plan to major for details on degree requirements and a
three year schedule of planned course offerings.

## Requirements for Undergraduate Study

All majors in the College of Arts and Sciences, including Bachelor of Liberal Studies, must meet the following requirements:

- Requirements of their chosen baccalaureate degree (i.e., B.A., B.S., BSW., etc.) in accordance with the policies of the College of Arts and Sciences, explained below.
- Requirements of the department for their selected major or interdisciplinary program.
- Requirements for the University's general education \& university requirements.


## Academic Policies

Grade Requirements
To graduate, all majors in the college must satisfy one of the following grade point options:

- Earn 120 graded hours with a C grade or better, which constitutes a complete degree program neither a grade of C- nor a satisfactory grade may be counted.
- Have a minimum UMSL campus grade point average of 2.0 and have met all other grade point restrictions for the degree or program.


## Cultural Diversity Requirement

To expand cultural awareness, students in some academic units may be required to complete a course that emphasizes Asian, African, Middle Eastern, Latin American, Pacific aboriginal, Native American, or a comparable culture. Courses that satisfy this requirement involve substantial material independent of the cultures' interactions with European cultures. If a course focuses on one facet of a culture, it must treat the topic within the context of the culture as a whole. These courses are also coded with the initials [CD] for Cultural Diversity. A list of courses which satisfy this requirement can be found in the introductory section of this Bulletin.

## Residency Requirements

Transfer students must complete at least 30 of the last 36 hours of their degree program in residence at the University of Missouri-St. Louis.

Unless otherwise specified, a transfer student must complete 12 hours of graded work at UMSL at the 2000 level or above within the minimum number of hours required for each major.
Unless otherwise specified, a transfer student must complete at least six hours of graded work at UMSL at the 2000 level or above within the minimum number of hours required for each minor. Students should consult the minor department for specific residency and grade requirements.

## Specific Baccalaureate Degree Requirements

## Course Requirements

After fulfilling the general education and specific major degree requirements, students are to take the remaining hours required to complete the bachelor's degree from courses (which the appropriate department has evaluated as being of university-level quality) from one or more of the following areas or their universityquality equivalents at other institutions: anthropology/archaeology, art (appreciation, history, studio), astronomy, biology, chemistry, communication, criminology and criminal justice, economics, English, foreign languages/ literatures, geology, history, mathematics/computer science, media studies, music (appreciation, history, performance), philosophy, physics, political science, psychology, social work, sociology, theatre and dance, business, education, engineering, or interdisciplinary. Other areas or courses not listed require approval by the chair of the student's department.

## Bachelor of Arts (B.A.)

All B.A. degree candidates must successfully complete a curriculum which includes a departmental major or an approved interdisciplinary field. A major must include at least 30 credit hours but no more than 45 hours. The College offers the B.A. degree in anthropology, biology, chemistry, economics, English, French, history, mathematics, philosophy, physics, political science, psychology, sociology, and Spanish.

## Foreign Language Requirement

Candidates for the B.A. degree are required to complete 13 credit hours or the equivalent in proficiency in one foreign language. Foreign language guidelines are as follows:

1) Students entering with no high school language units must enroll in Language 1 or may enroll in the 2115 series (see section 4).
2) Students with the degree of proficiency equivalent to 13 hours of college-level work in French, German or Spanish may obtain exemption by passing the department's placement exam. The specific dates for the exam are posted on-line or may be obtained from the Department of Foreign Languages and Literatures at 314-516-6240.
3) Native speakers of language other than English may meet the foreign language requirement by presenting
a transcript from a university or secondary school of their native country. The department will certify nat ve speakers of those languages which are taught at the university. Those who are proficient in other languages must submit certification of competence to the college.
4) Language 2115 A , B, C (Intensive) will satisfy the foreign language requirement. Aptitude testing is required prior to enrollment. For more information, call the Foreign Languages and Literatures Department at 314-516-6240
5) Students may not repeat, for either credit or quality points, an elementary course if they have already; completed a higher-level course for which the elementary course, or its equivalent, is a prerequisite.

## Applied Music and Studio Art

Students not majoring in music may count no more than eight hours in music ensemble performance (Music $1400,1410,1500,1520$, etc). Students in the college not majoring in studio art may count any number of studio art hours toward a degree in the college. This includes transfer credit.

## Bachelor of Science (B.S.)

The College offers the B.S. degree in mathematics, biochemistry and biotechnology, biology, chemistry, biochemistry, computer science, criminology and criminal justice, economics, physics (with emphasis in applied physics, astrophysics, engineering physics, or optical biophysics), and sociology. The requirements are generally the same as for the B.A. degree with the following exceptions:

1) More credit hours in the major discipline may be counted toward satisfying the 120 hours needed for graduation. See departmental degree requirements for information.
2) Not all departments require foreign language proficiency. See departmental degree requirements for information.

## Bachelor of Liberal Studies

(See Interdisciplinary Programs for complete description)

## Bachelor of Science in Public Policy and Administration (B.S.P.A.)

The B.S.P.A. degree program is administered through the Political Science Department and offers two emphasis areas. Public Administration emphasizes management in the public and nonprofit sectors. Public Policy allows focus on a particular policy area with attention to analytic training and research skills.

## Bachelor of Social Work (B.S.W.)

The School of Social Work offers the B.S.W. degree, stressing the scientific and applied aspects of social work.

## Minors

A number of minors are available at UMSL. Some are offered by individual departments, while others, sLch as Classical Studies are interdisciplinary in nature and involve a number of departments. The requirements for the various minors are listed in either the departmental or interdisciplinary sections of this Bulletin.

## Special Programs

## Certificate Programs

Graduate and undergraduate certificate programs are offered in archaeology biochemistry, biotechnology, forensic economics, labor studies, gerontology, studies in religions, trauma studies, tropical and conservation biology, nonprofit organization management and leadership, psychology-clinical respecializtion, women's and gender studies, and writing.

## International Studies Certificate

In cooperation with the Center for International Studies and other Colleges, the College offers certificate programs in African, East Asian, European, Greek, International, and Latin American studies. The Colleçe also cooperates in offering the International Business Certificate.

## Departmental Honors

Majors in the following departments may pursue departmental honors: biology, chemistry, economics, E iglish, foreign languages and literatures, history, and political science.

## Cooperative Education and Internship Programs

Cooperative education and internship programs are available for students seeking career-related employment while enrolled in school. These programs afford Arts and Sciences students an opportunity to gain practical experience and earn a substantial income. Co-ops and internships are administered through Career Serrices, 278 Millennium Student Center.

## College of Arts and Sciences Extension

Credit courses are offered at off-campus locations through the continuing education branch of the College of Arts and Sciences. These courses are open to UMSL students and qualify for regular academic credit toward degrees in the college. In addition, noncredit courses are offered in a range of disciplines within the college.

## UMSLHome

## Anthropology Home Page

## Faculty

Pamela Ashmore, Associate Professor, Chairperson
Ph.D., Washington University in St. Louis
Michael Cosmopoulos, Hellenic Government-Karakas Family Foundation Endowed Professor of Greek
Studies and Professor of Archaeology
Ph.D., Washington University in St. Louis
Laura Miller, Eiichi Shibusawa-Seigo Arai Endowed Professor in Japanese Studies, Ph.D., University of California-Los Angeles
Jay Rounds, Des Lee Professor of Museum Studies
Ph.D., University of California-Los Angeles
Susan E. Brownell, Professor
Ph.D., University of California-Santa Barbara
Sheilah Clarke-Ekong, Associate Professor, Ph.D., University of California-Los Angeles
Margo-Lea Hurwicz, Associate Professor
Ph.D., University of California-Los Angeles
Patti Wright, Associate Professor
Ph.D., Washington University in St. Louis
Michael Ohnersorgen, Assistant Professor
Ph.D., Arizona State University
Allon Uhimann, Assistant Professor
Ph.D., Australian National University
Donna Hart, Adjunct Associate Professor
Ph.D. Washington University in St. Louis
Mary Vermilion, Adjunct Associate Professor
Ph.D., University of Illinois-Chicago
Lucretia Kelly, Adjunct Assistant Professor
Ph.D., Washington University in St. Louis
Catherine Koziol, Adjunct Assistant Professor
M.A., Washington University in St. Louis

## General Information

The aim of anthropology is to understand the diversity of humans. For 100 years we have studied the cultures of the world, teaching people how to see themselves more clearly through the eyes of those who are different from themselves and how to work with the underlying humanity that unifies all cultural differences.

Anthropology is the study of humans through all time and space. The discipline considers our struggle to adapt to and survive in the natural and social environments and to improve our lot in the face of perpetual change. Anthropologists teach how cultures evolve and the role of individuals and groups in the invention and perpetuation of cultural beliefs, behaviors, symbols, and systems. Anthropologists have accumulated in-depth knowledge of hundreds of cultures and use this to understand better our own cultural beliefs, actions, and institutions, as well as those of people from other cultures. As the science of cultures, anthropology bring; a powerful perspective to bear in understanding the emerging global order. Cross-cultural and evolutionary insights and knowledge help us envision how we can incorporate vast human diversity into a unified world order of peace, prosperity, justice, and opportunity.

## Degrees and Areas of Concentration

A Bachelor of Arts in Anthropology focuses on applied and theoretical skills. The anthropology faculty are actively involved in cultural, archaeological, and biological anthropology research at home and abroad.

## Cultural Anthropology

Faculty conduct research in St. Louis, Los Angeles, Ghana, South Africa, China, Israel, Australia, and Native American communities. They encompass studies in health care choices of elder citizens, museum studies, gender and sexuality, body culture and sports, culture diversity principles, educational anthropology and more. Opportunities abound for students to pursue diverse research experiences on a vast range of topics on human actions, beliefs and organization.

## Archaeology

Faculty are engaged in regional and global research. Students may join faculty in excavations of an 800 -yearold ceremonial site at Cahokia Mounds, Illinois, a 10th-15th century pre-Aztec society in northwestern Mexico, and a Bronze Age administrative center near Iklaina, Greece. The program also has an archaeology lab and library with one of the largest extant collections of artifacts from eastern Missouri.

## Biological Anthropology

Faculty members are active in the study of the behavior, ecology, and evolution of primates and of educational issues in the study of paleoanthropology (fossil record of human origins) and human variation. Students have conducted original research at the St. Louis Zoo. They can study Forensic Anthropology and work with the program's own collection of 19th century skeletal remains.

## Student Experience

Students may work closely with faculty in designing their personal course of study and carrying out their own research projects in any of the above fields of study. Students have presented research results at professional meetings, in published papers, and at government and community agencies for use in planning and development. Students are encouraged to participate in the program's network of internships, providing an opportunity to practice newly acquired skills. As a capstone experience, all students, under faculty supervision, complete a significant independent research project for the Senior Seminar, culminating in written and oral reports to student colleagues and the faculty. The program encourages study abroad and in other regions of the United States and has scholarship funds to assist. There is an active Association of Student Anthropologists that sponsors an intercultural film series, speakers, and social activities.

Paid undergraduate positions are available on a competitive basis to anthropology majors as teaching assistants and faculty research assistants.

## Minor in Anthropology

The minor in anthropology is designed to offer students a flexible introduction to the fundamentals of the discipline to complement their major field of study. A minor is advisable for anyone planning a career with intercultural or international dimensions, where knowledge of cultural systems, environments, values, and symbols is useful.

## Certificate in Archaeology

The certificate in archaeology provides applied training in both laboratory and field methods to students who could be hired to assist professional archaeologists in area firms. Internships can be arranged with the UMSL archaeology lab or with a local institution

## Undergraduate Studies

## General Education Requirements

Majors must satisfy the university and college general education requirements. Any foreign language may be used to meet the language requirement for the B.A. degree.

## Degree Requirements

## Bachelor of Arts in Anthropology

Six hours of credit will be accepted for courses taken on a satisfactory/unsatisfactory basis from any anthropology elective. The statistics requirement may be taken on an S/U basis. All other required courses for the major must be completed with a grade of $C$ - or better. The following courses are required:

ANTHRO 1005, Introduction to Biological Anthropology
ANTHRO 1011, Introduction to Cultural Anthropology
ANTHRO 1019, Introduction to Archaeology
ANTHRO 3220, Social Statistics, or any other college level statistics course
ANTHRO 4301, Ideas and Explanations in Anthropology
ANTHRO 4308, Practicum in Cultural Research Methods or ANTHRO 4310, Laboratory Methods in
Archaeology or ANTHRO 4311, Primate Research Methods
ANTHRO 4315, Senior Seminar
ANTHRO 4316, Senior Seminar Tutorial
Two courses from two different subfields in Anthropology (Cultural Anthropology, Archaeology, Biological Anthropology, or Linguistic Anthropology) numbered 2100-2199
Three courses in Anthropology numbered 3200-3299, one of which must come from the following list:

ANTHRO 3202, History, Theory, and Practice of Anthropology
ANTHRO 3209, Forensic Anthropology
ANTHRO 3210, Applied Anthropology
ANTHRO 3211, Linguistic Anthropology
ANTHRO 3212, Medical Anthropology
ANTHRO 3216, Cognition across Cultures
ANTHRO 3229, Economic Archaeology and Anthropology
ANTHRO 3244, Religion, Magic, and Science
ANTHRO 3270, Human, Ecology, Cultural Collapse, and Sustainable Development
The total number of hours required for the major is 39.
Students may elect to take up to, but not to exceed, 12 additional hours in anthropology courses of their choice.

At the end of the program, students should have these competencies:

1. Discipline-Specific (Content) Knowledge

Graduates will be able to discuss the importance cultural diversity, thus preparing them to function in multicultural or international settings. Graduates will understand the common evolutionary origins that unify all cultural differences, as well as human biological variation within our shared humanity.
Graduates will develop in-depth knowledge of the culture of a particular region of the world.
2. Communication Skills

Graduates will develop social science writing skills, including writing of a research proposal for a grant agency and a substantial research report. Graduates will develop oral presentation skills, includinc presenting a formal research report.
3. Information Management/Quantitative Skills

Graduates will master research methods in one of the subfields of anthropology (cultural anthropology, biological anthropology, archaeology). Graduates will learn to design and conduct an original resee rch project, working in close cooperation with faculty.
4. Valuing/Ethics/Integrity

Graduates will be able to discuss and articulate the professional ethics and codes of conduct of the: discipline.
5. Critical Thinking Skills

Graduates will develop the ability to apply anthropological concepts in performing critical analysis of broad historical trends and complex social issues. Graduates will be able to value cultural diversity, thus preparing them to function in multicultural or international settings.
6. Application/Internship Skills

Graduates will gain hands-on experience in the application of anthropological concepts to real life and will be able to apply anthropological theory to real-life experience.

## Residency Requirement

Undergraduate majors must complete a minimum of 17 hours of upper-level ( $3000-5000$ ) Anthropology courses in residence, including $3202,4301,4308$ or $4310,4315,4316$, and one other course numbered from 3000 to 5000.

## Anthropology Minor

There are three possible emphases in the minor: Cultural Anthropology, Archaeology, and Biological/Forensic Anthropology. One course should be selected from each of the following five groups:

1. ANTHRO 1011, Introduction to Cultural Anthropology OR

ANTHRO 1019, Introduction to Archaeology OR
ANTHRO 1005, Biological Anthropology OR
ANTHRO 1006, Introduction to Non Human Primates
2. One 2000-level Anthropology course
3. One 3000-level Anthropology course
4. One 4000-level Anthropology course
5. One elective anthropology course at any level.

A minimum of 15 anthropology credit hours is required. Grades of $C$ - or better must be attained in all ccurses used to satisfy these requirements. One Elective course taken on an A/U basis may be applied to the minor.

Students in the Bachelor of Liberal Studies must take Anthropology 4301 as their capstone course.

## Archaeology Certificate

ANTHRO 1019, Introduction to Archaeology
One anthropology course at the 2100-2199 level with an archaeological emphasis.
One anthropology course at the 3200-3299 level with an archaeological emphasis.
ANTHRO 2109 or 4309, Archaeological Field School (3-6 credit hours)

ANTHRO 4310, Laboratory Methods in Archaeology
ANTHRO 4326, Internship in Archaeology (3-6 credit hours)

## Career Outlook

The B.A. in Anthropology equips the student for employment in almost any area in which a bachelor's degree is sufficient and a sensitivity to cultural values and diversity is important. Graduates have found employment as university professors and lawyers and in archaeology research programs, urban development, planning programs, health care delivery, human services, business, government service, teaching, computer systems design, and university administration. Anthropology is excellent preparation for graduate and professional training in administration, the helping professions, development work, law, environmental studies, international and human resource areas of business, and in many other areas,-depending upon individual interests. Many UMSL anthropology graduates have gone on to advanced training in master's, doctoral, and professional programs in respected universities around the country. For more career information, contact the program at 314-516-6020 for an appointment to talk with an appropriate faculty member or to request an information packet.

## Course Descriptions

ANTHRO 1005 Introduction to Biological Anthropology (4)
Biological anthropology studies evolutionary theory and its development, the evolution/creationist debate, Mendelian and population genetics, the evolutionary place of humans within the animal kingdom, anatomical and behavioral characteristics of primates, fossilization, primate evolution, the human evolutionary fossil record, biological variability in modern humans, race as a biological concept, and applied biological anthropology. In addition to 3 hours of lecture, 1 hour per week is spent in lab classifying ancient human fossils, observing monkeys and apes at the zoo, and doing other projects.

## ANTHRO 1006 Introduction to Non-Human Primates (3)

As a general survey of our closest living relatives, this course introduces the ecology, cognition, communication, social and sexual behavior, and fossil history, of non-human primates. The work of wellknown primatologists is used to illustrate various aspects of field research. Conservation status of primates in the wild is assessed as well as current threats to survival.
ANTHRO 1011 Introduction to Cultural Anthropology (3) [V, SS, CD]
Cultural anthropology is the study of human beings as creatures and creators of society. This course is an introduction to that study which aims to demonstrate how the basic concepts and techniques developed by cultural anthropologists help us to understand societies of various degrees of complexity, including our own. We will consider topics such as language, kinship, gender, ethnicity, economics, politics, religion, and social change in a broad comparative framework. Major goals are an increased awareness of the social and cultural dimensions of human experience the diversity and flexibility of human cultures and processes of intercultural communication and conflict.

## ANTHRO 1019 Introduction to Archaeology (3) [MI, SS, CD]

Archaeology is a subfield of anthropology that studies past human societies from their material remains. Explores the development of archaeology as a scientific discipline. Archaeological methods and theories will be explained using case studies from the continents of Africa, Asia, Australia, Europe and the Americas.

## ANTHRO 1021 The Body in Culture (3) [CD]

This course will compare uses of the body as a social signifier in Western and non-Western cultures. It will explore how culture shapes the images, uses, and meanings of the human body. It concentrates on different historical and cultural beliefs in five areas: how the body works sex and gender eating manners and food pain and punishment beauty and bodily mutilation.

ANTHRO 1025 World Cultures (3) [V, SS, CD]
An ethnographic survey of the major culture areas of the world (Africa, Asia, North and South America, Europe, and Oceania).

## ANTHRO 1033 World Archaeology (3) [MI, SS, CD]

Discusses some of the greatest discoveries in archaeology from prehistoric cultures to ancient civilizations of Africa, Asia, Australia, Europe, and the Americas. Archaeological examples may include early human origins at Olduvia Gorge in Tanzania, the pyramids of ancient Egypt, the Maya and Aztec of Mexico, the rise of civilization in Mesopotamia, England's Stonehenge, the Roman city of Pompeii, upper Paleolithic cave paintings in France and Spain, and American Indian pueblos of the Southwest. This introductory course is designed for non-anthropology majors, or for those who are considering the major.

ANTHRO 1037 The Wonders of Greece: Introduction to Greek History and Culture (3)
Same as HIST 1037. Our democracy and culture have been heavily influenced by Greek civilization. This course will introduce students to the culture and civilization of Greece in order to provide a better understanding of our own society. The course will cover the political and military history, art, literature,
philosophy, and science of Greece from prehistoric to modern times, with special emphasis on Greek civilization's enduring democratic and cultural ideals. This course will include screening of films and use of online resources.

## ANTHRO 1041 Sex and Gender across Cultures (3) [CD]

This course considers womanhood, manhood, third genders, and sexuality in a broad cross-cultural perspective. The focus of the course is on the diverse cultural logics that separate females, males and sometimes third genders into different groups in different societies, with the male group usually being the: more prestigious one. Focusing on indigenous non-Western cultures, this course examines gender roles and sexuality within the broader cultural contexts of ritual and symbolism, family, marriage and kinship, economy, politics, and public life. This course will help students understand what it is like to be male or female in nonWestern cultures.

## ANTHRO 1051 Anthropology of Sport (3) [CD]

This course is an overview of sports in different times and cultures. It offers a comparative perspective on similarities and differences between sports in Western and non-Western cultural traditions through an examination of such topics as: the ancient Greek Olympic Games vs. sports in ancient China and Japan tre use of sports by colonial empires to colonize non-Western subjects the development and spread of the modern Olympic Games sports and nationalism sports in China, Particular attention will be paid to the relationships between sport and gender, social class, ethnic/racial identity, and nationalism.

## ANTHRO 1052 The Olympic Games: Ideals and Reality (3)

What would the ancient Greeks think of the modern Olympic Games? This course uses cross-cultural comparison to assess whether the modern Olympic Games live up to their ancient Greek ideals. It begins with the history and philosophy of the ancient Olympic festival too understand the personal, educational, and political nature of the Olympic Ideal in its ancient cultural context. Next it examines the modern Games from the perspectives of athletes, spectators, and society at large to critically evaluate the Games as a contemporary social phenomenon. Finally, students develop constructive solutions to the problems identified.

## ANTHRO 1091 Introductory Topics in Anthropology (3) [CD]

This course features special and current topics at the introductory level in the areas of social, cultural and physical anthropology and archaeology. The course examines the basic concepts and provides an understanding of the development of new trends and areas of study in the field of Anthropology. Topics will focus on the comparative study of non-Western cultures such as ecological practices in tribal societies religious practices in prehistoric cultures the roles of women across cultures etc. Topics may vary and the course may be repeated provided topic is different.

## ANTHRO 1095 Brief Overview of the Four Fields of Anthropology (1)

Through the use of videos, readings, and the online course management system, this course provides a brief overview of the four traditional fields of anthropology: biological, archaeological, cultural, and linguistic anthropology. This course is designed for video instruction and offers minimal direct interaction with the instructor.

## ANTHRO 2035 Ancient Greek Civilization and Culture (3)

A survey of the history, language, literature, art, science and philosophy of the ancient Greeks from prehistory to the Roman conquest. It covers the glamorous Minoan-Mycenaean civilization, the rise of a classical Greek civilization and the golden age, the history of the city states such as Athens and "Sparta, and the Hellenistic period under Alexander the Great and his descents. Examines the nature of the ancient Greek language, surveys literary classics such as the Illiad and the Odyssey, and describes the archaeology of Greek myths based on the ongoing UMSL archaeological project in Greece. Discusses the rise of humanism, the ancient Olympic Games, and the legacy of ancient Greece in Western civilization.

## ANTHRO 2105 Human Variation (3)

This course will look at the variation that exists within our own species, both between and within populations. It will investigate the evolutionary and genetic basis of human variation, as well as its diversity, adaptive significance, and distribution. Topics covered will include: body shape and physiology, blood groups, susceptibility to disease, and skin color. It will survey historical attempts to classify humans into different "races" assess definitions of race as a solely cultural construct and critique attempts to link race, intelligence and performance.

## ANTHRO 2109 Archaeological Field School (3-6)

Prerequisite: Consent of instructor. Introduction to fleld methods in archaeology and to the techniques of recording, storing, analyzing, and reporting archaeological findings. Experience is gained through participation in a field research project including excavation and survey projects. Emphasis is placed upon research design and implementation and upon the use of archaeological data in describing and explaining human behavior.

ANTHRO 2111 Cultures of East Asia (3) [CD]
An ethnographic and historical survey of the various people of East Asia including Japan, China, North anc South Korea, Hong Kong, and Macau. Includes an examination of the varying cultural and social developments within and through the historical, geographical, and cultural environments.


ANTHRO 2232 Analysis of Archaeological Artifacts (3)
Prerequisite: ANTHRO 1109 or ANTHRO 2109 or consent of instructor. This course teaches the methods and techniques for analyzing the artifacts from an archaeological dig. Students learn to process, analyze, and interpret ceramics, stone tools, plant and animal debris according to form, design, use wear, and associat:ions. This analysis will form the basis of interpretations about human behaviors and cultural and temporal affiliations. The student will prepare a report of the examined collection.

## ANTHRO 3202 History, Theory, and Practice of Anthropology (3)

Prerequisites: ANTHRO 1005, ANTHRO 1006, ANTHRO 1011, or ANTHRO 1019. An overview of the histor and theory of anthropology from the Victorian era to today with an emphasis on putting theory into practice. The purpose of the course is to help students understand where anthropology has come from and where it may be going, and to teach students how to apply theory to specific questions and problems.

## ANTHRO 3209 Forensic Anthropology (4)

Same as CRIMIN 3209. Prerequisite: ANTHRO 1005, or BIOL 1102, or junior standing, or consent of instructor. Students learn basic dental and skeletal anatomy and the methods used by biological anthropologist and archaeologists to collect an analyze human skeletal remains, including how to determine age and sex of skeletal remains, identify ethnic markers, determine stature and handedness, and identify the presence of trauma and/or pathology. Also covers the role of the forensic anthropologist in crime scene investigations and human rights issues. In the weekly lab section students will have an opportunity for handson application of techniques to analyze skeletal remains.

## ANTHRO 3210 Applied Anthropology (3)

Prerequisite: ANTHRO 1011, or introductory course in another social science, or consent of instructor. A description and analysis of methods, principles, and use of anthropology in solution of problems associated with the changing conditions of our times. The course will examine a wide variety of cross-cultural case studies.

## ANTHRO 3211 Linguistic Anthropology (3)

Prerequisites: ANTHRO 1011 or consent of the instructor. Variable topics in the subfield of linguistic anthropology will be explored. The focus of the course may include study of communication as part of ouevolutionary heritage, the use of language as an index of social and cultural change, writing systems of the world, language and gender, or other topics.

## ANTHRO 3212 Medical Anthropology (3)

Prerequisite: ANTHRO 1011, or introductory course in another social science, or consent of instructor. An examination of the growing interaction between introductory course in another social science, or consent of instructor anthropology and medicine, and the increasing use of anthropologists in medical and health-care settings. In addition to teaching current theory in medical anthropology, the course focuses on anthropologically based skills essential to those working in health-related fields.

## ANTHRO 3215 Growing Old in Other Cultures (3)

Same as GERON 3215. This course examines the wide-ranging variability in the roles of older people across different cultures and the effects these have on older people, their families, and their societies.

## ANTHRO 3216 Cognition Across Cultures (3)

Prerequisite: ANTHRO 1011, or introductory course in another social science, or consent of instructor. This course explores cognition - perception, knowledge and thought - as a set of social and cultural processes. An introduction to methods for understanding the human mind in context. It will cover key debates, including: cross-cultural variation in thought processes (cognitive relativity vs. psychic unity), the relation between physiology and consciousness, ethnoscience, the social and cultural construction of reality, the different ivays that social contexts affect the way people think, the implications of the way knowledge is distributed across society, the social and cultural basis of logic.

## ANTHRO 3220 Social Statistics (3)

Same as SOC 3220. Prerequisites: SOC 1010 or ANTHRO 1011 and MATH 1020 or 1030. Issues and techniques of statistical analyses relevant to quantitative social science research, e.g., elementary probability, measures of central tendency and dispersion, measures of relationships including linear regression and correlation, inferential and nonparametric statistics. The course includes an introduction to computer-based statistical analysis.

## ANTHRO 3225 Ritual, Death, and Sports: The Archaeology of Greek Mythology (3)

Prerequisite: ANTHRO 1019 or ANTHRO 1011 or consent of instructor. Since the beginning of our exister ce, humans have pondered the mysteries of life and death and have strived to find meaning in a constantly changing world. In Western civilization, Greek mythology and religion represent humanity's earliest atternpts to deal with the greater forces that affect our lives, which found expression in the great religious and athletic festivals, such as the Olympic Games. We will study the myths, rituals, religious beliefs of the ancient Greeks and how these were expressed in sports and art, in order to get a glimpse of the Greeks' understanding of life, death, and the supernatural. The sources of our exploration are two: the fascinating archaeological discoveries of ancient Greek sites and relevant readings from the ancient Greek literature.


## ANTHRO 3227 Monsters \& Victims: Women Dramatis Personae in Greek Tragedy and Contemporary Drama (3.0)

Prerequisite: ANTHRO 1011, or introductory course in another social science, or consent of instructor. This course explores female dramatic figures in ancient Greek tragedies that represent women either as victims and/or monsters. From Iphigenia, Alcestis, and Hecuba to Clytemnestra, Phaedra and Medea, it analyzes issues such as the role of sex, gender, female sexuality, ritual and domestic violence in the image-making of women as either scapegoats or monsters by the major Greek tragedians, particularly Euripides. It explores contemporary adaptations by several women playwrights in light of theoretical readings by feminist critics.

## ANTHRO 3229 Economic Archaeology and Anthropology (3)

Prerequisite: ANTHRO 1011 or ANTHRO 1019 or consent of instructor. This course examines economic organization and behavior in a cross-cultural context. It looks at the various ways anthropologists have approached the study of economy, and explores how cultural factors such as relations of power, gender, kinship, and ideology affect economic organization in ancient and modern societies. Most of the course will focus on pre-industrial societies (including hunter-gather, tribal, and complex societies), and will address issues of subsistence strategies, craft production and specialization, trade and exchange, money, and markets. It will also briefly explore how modern communities around the globe are responding to contemporary processes like capitalism and globalization.

## ANTHRO 3235 Women in Subsaharan Africa: A Contemporary Perspective (3) [CD]

Prerequisite: ANTHRO 1011, or introductory course in another social science, or consent of the instructor. Examines important traditional concerns of anthropologists such as the nature of kinship obligation and privilege gender as a basis for the division of labor social organization for formal and informal networks and ritual and ceremony. In addition we look closely at the changing role of African women, as related by African women testing the very limits of what is "socially and culturally acceptable." The roles women continue to play in politics, comprehensive development (i.e., cultural and economic) and evolving social structures are reviewed to gain an understanding of the historical and contemporary mandates for their social action.

## ANTHRO 3236 Sex Trafficking in Cross-Cultural Perspective (3)

Prerequisites: ANTHRO 1041, GS 2150 or GS 2102 or consent of instructor. This course introduces the history of and current issues in the international sex industry, including human trafficking, slavery, and prostitution in Europe, Asia, Africa, South America, and North America. It will evaluate the power structures (political, economic, and military institutions) and the process, organization and structure of the industry within the context of nationality, ethnicity, and class, with particular emphasis on voluntary (immigration) and forced (displacement) population migration. Finally, it will look at current legislation and methods to control this growing problem, especially in the United States.
ANTHRO 3255 Oral History and Urban Culture in St. Louis (3)
Prerequisite: ANTHRO 1011 or instructor's consent. This course involves students in background research and active fieldwork in urban anthropology within the metropolitan area. The focus will be on learning and applying oral history techniques in the city of St. Louis and its neighborhoods. Students will conduct in-depth fieldwork in one city neighborhood. They will learn fieldwork methodologies and how to conduct social, cultural, and historical research in preparation for fieldwork. This includes learning to research, conduct, and process interviews. They will also learn to work in teams to construct a group project to be presented to the class.

ANTHRO 3270 Human Ecology, Cultural Collapse, and Sustainable Developments (3)
Prerequisites: ANTHRO 1019 or consent of the instructor. Human interactions with the natural environment will be explored by reviewing approaches, concepts, and tools from ecological anthropology and archaeology. Case studies based on archaealogical, ethnographic, and ethnological data will be analyzed and discussions expanded to include information about past and present, sustainable human-environmental interactions, policies and contributing institutions.
ANTHRO 3290 Advanced Topics in Archaeology (3)
Prerequisite: ANTHRO 1019, or consent of instructor. Selected topics in archaeology with a strong theoretical and methodological approach. Requires substantial reading and writing. May be repeated with consent of department.

ANTHRO 3291 Current Issues in Anthropology (3)
Prerequisite: ANTHRO 1011, or introductory course in another social science, or consent of instructor. Selected topics in social, cultural, and physical anthropology, with emphasis on current issues and trends in the field of anthropology. May be repeated provided topic is different.

ANTHRO 4301 Ideas and Explanations in Anthropology (3)
Prerequisite: One of ANTHRO 3202, ANTHRO 3209, ANTHRO 3210, ANTHRO 3212, ANTHRO 3216, ANTHRO 3229, ANTHRO 3230, or . The theory course in the capstone sequence for Anthropology majors. Students learn to identify and synthesize relevant theories write them up in the form of a comprehensive literature: review and apply them constructively to the collection, analysis, and explanation of data. Majors should take this course concurrently with ANTHRO 4308 , ANTHRO 4310 or ANTHRO 4311.

ANTHRO 4308 Practicum in Cultural Research Methods (4)
Prerequisites: One course in statistics and ANTHRO 1011, or consent of instructor. (With computer laboratory.) Emphasizes hands-on training in techniques for both the collection and analysis of ethnografhic data, including participant observation, selection of ethnographic informants, key informant interviewing, and more systematic methods such as survey research. The use of computer programs for the development of protocols to collect, analyze, and display data will be covered in lab.

## ANTHRO 4309 Archaeological Field School (3-6)

Prerequisite: Consent of instructor. Advanced methods in field archaeology and laboratory analysis. Empr asis is placed on sampling, the use of theory in guiding field and laboratory work, advanced field techniques, end specialty analysis. Opportunities are provided for the development of field and laboratory leadership skills. Independent research is encouraged.

ANTHRO 4310 Laboratory Methods in Archaeology (4)
Prerequisites: ANTHRO 1019 , SOC 3220 or equivalent, or consent of instructor. An advanced laboratory analysis and curation methods class. The emphases are (1) mastery of general lab methods and procedu es, and (2) development of independent analysis skills in one or more specialty areas such as lithics, ceramics, computer graphics, statistical methods, paleoethnobotany, experimental analysis, and soils.

ANTHRO 4311 Primate Research Methods (4)
Prerequisites: ANTHRO 1006, SOC 3220 or equivalent, or consent of instructor. Course material based on primate behavior, demographics, and morphology, Research techniques for ethological and primatological studies, including the design of research protocols, development of data collection methodologies, analysis of morphological and behavioral data and the scientific description of findings. Students are required to concluct observations of primates at the St. Louis Zoo and participate in the Undergraduate Research Symposium.

## ANTHRO 4312 Cultural Resource Management and Historic Preservation (3)

Prerequisite: ANTHRO 1019 or Consent of the Instructor. This course will introduce proper practices of cu tural resource management and historic preservation. It provides a technical and theoretical bridge between anthropological archaeology and its application to the management of resources. Among the issues covered will be relevant legislation, the phased approach to archaeological and historical research, state and fede al review procedures, proposal writing, interacting with clients, consulting with native peoples, and public and professional ethics and standards. This course will provide hands-on experience. Because one of the skills most sought by project managers and employers is writing competence, it will be writing intensive.

ANTHRO 4315 Senior Seminar in Anthropology (3)
Prerequisites: ANTHRO 4301 and one of the following: ANTHRO 4308, ANTHRO 4310, or ANTHRO 4311 . The capstone course for anthropology majors, ideally taken in the final semester of the senior year. Students write a research proposal, conduct an original research project, write it up as a senior thesis, and present the thesis before the department. Must be taken concurrently with ANTHRO 4316.

## ANTHRO 4316 Senior Seminar Tutorial (1)

Prerequisites: ANTHRO 4308, ANTHRO 4310, or ANTHRO 4311 and consent of Instructor. The student chooses a faculty member with expertise relevant to the topic of the senior thesis. The student and faculty member arrange a schedule of meetings to discuss the drafts of each section of the senior thesis as they are completed. The student will be expected to follow advice about research methods, find and utilize the sources suggested, and incorporate editorial corrections in the writing. The instructor will be the Second Reader $0^{\circ}$ the senior thesis, and will jointly assign the final grade to the senior thesis together with the instructor of ANTHRO 4315. Must be taken concurrently with ANTHRO 4315.

ANTHRO 4325 Internship in Cultural Anthropology (1-3)
Prerequisite: Recommendation of major adviser. Students will be assigned an internship on recommendation of their adviser. Internships will consist of a period of study, observation, and training in an appropriate public or private institution, business, or government office. Cultural Anthropology internships are aimed at providing students with opportunities to learn to apply their knowledge of social and cultural process and diversity t:o practical situations in the market place of ideas, goods, and services. Specific placements will be selected to match a student's interests and career goals.

ANTHRO 4326 Internship in Archaeology (1-6)
Prerequisite: Recommendation of major adviser. Students will be assigned an internship on recommendation of their adviser. Internships will consist of a period of study, observation, and training in an appropriate public or private institution, business, or government office. Archaeology internships are aimed at providing stuclents with opportunities to work with professional archaeologists in public and private research environments
including laboratories and curation centers. Specific placements will be selected to match a student's interests and career goals.

## ANTHRO 4327 Internship in Folklore (1-3)

Prerequisite: Recommendation of major adviser. Students will be assigned an internship on recommendation of their adviser. Internships will consist of a period of study, observation, and training in an appropriate public or private institution. Folklore internships are almed at providing students with opportunities to work with professional folkiorists and anthropologists in an applied setting. Further, it allows a student to devote an entire semester to produce a viable urban fieldwork report. Specific placements will be selected to match a student's interests and career goals.

## ANTHRO 4328 Internship in Museum Studies (1-3)

Prerequisite: Recommendation of major adviser. Students will be assigned an internship on recommendation of their adviser. Internships will consist of a period of study, observation, and training in an appropriate museum or other exhibition oriented institution. Museum internships are aimed at providing students with opportunities to work with professional museologists to learn skills relating to areas such as exhibition, curation, public programming, research, and publication. Specific placements will be selected to match student's interests and career goals.

ANTHRO 4329 Internship in Physical Anthropology (1-3)
Prerequisite: Recommendation of major adviser. Students will be assigned an internship on recommendation of their adviser. Internships will consist of a period of study, observation, and training in an appropriate institution, lab or research setting related to forensics, primate behavior and biology, human genetics, population, environmental policy, and other domains related to physical anthropology.

## ANTHRO 4350 Special Study (1-3)

Prerequisite: Consent of instructor. Independent study through readings, reports, or field research. No student may take more than a cumulative total of 6 hours of Special Study.

## ANTHRO 4391 Current Issues in Anthropology (1-4)

Prerequisite: ANTHRO 1011 or consent of instructor. Selected topics in social, cultural, and physical anthropology, with emphasis on current issues and trends in the field of anthropology. May be repeated.

## ANTHRO 5312 Cultural Resource Management and Historic Preservation (3)

Prerequisite: Graduate standing or consent of instructor. This course will introduce proper practices of cultural resource management and historic preservation. It provides a technical and theoretical bridge between anthropological archaeology and its application to the management of resources. Among the issues covered will be relevant legislation, the phased approach to archaeological and historical research, state and federal review procedures, proposal writing, interacting with clients, helping with native peoples, and public and professional ethics and standards. This course will provide hands-on experience. Because one of the skills most sought by project managers and employers is writing competence, it will be writing intensive.

## ANTHRO 5440 Cultural Aspects of Aging (3)

Same as GERON 5440. Prerequisite: Graduate status or consent of instructor. Focuses on the variety of solutions encountered in different sociocultural contexts for dealing with the problems, challenges and opportunities of growing old. It is organized around topics that are of concern to both anthropology and social gerontology: the status of the aged, intergenerational relations, aging in modernizing societies, ethnic dimensions of aging in complex societies, health in later life, death and dying. Both in-depth case studies and cross-cultural comparisons are examined in an effort to arrive at a culturally informed assessment of factors affecting aging and the aged in the United States.

## ANTHRO 5592 The History of the Visual Arts in American Museums (3)

Same as HIST 5592 and ART HS 5592. Prerequisites: Graduate standing and consent of instructor. This course is an introduction to selected topics in the history of museology, focusing on art and anthropology museums as sits for the interpretations of art and culture, and as contested meeting grounds for various views of history and culture.

## ANTHRO 6135 Foundations of Museology I (3)

Same as ART HS 6035 and HIST 6135. Prerequisite: Consent of Director of Museum Studies Program. Concepts for understanding museums in their social and cultural context, history of museurns, museology and general social theory, information transfer vs. meaning-making models, museums and communities, the changing role of museums, museums as complex organizations, process models of museology.

## ANTHRO 6136 Foundations of Museology II (3)

Same as ART HS 6036 and HIST 6136. Prerequisite: Consent of Director of Museum Studies Program. Audience-centered approaches to museology visitor research and learning theory, philosophical and practical considerations in museum planning, the physical design of museums, creativity, exhibit and program development, collections and curation, the challenge of diversity, the future of museums.

ANTHRO 6137 Effective Action in Museums (3)
Same as ART HS 6037 and HIST 6137. Prerequisite: Consent of Director of Museum Studies Program. The
nature of the work done in museums; how museums are organized to accomplish this work, professional oles and practices, technology and resources used by museums, skills for creative and effective leadership in project management and administration in museums, planning, flow charting, budgeting, team dynamics, and related skills. The course will include several site visits to area museums and guest lectures by a variety of museum professionals.

ANTHRO 6138 Museum Studies Master's Project (4)
Same as ART HS 6038 and HIST 6138. Prerequisite: Consent of Director of Museum Studles Program. Research and writing/exhibit development on a selected topic.

## ANTHRO 6139 Practicum in Exhibit and Program Development (3)

Prerequisite: Consent of Director of Museum Studies Program. Development of exhibits and related education programs. Students work as teams with museum professionals to develop and implement an exhibit concept that integrates design, education and marketing from the onset. Methods in planning, flow charting, budgeting, team dynamics and related skills.

## BULLETIN =orl <br> 2012

##  <br> Degree Programs in Biochemistry

UMSL Home<br>Biochemistry and Biotechnology Home Page<br>Faculty

Wesley R. Harris, Professor of Chemistry and Biochemistry, Director
Ph.D., Texas A\&M University
George Gokel, Distinguished Professor of Chemistry \& Biochemistry
Ph.D., University of Southern California
Xuemin Wang, E. Desmond Lee and Family Fund Endowed Professor of Plant Sciences
Ph.D., University of Kentucky
Keith J. Stine, Professor of Chemistry and Biochemistry
Ph.D., Massachusetts Institute of Technology
Teresa Thiel, Professor of Biology; Associate Dean, College of Arts and Sciences
Ph.D., Case Western Reserve University
Cynthia M. Dupureur, Associate Professor of Chemistry and Biochemistry
Ph.D., Ohio State University
Michael R. Nichols, Associate Professor of Chemistry and Biochemistry
Ph.D., Purdue University
Wendy M. Olivas, Associate Professor of Biology
Ph.D., University of Nebraska Medical Center
Jane A. Starling, Associate Professor of Biology Emerita
Ph.D., The William Marsh Rice University
Chung F. Wong, Associate Professor of Chemistry and Biochemistry
Ph.D., University of Chicago
Lisa Schechter, Assistant Professor of Biology
Ph.D., Harvard University
Mindy Steiniger, Assistant Professor of Biology
Ph.D., University of Wisconsin, Madison
Bethany Zolman, Assistant Professor of Biology
Ph.D., The William March Rice University
Joseph Kamalay, Assistant Teaching Professor of Biology
Ph.D., University of California, Los Angeles
Marc Spingola, Assistant Teaching Professor of Biology
Ph.D., University of New Mexico
Lisa Underwood, Assistant Teaching Professor of Biology
Ph.D., Washington University, St. Louis

## General Information

## Degrees

The Biochemistry and Biotechnology Program provides academic programs leading to the undergraduate B.S. degree or the graduate M.S. degree in Biochemistry and Biotechnology. These degrees are offered in cooperation with the Department of Biology and the Department of Chemistry and Biochemistry. Faculty members in this program are engaged in teaching and research in areas such as biochemistry, genetics, molecular biology, cell biology and developmental biology. Majors have the opportunity through coursework, laboratories, seminars and research experience to develop the knowledge and skills necessary to enter the workforce or to go on with further graduate education.

## Career Outlook

The emerging Biotechnology sector is increasing the regional and national demand for workers with significant training in molecular biology, biochemistry, and genetics. The St. Louis metropolitan area has long been a
major center for biochemistry and biotechnology, and in the past decade it has become a national hub for life sciences research and development activity. A degree in Biochemistry and Biotechnology provides students with the training they need to become part of the broad biotechnology and life sciences industries.

## Undergraduate Studies

## Degree Requirements

## Bachelor of Science in Biochemistry and Biotechnology

## General Education Requirements

Students must satisfy the university and college general education requirements. Some math or science courses required for the major may be used to meet the science and mathematics requirement of the university. There is no foreign language requirement for the degree.

All Biochemistry \& Biotechnology majors are required to take a capstone seminar (either CHEM 4797 or BlOL 4797) during the semester in which they plan to graduate (the winter semester for students graduating in the summer). Students may not receive credit for both CHEM 4797 and BIOL 4797).

## Satisfactory/Unsatisfactory Option

Up to 18 credit hours may be taken on a satisfactory /unsatisfactory ( $\mathrm{s} / \mathrm{u}$ ). Excluded from this option are required courses in biology, chemistry, physics, and mathematics.

Non-major Biology or Chemistry courses
Courses in Biology with a number less than 1800 and courses in Chemistry with a number less than 1100 do not count toward the credit hours required for a major in biochemistry and biotechnology.

## 1) Biology Core Courses

BIOL 1811, Introductory Biology: From Molecules to Organisms
BIOL 2012, Genetics
BIOL 2013, Genetics Laboratory
BIOL 2482, Microbiology
BIOL 2483, Microbiology Laboratory
BIOL 3622, Cell Biology
2) Chemistry Core Courses

CHEM 1111, Introductory Chemistry I
CHEM 1121, Introductory Chemistry II
CHEM 2223, Quantitative Analysis
CHEM 2612, Organic Chemistry I
CHEM 2622, Organic Chemistry II
CHEM 2633, Organic Chemistry Laboratory
CHEM 3302, Physical Chemistry for the Life Sciences
3) Math and Physics Core Courses

MATH 1030, College Algebra
MATH 1035, Trigonometry
MATH 1100, Basic Calculus or MATH 1800, Analytic Geometry and Calculus I
PHYSICS 1011, Basic Physics
PHYSICS 1012, Basic Physics
4) Biochemistry and Biotechnology Core Courses

BIOL 4602, Molecular Biology OR
BIOL 4612, Molecular Genetics of Bacteria (if both courses are taken, one can be used as an elective)
BIOL 4614, Biotechnology Laboratory I OR
BIOL 4615, Biotechnology Laboratory II (if both courses are taken, one can be used as an elective)
BIOL/CHEM 4712, Biochemistry
CHEM 4733, Biochemistry Laboratory
CHEM 4722, Advanced Biochemistry
BIOL 4797, Biochemistry and Biotechnology Seminar OR
CHEM 4797, Biochemistry and Biotechnology Seminar (Students may not receive credit for both BIOL 4797 and CHEM 4797)

[^1]Bulletin 2011-2012: Degree Programs in Biochemistry and Biotechnology
BIOL 4622, Molecular Cell Biology
BroL 4632, Nucleic Acid Structure and Function
BIOL 4642, Plant Biology and Biotechnology
BIOL 4652, Virology
BIOL 4842, Immunobiology
BIOL 4905, Research (up to 3 credit hours)
BIOL 4920, Selected Topics (when relevant)
CHEM 3643, Advanced Organic Chemistry Laboratory
CHEM 3905, Chemical Research (up to 3 credit hours)
CHEM 4772, Physical Biochemistry

## Electives

Recommendations include basic statistics (MATH 1310 or MATH 1320), computer science, public speaking (COMM 1040), foreign language, ethics, and undergraduate research.

## Research Opportunity

Students may use up to 3 credit hours of undergraduate research as elective hours in the B.S. degree. This provides an opportunity to gain research experience under the supervision of a faculty member. The project will normally include a review of the literature, laboratory experience and a final research report.

## Minor in Biology

Students who complete the B.S. degree in Biochemistry and Biotechnology may also obtain a minor in biology by completing BIOL 1821, Introductory Biology: Organisms and the Environment. The minor must be approved by the chair of the Department of Biology. At least 9 hours of the biology course credits must be taken in residence at UMSL. Candidates must have a cumulative grade point average of 2.0 or better in the minor, and none of the courses may be taken on a satisfactory/unsatisfactory (s/u) basis.

## Minor in Chemistry

Students who complete the B.S. degree in Biochemistry and Biotechnology will also fulfill the course requirements for a minor in Chemistry. A GPA of at least 2.0 is required for the courses presented for the minor. At least three courses toward the Chemistry minor must be completed at UMSL.

## Learning Outcomes

Students often think of the physical and life sciences as areas in which one masters a collection of "scientific facts". However, an education in Biochemistry \& Biotechnology involves much more than memorizing facts. Students in this program will develop a well-rounded set of competencies in several critical areas. These include:

1. Discipline-Specific Knowledge. Graduates from this program will have a solid foundation in the content areas of chemistry, biology, and biochemistry. A certain emphasis on specific, descriptive data is necessary. But the larger emphasis is on a clear understanding of the overriding principles and theorems of these areas that allow students to evaluate specific data within a larger context.
2. Laboratory Skills. Scientists not only learn the results of others, they work in the lab to generate new knowledge. Graduates will learn the basic skills associated with performing laboratory experiments in chemistry, biology, and biochemistry, and they will learn how to critically evaluate their data. This includes an appreciation of the potential sources of error associated with laboratory measurements.
3. Problem Solving Skills. Graduates will develop the ability to solve problems in their discipline. In part, this expands on laboratory skills, as students learn how to interpret and evaluate their data. These skills also include learning how to take general principles from various areas of chemistry, biochemistry, and biology and apply them to the solution of specific problems.
4. Communication Skills. Graduates must not only be able to solve problems, they must also be able to communicate those solutions to others. Graduates will learn how to write scientific reports and papers and will be able to make effective oral presentations of their results and ideas.
5. Scientific Literacy. Scientists must be able to build on the previous work of others and to put their new results into the larger context of the field. This requires the ability to work effectively with the scientific literature. Graduates will be able to use the specialized search engines associated with the vast literature in chemistry, biology, and biochemistry to find and retrieve information. Graduates will also have the knowledge background necessary to read papers from the literature with good comprehension.
6. Professional Ethics. Graduates will understand and respect the accepted standards of conduct associated with the scientific profession. This will include honestly and objectively evaluating and reporting data and demonstrating the proper respect for the published work of others.

## Graduate Studies

## Degree Requirements

Master of Science in Biochemistry and Biotechnology
The Biochemistry and Biotechnology Program offers two types of Master of Science degrees. One is a non-
thesis option suitable for those with laboratory research experience or for others, such as educators, who do not require research experience. The other option includes laboratory-based research under the supervisi on of one the program faculty members, leading to a written thesis. All students admitted to the graduate program are considered to be in the non-thesis program. They may transfer into the thesis program after they have been accepted as a thesis student by one of the faculty.

## M.S. Admission Requirements

Applicants to the M.S. program must submit a completed application and personal data forms, two letters of recommendation from faculty at previously-attended colleges or universities, and transcripts of all previous postsecondary academic work. Applicants whose undergraduate degree is from a university outside of the United States must submit GRE scores (verbal, quantitative, and analytical). For students with a degree fom a U.S. university, submission of Graduate Record Examination scores, although not required, is highly recommended. Admission as a regular graduate student requires graduation from an accredited college with a minimum grade point overall and in biology and chemistry courses of 3.0 (where $A=4.0$ ). Students will generally be expected to have completed a major in biology, chemistry, biochemistry or biotechnology. In addition to the Graduate School admission requirements, applicants should have completed an undergracluate course in biochemistry (equivalent to Biology/Chemistry 4712). Successful applicants will typically have completed courses in organic chemistry, cell biology, and genetics. Applicants may be asked to make up any deficiencies in these areas as a condition of enrollment.

All international applicants, except those from countries where English is the primary language, must take the TOEFL. Ordinarily, a score of 213 on the computer-based exam ( 550 on the paper-based exam or 80 on the internet-based exam) or better is required.

## Requirements

Both the thesis and non-thesis options require a total of 30 graduate credit hours, of which at least half nust be at the 5000 -level or above. A maximum of 12 or 5 credit hours of Graduate Research (BIOL or CHEM 6905) may be applied toward the 30 credit hour total for the thesis or non-thesis options, respectively.

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1) Required Courses
CHEM 4722, Advanced Biochemistry
CHEM 5774, Bioinformatics
BIOL 4614, Biotechnology Laboratory I or BIOL 6615, Advanced Biotechnology Laboratory II
BIOL 6602, Advanced Molecular Biology or BIOL 6612, Advanced Molecular Genetics of Bacteria
BIOL 6889,Graduate Seminar
2) Elective Courses
CHEM 4733, Biochemistry Laboratory
CHEM 4764, Interdisciplinary Topics in Biochemistry
CHEM 4772, Physical Biochemistry
CHEM 5794, Special Topics in Biochemistry
CHEM 6787, Problem Seminar in Biochemistry
CHEM 6905, Graduate Research
BIOL 4842, Immunobiology
BIOL 5069, Topics in Cell and Molecular Blology
BIOL 6550, Advanced Bacterial Pathogenesis
BIOL 6602, Advanced Molecular Biology
BIOL 6612, Advanced Molecular Genetics of Bacteria
BIOL 6615, Advanced Biotechnology Laboratory II
BrOL 6622, Advanced Cellular Basis of Disease
BIOL 6632, Advanced Nucleic Acid Structure and Function
BIOL 6642, Advanced Plant Molecular Blology & Genetic Engineering
BIOL 6652, Advanced Virology
BIOL 6699, Graduate Internship in Biotechnology
BIOL 6889,Graduate Seminar
BIOL 6905, Graduate Research
BIOL 6920, Topics in Biology (2-5 credits), when relevant.
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## Course Descriptions

Prerequisites may be waived by consent of the instructor. Some courses as indicated in the course descr ption may be taken concurrently with the listed offering. Consult an adviser for further information.

## Biology Courses

*Note - Majors in Biochemistry and Biotechnology are not required to take BIOL 1821; hence it is not a prerequisite for BIOL 2012, BIOL 2482, or BIOL 3622 for these majors.

BIOL 1811 Introductory Biology: From Molecules to Organisms (5), [MI, MS]
Prerequisites: A minimum of high school chemistry, ENGL 1100 or equivalent (may be taken concurrentl/),


BIOL 4622 and BIOL 6622.
BIOL 4632 Nucleic Acid Structure and Function (3)
Prerequisites: BIOL 2012 and 4712 or equivalent or consent of instructor. Comprehensive view of structural properties of DNA and RNA that promote molecular interactions and biological function. Topics include physical properties of nucleic acids, formation and biological importance of higher order structures, RNA enzymati: activities, nucleic acid-protein interactions, and RNA metabolism. Three hours of lecture per week. Students may not receive credit for both BIOL 4632 and BIOL 6632.

## BIOL 4642 Plant Biology and Biotechnology (3)

Prerequisite: BIOL 4602 or 4612 . Topics may include molecular and cellular aspects of plant growth, development, and responses to environmental stress and pathogen attack, using the experimental approaches of genetics, molecular biology, and biochemistry. Plant growth manipulation and genetic engineering, including techniques required for DNA transfer and plant regeneration, as well as current and potential future applications, such as engineered resistance to stress, developmental engineering, and metabolic engineering, will also be covered. Three hours of lecture per week. Student may not receive credit for both BIOL 4642 and BIOL 6642.

## BIOL 4652 Virology (3)

Prerequisites: BIOL 2012 and BIOL 3622. A comparative study of the structure, reproduction, and genetits of viruses. Three hours of lecture per week. Students may not receive credit for both BIOL 4652 and BIOL 6652.

BIOL 4712 Biochemistry (3)
Same as CHEM 4712. Prerequisite: CHEM 2612 and either BIOL 1811 or CHEM 2622. Examines the cherr istry and function of cell constituents, and the interaction and conversions of intracellular substances. Students may not receive credit for both BIOL 4712 and CHEM 4712.

## BIOL 4797 Biochemistry and Biotechnology Seminar (1)

Same as CHEM 4797. Prerequisite: Senior standing in the Biochemistry \& Biotechnology program. This course will focus on selected publications related to biochemistry and biotechnology from both refereed journals and news sources. Students are expected to participate in discussions and to prepare oral and written presentations. Completion of the Major Field Achievement Test in Biochemistry \& Biotechnology is a course requirement. May not be taken for graduate credit.

BIOL 4842 Immunobiology (3)
Prerequisites: BIOL 4712 and CHEM 2612. The fundamental principles and concepts of immunobiology and immunochemistry. Emphasis on the relation of immunological phenomena to biological phenomena and biological problems. Three hours of lecture per week.

## BIOL 5069 Topics in Cellular and Molecular Biology (1)

Prerequisite: Graduate standing. Presentation and discussion of student and faculty research projects and/or current research articles in molecular, cellular and developmental biology. May be repeated.

## BIOL 6550 Advanced Bacterial Pathogenesis (3)

Prerequisites: BIOL 2482 and BIOL 2012. Examination of the strategies bacterial pathogens use to infect animals. Topics include host immune responses to infection, bacterial virulence factors, regulation of bacterial virulence, and the cellular and molecular approaches used to study host-parasite interactions. Students may not receive credit for both BIOL 6550 and BIOL 4550 . Students will be required to give an oral presentation and/or write an extra paper on a topic relevant to the course. Three hours of lecture per week.

## BIOL 6602 Advanced Molecular Biology (3)

Prerequisites: BIOL 2012 and BIOL 4712, or consent of instructor. A study of the principles of molecular biology, with emphasis on understanding the genetic regulation of DNA, RNA, and protein synthesis and function in eukaryotic cell. Three hours of lecture per week. Students will be required to give an oral presentation and/or write an extra paper on a topic relevant to the course. Students may not receive credit for both BIOL 6602 and BIOL 4602.

## BIOL 6612 Advanced Molecular Genetics of Bacteria (3)

Prerequisites: BIOL 2012 and BIOL 2482. A study of the molecular biology of gene replication, transfer, and expression in bacterial cells. Topics include DNA replication, transcription and translation, mutagenesis, [NA repair and recombination, gene transfer, and the regulation of genes and global expression systems. Three hours of lecture per week. Students will be required to give an oral presentation and/or write an extra piper on a topic relevant to the course. Student may not receive credit for both BIOL 6612 and BIOL 4612.

## BIOL 6615 Advanced Biotechnology Laboratory II (4)

Prerequisites: BIOL 4614 and either BIOL 4602 or BIOL 4612 , or consent of instructor. An in-depth look at the theory and practice of biotechnology. Lectures and discussion will examine the underlying principles, and laboratory exercises will present hands-on experience with current techniques. One hour of lecture and six hours of laboratory per week. Students will be required to give an oral presentation and/or write an extra paper on a topic relevant to the course. Students may not receive credit for both BIOL 6615 and BIOL 4615.

## BIOL 6622 Advanced Cellular Basis of Disease (3)

Prerequisites: BIOL 4602, and BIOL 3622, or consent of instructor. A study of structural organization and processes of eukaryotic cells. Topics of discussion may include membrane dynamics, organelle biogenesis and function, signal reception and transduction, cytoskeleton structure and mobility, and the cell cycle. Basic concepts in these areas will be combined, covering complete signal transduction pathways and the cellular basis of disease, including cancer. Students may not receive credit for both BIOL 6622 and BIOL 4622.

## BIOL 6632 Advanced Nucleic Acid Structure and Function (3)

Prerequisites: BIOL 2012 and BIOL 4712 or equivalent or consent of instructor. Comprehensive view of structural properties of DNA and RNA that promote molecular interactions and biological function. Topics include physical properties of nucleic acids, formation and biological importance of higher order structures, RNA enzymatic activities, nucleic acid-protein interaction, and RNA metabolism. Three hours of lecture and one hour of discussion per week. Students may not receive credit for both BIOL 4632 and BIOL 6632.

BroL 6642 Advanced Plant Molecular Biology and Genetic Engineering (3)
Prerequisite: BIOL 4602 or BIOL 4612. Topics will include plant cell and developmental biology, DNA transfer into plants, using mutations to identify genes and their functions, regeneration of plants in tissue culture, signal transduction mechanisms, molecular biology of plant organelles, developmental engineering, metabolic engineering, plant microbe interactions, and engineered resistance to pathogen attack. Three hours of lecture and one hour of seminar per week. Students may not receive credit for both BIOL 4642 and BIOL 6642.

## BIOL 6652 Advanced Virology (3)

Prerequisites: BIOL 2482 and BIOL 2012. An advanced comparative study of the structure, reproduction, and genetics of viruses. Three hours of lecture, one hour of discussion or seminar per week. Students may not receive credit for both BIOL 4652 and BIOL 6652.

## BIOL 6699 Graduate Internship in Biotechnology (1-4)

Prerequisites: Graduate standing and enrollment in graduate Biotechnology Certificate Program. Six credit hours maximum (maximum of eight combined credit hours of BIOL 6905 and internship). Internship will consist of period of observation, experimentation and on-the-job training in a biotechnology laboratory. The laboratory may be industrial or academic. Credit will be determined by the number of hours the student works each week and in consultation between the intern's supervisor and the instructor. Internship assignments will be commensurate with the education and experience of the student.

BIOL 6889 Graduate Seminar (2)
Presentation and discussion of various research problems in biology. Graduate student exposure to the seminar process.

BIOL 6905 Graduate Research in Biology (1-10)
Research in area selected by student in consultation with faculty members.
BIOL 6920 Topics in Biology (2-5)
In-depth studies of selected topics in contemporary biology. May be repeated.

## Chemistry Courses

CHEM 1111 Introductory Chemistry I (5) [MS]
Prerequisite: Mathematics through college algebra and trigonometry may be taken concurrently. Presents an introduction to the fundamental laws and theories of chemistry. Laboratory experiments are designed to demonstrate some aspects of qualitative and quantitative analysis and to develop skills in laboratory procedures. Chemistry majors may not include both CHEM 1082 and CHEM 1111, and both CHEM 1011 and CHEM 1111 in the 120 hours required for graduation. Three hours of lecture and one hour of discussion per week, one hour of laboratory-lecture and three hours of laboratory per week.

CHEM 1121 Introductory Chemistry II (5) [MI, MS]
Prerequisite: CHEM 1111 or advanced placement. Lecture and laboratory are a continuation of CHEM 1111. Three hours of lecture and one hour of discussion per week; one hour laboratory-lecture and three hours of laboratory weekly.

CHEM 2223 Quantitative Analysis (3) [C, MI, MS]
Prerequisite: CHEM 1121. Principles and practice of elementary quantitative chemistry. The lecture treats descriptive statistics with emphasis on small samples; various types of competing equilibria pertaining to acidbase, complexometric and potentiometric titrations; and an introduction to spectrophotometric processes. The laboratory provides exercises in titrimetric, gravimetric, and spectrophotometric techniques. Both portions of the course deal with the analytical chemistry of environmentally-significant problems. Two hours of lecture and four and one-half hours of laboratory weekly.

## CHEM 2612 Organic Chemistry I (3) [MS]

Prerequisite: CHEM 1121. An introduction to the structure, properties, synthesis, and reactions of aliphatic and aromatic carbon compounds. Three hours of lecture per week.

CHEM 2622 Organic Chemistry II (3) [MI, MS]
Prerequisite: CHEM 2612. A systematic study of organic reactions and their mechanisms; organic synthetic methods. Three hours of lecture per week.

CHEM 2633 Organic Chemistry Laboratory (2) [C, MS]
Prerequisite: CHEM 2612 or consent of instructor. An introduction to laboratory techniques and procedures of synthetic organic chemistry including analysis of organic compounds. One hour of lecture and four and onehalf hours of laboratory per week.

CHEM 3302 Physical Chemistry for the Life Sciences (3)
Prerequisites: CHEM 2612 and MATH 1800 or MATH 1100, and PHYSICS 1012. Principles and applications; of physical chemistry appropriate to students pursuing degree programs in the life sciences. Topics will include thermodynamics, equilibria, kinetics, and spectroscopy. This course is intended for undergraduates seeking the B.S. degree in Biochemistry and Biotechnology and does not fulfill the physical chemistry requiremen: for other Chemistry B.A. and B.S. degree programs.

## CHEM 3643 Advanced Organic Chemistry Laboratory (2)

Prerequisites: CHEM 2223, CHEM 2622, CHEM 2633. CHEM 3022 may be taken concurrently. Identification of organic compounds by classical and spectroscopic methods; advanced techniques in synthesis and separation of organic compounds. One hour of lecture and four and one-half hours laboratory per week. Not for graduate credit.

## CHEM 4712 Biochemistry (3)

Same as BIOL 4712. Prerequisites: CHEM 2612 and either BIOL 1811 or CHEM 2622. The chemistry and function of cell constituents, and the interaction and conversions of intracellular substances. Three hours of lecture per week. Students may not receive credit for both BIOL 4712 and CHEM 4712.

CHEM 4722 Advanced Biochemistry (3)
Prerequisite: CHEM 4712. Selected advanced topics in the chemistry of life processes. Three hours of lecture per week.

CHEM 4733 Biochemistry Laboratory (2)
Prerequisites: CHEM 4712 (may be taken concurrently), and CHEM 2223. Laboratory study of biochemical processes in cellular and subcellular systems with emphasis on the isolation and purification of proteins (enzymes) and the characterization of catalytic properties. One hour of lecture and three and one-half hour of laboratory per week.

CHEM 4772 Physical Biochemistry (3)
Prerequisite: CHEM 3312 or CHEM4712/BIOL 4712. Designed to acquaint students with concepts and me:hods in biophysical chemistry. Topics that will be discussed include protein and DNA structures, forces involvec in protein folding and conformational stability, protein-DNA interactions, methods for characterization and separation of macromolecules, electron transfer, and biological spectroscopy. Three hours of lecture per week.

CHEM 4797 Biochemistry and Biotechnology Seminar (1)
Same as BIOL 4797. Prerequisite: Senior standing in the Biochemistry \& Biotechnology program. This course will focus on selected publications related to biochemistry and biotechnology from both refereed journals and news sources. Students are expected to participate in discussions and to prepare oral and written presentations, Completion of the Major Field Achievement Test in Biochemistry \& Biotechnology is a course requirement. May not be taken for graduate credit.

CHEM 5774 Bioinformatics (3)
Prerequisite: CHEM 4712 or equivalent. This course introduces modern approaches in bioinformatics and computational biochemistry. Topics to be covered include a survey of biological databases, predictions frem protein and DNA sequences, sequence alignment and sequence database searches, building phylogenetic trees, three-dimensional protein structure prediction, and molecular modeling and simulation.

CHEM 5794 Special Topics in Biochemistry (1-3)
Prerequisite: Consent of instructor. Selected topics in biochemistry. May be taken more than once for credit.
CHEM 6787 Problem Seminar in Biochemistry (1)
Prerequisite: Consent of the biochemistry staff. Problems from the current literature, presentations and discussions by faculty, students and visiting scientists. Ph.D. students may take more than once for credit. Up to three credits may be applied to the M.S. degree program.

CHEM 6905 Graduate Research in Chemistry (1-10)

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## Department of Biology <br> Unfergraduate Studies <br> Graduate Studies <br> UMSL Home <br> Department of Biology Home Page <br> Faculty

Patricia G. Parker, E. Desmond Lee Professor of Zoological Studies, Chairperson Ph.D., University of North Carolina, Chapel Hill
Charles R. Granger, Curators' Distinguished Teaching Professor
Ph.D., University of Iowa
Elizabeth A. Kellogg, E. Desmond Lee Professor of Botanical Studies
Ph.D., Harvard University
Robert E. Ricklefs, Curators' Professor
Ph.D., University of Pennsylvania
Xuemin Wang, E. Desmond Lee Professor of Plant Science
Ph.D., University of Kentucky
Robert J. Marquis, Professor
Ph.D., University of Iowa
Peter F. Stevens, Professor
Ph.D., University of Edinburgh
Teresa Thiel, Professor; Associate Dean of Arts and Sciences
Ph.D., Case Western Reserve University
Godfrey R. Bourne, Associate Professor
Ph.D., University of Michigan
Wendy M. Olivas, Associate Professor
Ph.D., University of Nebraska Medical Center
Bethany K. Zolman, Associate Professor
Ph.D. Rice University
Lisa M. Schechter, Assistant Professor
Ph.D. Harvard University
Mindy Steiniger, Assistant Professor
Ph. D. University of Wisconsin, Madison
Amy E. Zanne, Assistant Professor
Ph.D. University of Florida
Zuleyma Tang-Martinez, Founders Professor Emerita
Ph.D., University of California-Berkeley
Robert Bader, Professor Emeritus
Ph.D., University of Chicago
Arnold B. Grobman, Professor Emeritus
Ph.D., University of Rochester
James H. Hunt, Professor Emeritus
Ph.D., University of California-Berkeley
Martin Sage, Professor Emeritus
Ph.D., Nottingham University
Monroe Strickberger, Professor Emeritus
Ph.D., Columbia University, NY
Lon A. Wilkens, Professor Emeritus
Ph.D., Florida State University
Albert Derby, Associate Professor Emeritus
Ph.D., City University of New York
Harvey P. Friedman, Associate Professor Emeritus
Ph. D., University of Kansas
Lawrence D. Friedman, Associate Professor Emeritus
Ph.D., University of Wisconsin
Donald E. Grogan, Associate Professor Emeritus
Ph.D., University of Missouri-Columbia

Jane A. Starling, Associate Professor Emerita
Ph.D., The William Marsh Rice University
Patrick L. Osborne, Associate Teaching Professor, Associate Director, Whitney R. Harris World Ecology Center
Ph.D., University of East Anglia
Joseph Kamalay, Assistant Teaching Professor
Ph.D. University of California, Los Angeles
Lori L. Paul, Assistant Teaching Professor
Ph.D., Washington University
Marc Spingola, Assistant Teaching Professor
Ph.D., University of New Mexico
Lisa Underwood, Assistant Teaching Professor
Ph.D., Washington University, St Louis
Christopher D. Wolin, Assistant Teaching Professor
Ph. D., University of California Los Angeles
Kenneth R. Mares, Lecturer
Ph.D., University of Missouri, Kansas City

## Affiliated Faculty

Deborah A. Clark, Research Professor
Ph.D., University of Wisconsin
David B. Clark, Research Professor
Ph.D., University of Wisconsin
Terry L. Erwin, Research Professor
Ph.D., University of Alberta
Claude M. Fauquet, Research Professor
Ph.D., University of Strasbourg
William F. Laurance, Research Professor
Ph.D., University of California, Berkeley
Peter H. Raven, Research Professor;
Ph.D., University of California-Los Angeles
M. Jan Salick, Research Professor

Ph.D., Cornell University
Ihsan A. Al Shehbaz, Associate Research Professor
Ph.D., Harvard University
Bruce Allen, Associate Research Professor
Ph.D., University of Cincinnati
Eldridge Bermingham, Associate Research Professor
Ph.D., University of Georgia
Thomas B. Croat, Associate Research Professor
Ph.D., University of Kansas
Peter E. Hoch, Associate Research Professor
Ph.D., Washington University
Peter M. Jorgensen, Associate Research Professor
Ph.D., Aarhus Universitet
Robert E. Magill, Associate Research Professor
Ph.D., Texas A\&M
David A. Neill, Associate Research Professor
Ph.D., Washington University
Charlotte Taylor, Associate Research Professor
Ph.D., Duke University
Hendrik H, van der Werff, Associate Research Professor
Ph.D., State University of Utrecht,
George A. Yatskievych, Associate Research Professor
Ph.D., Indiana University
James L. Zarucchi, Associate Research Professor
Ph.D., Harvard
Cheryl S. Asa, Assistant Research Professor
Ph.D., University of Wisconsin-Madison
Stanton Braude, Assistant Research Professor
Ph.D., University of Michigan
Peter M. Richardson, Assistant Research Professor
Ph.D., University of London
George E. Schatz, Assistant Research Professor
Ph.D., University of Wisconsin-Madison
Christopher G. Taylor, Assistant Research Professor
Ph.D., North Carolina State University
Maria Del Carmen Ulloa Ulloa, Assistant Research Professor
Ph.D., Aarhus Universitet
Liming Xiong, Assistant Research Professor
Ph.D., University of Arizona
Yiji Xia, Assistant Research Professor
Ph.D., Iowa State University
Matthew A. Albrecht, Adjunct Assistant Professor
Ph.D., Ohio University
Stephen Blake, Adjunct Assistant Professor
Ph.D., University of Edinburgh
Sharon Deem, Adjunct Assistant Professor
Ph.D., University of Florida
Ivan Jimenez, Adjunct Assistant Professor
Ph.D., University of Missouri-St. Louis

## General Information

## Degrees and Areas of Concentration

The Department of Biology provides academic programs leading to the B.A. or B.S. in Biology. In cooperation with the College of Education, the department offers the B.S. in Secondary Education with a major in biology and the B.A. or B.S. in Biology with teacher certification. It also offers graduate work leading to the Master of Science and the Doctor of Philosophy degrees in Biology. Biology faculty members are engaged in teaching and research in areas ranging from cell and molecular biology to population and community studies.

## Minor in Biology

Students majoring in another discipline may earn a minor in biology by completing a prescribed course of study. Unique programs can be developed to coordinate with special career objectives.

## Departmental Honors

The Department of Biology offers an Honors Program to train students in conducting research in areas of biological research currently under study in the Department.

## Graduate Studies

The Department of Biology offers graduate work leading to the M.S. and Ph.D. degrees in biology. Graduate students will normally work toward an M.S. or Ph.D. degree in two broad areas of biology: a) cellular, molecular, and developmental biology, or b) ecology, evolution, and systematics. Students in the M.S. and Ph.D. programs also have the opportunity to do their graduate work in collaboration with scientists at the Missouri Botanical Garden, the Donald Danforth Plant Science Center, or the Saint Louis Zoo through cooperative graduate programs.

## Facilities

Department facilities include research and teaching laboratories, environmental chambers, greenhouses, and a large array of supporting modern research instrumentation. Graduate research can be pursued using facilities of the Missouri Botanical Garden, the Donald Danforth Plant Science Center, or the Saint Louis Zoo. Several sites within an hour of campus are suitable for regional field studies, including state parks, wildlife conservation areas, the Shaw Nature Reserve, and Washington University's Tyson Research Center. UMSL is a member of the St. Louis University Research Station Consortium that operates Lay and Reis Field Stations in Missouri and is also a member of the Organization for Tropical Studies, which operates three field stations in Costa Rica. CEIBA Biological Centre in Guyana has hosted several UMSL courses and student researchers. Student researchers work independently at research stations throughout the tropics.

## Cooperative Programs

The department participates in a cooperative consortium program in biology with Washington University, Saint Louis University, Southern Illinois University-Edwardsville, and the Missouri Botanical Garden.

## Program Objectives and Career Prospects

The degree program at the baccalaureate level is designed to prepare the student for further professional training in areas such as medicine, dentistry, veterinary medicine, optometry, plant science, conservation, and related areas or for further graduate training in research in biology.
The Undergraduate Certificates in Biotechnology and Conservation Biology are for majors interested in careers in biotechnology and associated areas and in conservation, respectively.
The Master of Science program is an extension of the undergraduate program and provides the researchoriented training and education necessary for students to enter doctoral programs in biology and develops professional biologists qualified to function in responsible technical positions. It also trains students to become effective secondary school and junior college biology teachers.
The Graduate Certificates in Biotechnology and in Tropical Biology and Conservation provides professional training in the areas of biotechnology and conservation.
The Ph.D. program prepares students to be research biologists in academics or other professional fields in
ecology, evolution and systematic and cellular and molecular biology. Employment opportunities are ava lable in college or university research and teaching, in government and public institutions such as museums, botanical gardens and conservation organizations, and in industry.

## Undergraduate Studies

## General Education Requirements

Students must satisfy the university and college general education requirements. Some Biology courses may be used to meet the science and mathematics requirement of the university.

Candidates for the B.A. degree must fulfill the foreign language requirement of the College of Arts and Sciences. There is no foreign language requirement for the B.S. degree.

## Satisfactory/Unsatisfactory Option

Up to 18 credit hours may be taken on a satisfactory/ unsatisfactory ( $s / u$ ) basis. Excluded from this option are required courses in biology, chemistry, physics, and mathematics.

## Non-major biology courses

The following 1000 level biology courses do not count toward the biology credit hours required for a majcr in biology. Moreover, if biology majors take these courses, they are treated as biology courses when computing the 70 credit hours outside of biology needed to be included in the 120 total credit hours required for graduation.

BIOL 1012, General Biology
BIOL 1013, General Biology Laboratory
BIOL 1102, Human Biology
BIOL 1131, Human Physiology and Anatomy I
BIOL 1141, Human Physiology and Anatomy II
BIOL 1162, General Microbiology
BIOL 1202, Environmental Biology
BIOL 1350, Conservation of Diversity

## Degree Requirements

## Bachelor of Arts in Biology

The B.A. degree provides maximum flexibility for biology majors to pursue an undergraduate liberal arts course of study that can lead to professional careers in medicine, allied health, public and environmental health, law, and graduate studies in the life sciences. Candidates must have a cumulative grade point average of 2.0 or better in biology courses. Effective fall semester 2009, candidates must also earn a minimum g ade of C - in all core courses.

All B.A. degree majors must take at least 39 credit hours but not more than 50 hours in appropriate biology course work. Transfer student must satisfactorily complete at least 12 credit hours of UMSL biology course work (including one laboratory) at the 2000 level or above before receiving a B.A. degree from the College of Arts and Sciences with a major in biology.

## Lecture and Seminar Course Requirements

1) Core Courses. The following biology courses or their equivalents are required:

BIOL 1811, Introductory Biology: From Molecules to Organisms
BIOL 1821, Introductory Biology: Organisms and the Environment
BIOL 2012, Genetics
BIOL 3302, Introduction to Evolution
BIOL 3622, Cell Biology
BIOL 4889, Senior Seminar, or BIOL 4985 and BIOL 4986 for those seeking teacher certification.
One of the following diversity courses:
BIOL 2402, Vertebrate Biology or
BIOL 2442, Invertebrate Biology or
BIOL 2482, Microbiology or
BIOL 2501, Biology of Plants or
BIOL 4402, Ornithology or
BIOL 4422, Entomology or
BIOL 4482, Parasitology or
BIOL 4501, Flowering Plant Families: Phylogeny and Diversification

## 2) Elective Courses.

Three additional biology lecture courses, at the 2000 level or higher are required. They may be selected rom any of the lecture or lecture-laboratory courses offered. Selection of these courses should reflect the carter interest of the student. Biology courses taken to fulfill basic skill requirements (e.g., statistics requirement or
biochemistry option) can be used to satisfy this requirement.
At least two biology lecture courses taken as part of the core or as electives must be at the 4000 level or higher. No more than one of these higher level courses can be used to fulfill other requirements (e.g., diversity or statistics requirements, or biochemistry option).

## Laboratory Course Requirements

Three biology laboratory courses at the 2000 level or higher are required. They may be taken from any of the lecture-laboratory or laboratory courses offered. Two credit hours of BIOL 3699, BIOL 4299, BIOL 4905, or BIOL 4915 (no combination of these courses allowed) can be used to fulfill one laboratory requirement. Students may take CHEM 4733 to satisfy one of these laboratory course requirements, but students may not use both BIOL 4713 and CHEM 4733 to fulfill this requirement.

Basic Skills Requirement
A well-rounded biologist needs certain skills outside the biology subject matter. The basic skills requirement is designed to provide the student with a background in communication skills and knowledge in associated science areas.

1) Communication Skills. Courses in foreign languages and in writing are required for development of the basic communication skills needed to transmit scientific information. The following satisfy this requirement:

## Foreign Language

The foreign language requirement of the College of Arts \& Sciences fulfills the departmental requirement.

## Writing

ENGL 3100, Advanced Expository Writing or ENGL 3160, Writing in the Sciences (strongly preferred)
2) Associated Science Area. The following courses or their equivalents must be successfully completed in science areas related to biology:

PHYSICS 1011, Basic Physics
PHYSICS 1012, Basic Physics
CHEM 1111, Introductory Chemistry 1 or [CHEM 1082 and CHEM 1091]
CHEM 1121, Introductory Chemistry 11
CHEM 2612, Organic Chemistry I
One of the following:
CHEM 2223, Quantitative Analysis or
CHEM 2622, Organic Chemistry II or
CHEM 2633, Organic Chemistry Laboratory or
BIOL/CHEM 4712, Biochemistry
MATH 1310, College Algebra
MATH 1035, Trigonometry
MATH 1100, Basic Calculus or MATH 1800, Analytical Geometry and Calculus
One of the following:
BIOL 4122 , Biometry or
MATH 1310, Elementary Statistical Methods or
MATH 1320, Applied Statistics I or
ED REM 5730, Educational Statistics or
PSYCH 2201, Psychological Statistics
Bachelor of Science in Biology
The B.S. degree in biology is designed to prepare students for basic technical positions and graduate studies in the life sciences. Candidates for the degree have the same core courses and general education requirements as those seeking the Bachelor of Arts degree, as well as additional requirements in depth of study, laboratory experience, communication skills, and background in associated science areas. Candidates must have a cumulative grade point average of 2.0 or better in biology courses. Effective Fall semester 2009, candidates must earn a minimum grade of C - in all core courses.

There is no foreign language requirement for the B.S. degree. However, students should realize that the literature for biological studies is in many different languages and the ability to extract information from this literature is an important skill.

To fulfill the requirements for the B.S. degree a minimum of 44 hours but not more than 50 hours must be completed in appropriate biology course work. Transfer students must satisfactorily complete at least 17 credit hours of UMSL biology course work (including two laboratory courses) at the 2000 level or higher before receiving a B.S. degree in biology.

## Lecture and Seminar Course Requirements

1) Core Courses. The following biology courses or their equivalents are required:

BIOL 1811, Introductory Biology: From Molecules to Organisms
BIOL 1821, Introductory Biology: Organisms and the Environment
BIOL 2012, Genetics
BIOL 3302, Introduction to Evolution
BIOL 3622, Cell Biology
BIOL 4889, Senior Seminar or BIOL 4985 and BIOL 4986 for those seeking teacher certification.
One of the following diversity courses:
BIOL 2402, Vertebrate Biology or
BIOL 2442, Invertebrate Biology or
BIOL 2482, Microbiology or
BIOL 2501, Biology of Plants or
BIOL 4402, Ornithology or
BIOL 4422, Entomology or
BIOL 4482, Parasitology or
BIOL 4501, Flowering Plant Families: Phylogeny and Diversification

## 2) Elective Courses

Four additional biology lecture courses at the 2000 level or higher are required. They may be selected fro $n$ any of the lecture or lecture-laboratory courses offered. Selection of these courses should reflect the carerer interest of the student. Biology courses taken to fulfill basic skill requirements (e.g., statistics requirement or biochemistry option) can be used to satisfy this requirement.

At least three biology lecture courses taken as part of the core or as electives must be at the 4000 leve or higher. No more than two of these higher level courses can be used to fulfill other requirements (e.g., diversity or statistics requirements, or biochemistry option).

## Laboratory Course Requirements

Four biology laboratory courses at the 2000 level or higher are required. They may be selected from any of the lecture-laboratory or laboratory courses offered. Two credit hours of of BIOL 3699, BIOL 4299, BIOL 4905, or BIOL 4915 (no combination of these courses allowed) can be used to fulfill one laboratory requirement. Students may take CHEM 4733 to satisfy one of these laboratory course requirements, but students may not use both BIOL 4713 and CHEM 4733 to fulfill this requirement.

## Basic Skills Requirement

A well-rounded biologist needs certain skills outside the biology subject matter. The basic skills requirement is designed to provide the student with a background in communication skills and knowledge in associated science areas.

1) Communication Skills. Courses in both formal speaking and writing are required for development of the basic communication skills needed to transmit scientific information.

Formal Speaking
COMM 1040, Introduction to Public Speaking

## Writing

ENGL 3100, Advanced Expository Writing or ENGL 3160, Writing in the Sciences (strongly preferred)
2) Associated Science Area : The following courses or their equivalents must be successfully completerd:

PHYSICS 1011, Basic Physics
PHYSICS 1012, Basic Physics
CHEM 1111, Introductory Chemistry I, or [CHEM 1082 and CHEM 1091]
CHEM 1121, Introductory Chemistry II
CHEM 2612, Organic Chemistry I
CHEM 2622, Organic Chemistry II or BIOL/CHEM 4712, Biochemistry
CHEM 2223, Quantitative Analysis or CHEM 2633, Organic Chemistry Laboratory
MATH 1030, College Algebra
MATH 1035, Trigonometry
MATH 1100, Basic Calculus, or MATH 1800, Analytic Geometry and Calculus I
One of the following:
BIOL 4122, Biometry or
MATH 1310, Elementary Statistical Methods or
MATH 1320, Applied Statistics I or
ED REM 5730, Educational Statistics or
PSYCH 2201, Psychological Statistics
One of the following:
PHIL 2256, Bioethics or PHIL 3380, Philosophy of Science

## Research Opportunity

Students in the B.S. Biology degree program who are interested in gaining research experience are encouraged to take a minimum 2 credit hours of undergraduate research, BIOL 4905. The privilege of doing undergraduate research provides students with a first-hand opportunity to experience the research process under the supervision of a faculty member or off-campus scientist. The project normally includes a library search of pertinent literature, laboratory or field experience, and a summary paper and a presentation, all based on an average 8 hr . per week per credit hour for a 15 week semester.

## Departmental Honors Thesis

The Department of Biology offers the more motivated and highly achieving students the opportunity to present primary research in the form of a written Honors Thesis. The first step in conducting an undergraduate thesis is to identify a faculty research mentor; the mentor, along with two UMSL faculty members, will be readers of the thesis. It is highly recommended that students arrange to work full time on their honors thesis during the summer between the junior and senior years. Some funds are available from university, the Harris World Ecology Center, and departmental fellowships, but in more cases support will come from the sponsoring lab.
The thesis will be completed and presented orally in an advertised public forum by the first of the month in which graduation is to occur. The readers of the thesis will decide on the appropriate level of honors, and will report their recommendation to the Dean of Arts and Sciences, so that the student is recognized at graduation as having graduated with Honors in Biology (or High Honors in Biology). In addition to fulfilling the coursework required for a B.S. or B.A. in Biology and the Honors Thesis itself, students must: 1) carry at least a 3.3 GPA, 2) complete a minimum 2 credit hours of BIOL 4905 (Research).

## Bachelor of Science in Education with Emphasis in Biology

The B.S. Ed. is a professional degree designed for individuals who wish to pursue a teaching career in biology in the secondary schools. The biology requirements parallel those for the B.A. degree with the exception that BIOL 4985, Curriculum and Methods of Teaching Life Sciences, and BIOL 4986, Laboratory in Teaching Life Sciences, are substituted for BrOL 4889, Senior Seminar. Students must also fulfill the requirements for the B.S. Ed. degree as prescribed by the College of Education.

## Bachelor of Arts in Biology with Teacher Certification

Biology majors interested in teaching biology in secondary schools may obtain teacher certification in cooperation with the College of Education by fulfilling the B.A. or B.S. with certain prescribed courses in biology, with the exception of BIOL 4889, Senior Seminar, and in addition, completing the following courses:

PSYCH 1003, General Psychology
ED FND 1111, The School in Contemporary Society
ENGL 3160, Writing in the Sciences
HIST 1001, 1002, or 1003, American Civilization
POL SCI 1100, Introduction to American Politics
PHIL 3380, Philosophy of Science
COMM 1040, Introduction to Public Speaking
TH DAN 1210, Fundamentals of Acting
GEOL 1001, General Geology
ATM SC 1001, Elementary Meteorology
ED PSY 3312, The Psychology of Teaching and Learning
ED TEC 2248, Utilization of Computer-Based Materials in Instruction
SEC ED 3213, Techniques of Secondary School Teaching and Field Experiences OR
TCH ED 3310, Introduction to Instructional Methods
SPEC ED 3313, The Psychology and Education of Exceptional Individuals
SEC ED 4391, Teaching Reading in Secondary School

## Content Areas

BIOL 4985, Curriculum and Methods of Teaching Life Sciences
BIOL 4986, Laboratory in Teaching Life Sciences
SEC ED 3290, Secondary School Student Teaching
BIOL 4999, Science Teaching Intern Seminar
Because specific biology courses are required for teaching endorsement, students are advised to contact the Department of Biology AND the College of Education for special advising regarding teacher certification.

## Minor in Biology

Students may minor in biology by completing a minimum of 19 credit hours in biology, of which at least 9 hours of the biology course credits must be taken in residence at UMSL.

Requirements are:
BIOL 1811, Introductory Biology: From Molecules to Organisms, BIOL 1821, Introductory Biology: Organisms and the Environment, and BIOL 2012, Genetics. Two additional courses totaling no less than 6 credit hours. At least one course should be at the 3000 level or above.

All students must plan an appropriate course of study in consultation with an advisor, and the program rust be given prior approval by the Chairperson of the Department of Biology. Under certain circumstances, a student may deviate from the prescribed course of study and substitute a group of courses that exhibit a coherent area of specialization to coordinate with a career objective.

Candidates must have a cumulative grade point average of 2.0 or better in the minor, courses may be taken on a satisfactory/ unsatisfactory (s/u) basis.

## Minor in Environmental Studies

This is an interdisciplinary program that integrates the natural and physical sciences with the social scien zes and humanities to study current environmental problems resulting from human population growth, global climate change, overuse of natural resources, pollution and biodiversity loss. A minimum 18 hours are required, 9 of which must be in the natural and physical sciences, including the listed Honors College courses, and 9 must be from the social sciences and humanities. A total of 12 hours must be taken at or above the 2000 level, and one course at or above the 3000 level. At least 9 hours must be taken while in residence at UMSL. A minimum GPA of 2.0 is required.

ANTHRO 1005 Introduction to Biological Anthropology
ANTHRO 3270 Introduction to Biological Anthropology
BIOL 1202 Environmental Biology
BIOL 1821 Introductory Biology: Organisms and the Environment
BIOL 2102 General Ecology
BIOL 2103 General Ecology Laboratory
BIOL 2501 Biology of Plants
BIOL 3122 Tropical Resource Ecology
BIOL 3202 Conservation Biology
BIOL 3203 Conservation Biology Laboratory
BIOL 3302 Introduction to Evolution
BIOL 4102 Behavioral Ecology
BIOL 4192 Applications of Geographic Information Systems
BIOL 4222 Tropical Ecology and Conservation
BIOL 4245 Field Biology
BIOL 4270 Global Climate Change
BIOL 4402 Ornithology
BIOL 4422 Entomology
BIOL 4501 Plant Families
ECON 4160 Geospatial Analysis in the Social Sciences
ECON 4170 Cost-Benefit Analysis
ECON 4550 Natural Resource Economics
GEOL 1002 Historical Geology
HONORS 2050 Inquiries in the Natural Sciences (when topic appropriate)
HONORS 2051 Inquires in the Sciences: Laboratory or Fieldwork (when topic appropriate)
INTBUS 4281/INTBUS 5198 Entrepreneurship in the Global Environment
PHIL 2255 Environmental Ethics
POL SCI 3480 Environmental Politics
POL SCI 3595 Studies in Comparative Politics (when topic appropriate)
POL SCI 3850 International Organizations \& Global Problem Solving (when topic appropriate)
POL SCI 3900 Special Readings (when topic appropriate)
POL SCI 4460 Urban Planning and Politics

## Undergraduate Certificate in Biochemistry

The university offers a certificate program for science majors who are interested in careers in biochemistry. The Biochemistry Certificate is an interdisciplinary specialization that may be earned within either a biology or chemistry major. To earn the certificate, biology majors must enroll in the Biochemistry Certificate Program upon the completion of 60 credit hours, fulfill all the science (biology, chemistry, math, and physics) course requirements for the B.S. degree in biology, and successfully complete the following courses:

CHEM 2622, Organic Chemistry II
BIOL/CHEM 4712, Blochemistry
CHEM 2223, Quantitative Analysis
CHEM 2633, Organic Chemistry Laboratory
BIOL 4713, Techniques in Biochemistry or CHEM 4733, Biochemistry Laboratory
CHEM 4722, Advanced Biochemistry
And three of the following biology courses:

|  | BIOL 2482, Microbiology <br> BIOL 2483, Microbiology Laboratory <br> BIOL 3642, Development <br> BIOL 4602, Molecular Biology <br> BIOL 4612, Molecular Genetics of Bacteria <br> BIOL 4614, Biotechnology Laboratory I <br> BIOL 4622, Molecular Biology of the Cell <br> BIOL 4632, Nucleic Acid Structure and Function <br> BIOL 4842, Immunobiology |
| :---: | :---: |

## Undergraduate Certificate in Biotechnology

The university offers an undergraduate certificate program for biology majors who are interested in careers in biotechnology including biochemistry, microbiology, molecular biology, cell biology, and developmental biology. To earn the certificate, biology majors must enroll in the Biotechnology Certificate Program upon the completion of 60 credit hours, fulfill all the science (biology, chemistry math, and physics) course requirements for the B.S. degree in biology, and successfully complete the following courses:

BIOL 2013, Genetics Laboratory
BIOL 2482, Microbiology
BIOL 2483, Microbiology Laboratory
CHEM 2622, Organic Chemistry II
BIOL 4614, Biotechnology Laboratory I
BIOL/CHEM 4712, Biochemistry
BIOL 4713, Techniques in Biochemistry or CHEM 4733, Biochemistry Laboratory
One of the following courses:
BIOL 4602, Molecular Biology
BIOL 4612, Molecular Genetics of Bacteria
And one of the following courses:
BIOL 4615, Biotechnology Laboratory II
BIOL 4622, Molecular Biology of the Cell
BIOL 4632, Nucleic Acid Structure and Function
BIOL 4652, Virology
BIOL 4842, Immunobiology
CHEM 4722 , Advanced Biochemistry

## Undergraduate Certificate in Conservation Biology

The Certificate in Conservation Biology is a multidisciplinary program of study integrating theoretical and applied topics associated with conservation biology. The certificate is intended for undergraduate students with majors in biology or in any other field who wish to develop a specialization in conservation. The certificate is offered by the Department of Biology in cooperation with the departments of Anthropology, Economics, History, Political Science, Social Work, and Sociology. Building on a core curriculum, students can elect courses from these departments to complete their requirements. Regularly enrolled undergraduates at UMSL or individuals with baccalaureate degrees who wish to recelve a Certificate in Conservation Biology are eligible to participate in the conservation certificate program. To participate, students must apply to the certificate program. Application forms are available from the Blology Department. Guidelines for admission to the certificate program are also available. Individuals with baccalaureate degrees who are interested in this certificate must apply to the university as unclassified undergraduates. The certificate requires completion of 21 credit hours, outlined below. Students should consult the Bulletin with regard to prerequisites for any of the courses listed here.

## Core Courses <br> Biology

BIOL 2102, General Ecology
BIOL 3202, Conservation Biology
BIOL 3203, Conservation Biology Laboratory
BIOL 4299, Practicum in Conservation
Electives: The remaining 11 credits must be selected from courses listed below. Five credits must be taken from within biology and 6 credits outside biology, from at least two departments.

## Anthropology

ANTHRO 2120, Native Peoples of North America
ANTHRO 2131, Archaeology of Missouri
ANTHRO 2132, Archaeology of North America
Biology
BIOL 3122, Tropical Resource Ecology
BIOL 3123, Tropical Resource Ecology Field Studies

BIOL 4102, Behavioral Ecology
BIOL 4112, Evolution of Animal Sociality
BIOL 4182, Population Biology
BIOL 4202, Wildife Ecology and Conservation
BIOL 4245, Field Biology
BIOL 4382, Introduction to Marine Science
BIOL 4402, Ornithology
BIOL 4403, Ornithology Laboratory
BIOL 4422, Entomology
BIOL 4423, Entomology Laboratory
BIOL 4501, Flowering Plant Families Phylogeny and Diversification

## Economics

ECON 3300, International Economic Analysis
ECON 3301, Intermediate Economic Theory:
ECON 4550, Natural Resource Economics
History
HIST 3000, Selected Topics, when relevant

## Political Science

POL SCI 3480, Environmental Politics
POL SCI 3590, Studies in Comparative Politics, when relevant
POL SCI 3850, International Organizations and Global Problem Solving
POL SCI 4510, Comparative Public Policy and Administrations

## Pre-professional Graduation

The Department of Biology sponsors a 3+4 Program for the UMSL College of Optometry.
In this program students may be admitted to the College of Optometry after completing three years ( 90 semester hours) of study in the Department of Biology. The undergraduate degree is granted when students satisfactorily complete the first year of optometry school. One or more of the following conditions must be met in order to qualify for the undergraduate degree. All general education requirements and all requirements for the major, except electives, must be completed. Any deficiency in required courses must be remedied with courses taken at UMSL within three years after entering the College of Optometry. Up to 6 hours from the College of Optometry may be substituted for undergraduate degree requirements, with approval of the Department of Biology.

UMSL - Logan College (3+3 program)
The Department of Biology has developed a $3+3$ articulation agreement with Logan College of Chiropractic (LCC). This program enables qualified students the opportunity to complete a Bachelor of Science degree in Biology for the University of Missouri - St. Louis as well as a Doctor of Chiropractic for Logan College of Chiropractic in six years.

## The program is only open to students who enter UMSL as first-time freshmen.

Participants must complete their first 90 hours of college work ( 3 years) at UMSL following a prescribed curriculum.

Participants who have achieved at least 3.25 GPA at UMSL will automatically be granted admission by Logan College of Chiropractic.

After successfully completing an additional 30 credit hours (4th year) at Logan, a student will receive a BS in Biology degree from UMSL.

After completing two additional years at Logan, the student will receive a doctorate in chiropractic

The acceptance of transfer credits or testing toward completion of degree requirements shall be governed by current policies of UMSL. However, no more than 20 credits of required courses, and NONE of the science credits required for admission to LCC may be earned via examination or transfer from another school

LCC shall accept, for the entrance date of their choice, all students who successfully complete the Pre-Chiropractic Program with a cumulative GPA of 3.25 or higher and meet all other criteria for admission

Students who earn less than a 3.25 GPA , but at least a 2.50 GPA , will be eligible for admission to LCC, and will receive appropriate consideration in the admission process for having completed the UMSL Pre-Chiropractic Program, but will not receive the assurance of a seat reserved for students earning a 3.25 or higher GPA

Students will make application to LCC one year in advance of their desired entrance date and will complete all required application procedures thereafter in a timely manner, including submission of recommendation and a satisfactory interview.

This program offers benefits to students (six years instead of seven from high school to doctorate). The University of Missouri courses are listed below:

General Education Requirements (33):
Humanities (9) Select from General Education List
Social Sciences (One course must be a Psychology) (9)
Select from General Education List of courses meeting Social Science Gen. Ed requirements.
American History \& Government (3)
Choose (3):
MATH 1310 Elementary Statistical Methods; or
MATH 1320 Applied Statistics I or
BIOL 4122 Biometry
COMM 1040 Introduction to Public Speaking (3)
ENGL 1100 Freshman Composition (3)
ENGL 3160 Writing in the Sciences (3)
Major (58):
Foundation courses
BIOL 1811 Introductory Biology: From Molecules to Organisms (5)
BIOL 1821 Introductory Biology: Organisms and the Environment (5)
BIOL 2012 Genetics (3)
BIOL 2482 Microbiology (3)
BIOL 3622 Cell Biology (3)
BIOL 3302 Introduction to Evolution (3)
BIOL/CHEM 4712 Biochemistry (3)
BIOL 4889 Senior Seminar (2)
PHYSICS 1011 Basic Physics (4)
PHYSICS 1012 Basic Physics (4)
CHEM 1111 Introductory Chemistry I (5)
CHEM 1121 Introductory Chemistry II (5)
CHEM 2612 Organic Chemistry I (3)
CHEM 2622 Organic Chemistry II (3)
CHEM 2633 Organic Chemistry Laboratory (2)
PHIL 2256 Bioethics (3)
MATH 1030 College Algebra (3)
MATH 1035 Trigonometry (2)
Choose (3-5):
MATH 1100 Basic Calculus (3); or MATH 1080 Analytical Geometry\& Calculus I (5)
The remaining 30 hours to be taken at Logan include:
Transfer Credits (34):
Anatomy I / Lab (6)
Spinal Anatomy / Lab (5)
Biochemistry I / Lab (4)
Histology / Cell Biology / Lab (5)
Anatomy II / Lab (6)
Neuroanatomy / Lab (5)
Biochemistry II (4)
Physiology I (4)
Microbiology / Lab (4)

## Graduate Studies

The graduate program offers both Masters and Ph.D. degrees, as well as Graduate Certificates in Biotechnology and Tropical Biology and Conservation.

## Advisors

All graduate students will have a faculty advisor. In the event that a student's interest changes or the faculty advisor feels the student's direction no longer falls with his/her area of expertise, the student and advisor should discuss whether a change of advisor is warranted. The graduate director must be notified in writing of any change in advisors. If a student or advisor is uncomfortable discussing the issue directly with the other, he/she is encouraged to meet with the director of the graduate program.

## Graduate Assistantships

Stipends for teaching and research assistantships are awarded on a competitive basis to qualified gradua:e students in masters or PhD. Programs. Tuition fees are waived for graduate assistants. Applications for assistantships must be sent to the Director of Graduate Studies in the Department of Biology and received by December 1.

## Master of Science in Biology

The Department of Biology offers two ways of achieving the Master of Science degree. The first is a nonthesis option suitable for those who may already have extensive research experience, for educators who seek to upgrade their academic skills but do not require research experience, or for those who need to broaden their biological background. The second is a traditional apprenticeship in research leading to a written the:sis. All students admitted to the graduate program are considered to be in the non-thesis program unless they have been accepted into an individual faculty lab. Starting with a common core, both the non-thesis or thesis option may be developed into a final degree program in either of two broad areas in biology: 1) Cell and Molecular Biology or 2) Ecology, Evolution, and Systematics. Non-thesis students may also elect to take courses in both areas.

## M.S. Admission Requirements

Applicants to the M.S. program must submit completed application and personal data forms, three letters of recommendation from undergraduate faculty or work supervisors, and transcripts of all previous work. Submission of Graduate Record Examination scores, although not required, is highly recommended and will be helpful for positive consideration of admittance. Admission as a regular graduate student requires gradua:ion from an accredited college with a minimum grade point average overall and in biology courses of 3.0 (where $A=4.0$ ).

All foreign applicants, except those from countries where English is the primary language, must take the TOEFL. Ordinarily, a score of 213 on the computer-based exam ( 550 on the paper-based exam) or better is required.

In addition to the Graduate School admission requirements, applicants should have completed advanced undergraduate biology courses including genetics, biochemistry, and evolution. Courses in organic chemistry, college physics, and calculus are also expected, and a course in statistics is highly recommended.

Students admitted to the degree program who have not met some of the prerequisites may be asked to pass appropriate courses before graduating. These courses will be agreed upon by the student's advisor and the student during the first semester of enrollment. In particular, undergraduate deficiencies in genetics and either biochemistry or evolution shall be made up by taking the appropriate course(s). Three credits of BIOL 4920 Selected Topics can be given to graduate students for BIOL 2012 (Genetics) or BIOL 3302 (Evolution), if they receive a grade of B or better for all undergraduate course work and complete a grad ate level paper assigned by the instructor. Instructor consent is required.

General Requirements (Pending CBHE approval)
All students are required to take at least 4 but not more than 8 hours of BIOL 6889, Graduate Seminar. Thesis student are required to take BIOL 5089, Ethical Issues in Biology. Students are expected to maintain a GPA of 3.0 or better. Students may choose to specialize in either Cellular and Molecular Biology (CMB) emphasis area or the Ecology, Evolution and Systematics (EES) emphasis area, and appropriate courses in each area will be recommended by the student's advisor.

## Non-thesis Option

Including the general requirement, students must take at least 30 graduate credit hours, of which at leas: half must be at the 5000 or 6000 level. No more than 5 hours of BIOL 6905, Graduate Research, may be counted toward the degree.

## Thesis Option

The student and adviser work together to develop a research plan. The thesis proposal must be approvec by the student's adviser and advisory committee before the student enrolls in more than 4 credit hours of BIOL 6905, Graduate Research, and before the student has completed 15 credit hours in the master's prograrı. No more than 13 hours of BIOL 6905, Graduate Research, may be counted toward 30 hours of the degree. A thesis embodying results of original research shall be submitted to and approved by the Department of Biology and the Graduate School. This approval requires both a written thesis and oral presentation and defense.

Doctor of Philosophy in Biology (Pending CBHE Approval)
The doctoral program emphasizes empirical and theoretical approaches to biological research. Students are required to integrate basic skills in biology with focal studies in an emphasis area. The program is designed to provide research experience and training appropriate for advanced positions in academic research and teaching, government and public agencies, and industry.

## Ph.D. Admission Requirements

Applicants to the Ph.D. program must submit a formal application to the Graduate Admissions Office. In
54 5x addition, the applicant should arrange to have sent: three letters of recommendation from faculty members at previously attended colleges or universities, GRE scores (Verbal, Quantitative, and Analytical), and transcripts of all postsecondary academic work. Admission to the Ph.D. program normally requires a minimum grade point average overall and in biology courses of 3.0 (where $A=4.0$ ). Applicants from countries where English is not a primary language are required to take the TOEFL examination. Scores must be submitted before admission can be decided. Ordinarily, a score of 550 or better is required.
Applicants should have a bachelor's or M.S. degree from an accredited United States college or university or evidence of equivalent training at an accredited institution outside the United States. They should have the appropriate background for graduate work in biology, including courses in genetics, biochemistry, and evolution. Courses in organic chemistry, college physics, and calculus are expected. A course in statistics is recommended. Students admitted to the Ph.D. program who have not met all the prerequisites may be required to make up deficiencies before admission to candidacy. The deficiencies will be decided during orientation meetings prior to the start of the second semester. Three credits of BIOL $\mathbf{4 9 2 0}$ Selected Topics can be given to graduate students for BIOL 2012 or BIOL 3302 if they receive a grade of B or better for all undergraduate course work and complete a graduate-level paper assigned by the instructor. Instructor consent is required,

## Ph.D. Degree Requirements

In addition to the general requirements of the Graduate School, the basic requirements for the Ph.D. degree in Biology include 60 graduate credit hours. At least 30 of the 60 hours must be taken at the 5000 or 6000 level. With the explicit consent of the advisory committee, students may take for graduate credit up to 3 credit hours of 3000 level courses in allied departments. All students are required to take BIOL 5089, Ethical Issues in Biology. Courses in biology at the 3000 level and below are not avallable for graduate credit. At least 31 of the 60 hours must be taken while in residence at the University of Missouri-St. Louis. Graduate credit for course work transferred from another program is subject to approval by the graduate committee and by the Graduate School. Graduate courses taken elsewhere will be considered for transfer credit during orientation meetings conducted prior to the start of the second semester of enrollment.

The requirements for all Ph.D. students include:
30 hours of course work, including

1. At least 6 credits of BIOL 6889, Graduate Seminar
2. One credit of BIOL 5179, Ethics in Biology (to be taken the first semester)
3. BIOL 4122, Biometry, or an equivalent undergraduate course in statistics - This requirement is normally waived in the student has already taken an undergraduate course in statistics and received a B-or higher. Bioinformatics can also be substituted for Biometry.

The maximum number of credit hours that may be applied toward the 60 -hour requirement is limited as stated below:
BIOL 6889, Graduate Seminar: 10 hours
BIOL 6905, Graduate Research: 30 hours
A combination of 6 total credit hours of the following:
BIOL 5059, Topics in Ecology, Evolution, and Systematics
BIOL 5069, Topics in Cellular and Molecular Biology
BIOL 5079, Topics in Floristic Taxonomy
Emphasis area requirements
Each Ph.D. student is associated either with the Cellular and Molecular Biology (CMB) emphasis area, or the Ecology, Evolution and Systematics (EES) emphasis area. Each of these areas has its own course
requirements in addition to the University-wide and department-wide requirements listed above.
Ecology, Evolution and Systematics:
BIOL 5312, Theory of Systematics ( 3 credit hours)
BIOL 6182, Advanced Population Biology ( 3 credit hours)
BIOL 5192, Community Ecology (3 credit hours)
Cellular and Molecular Biology:
Three of the following:
BIOL 6602, Advanced Molecular Biology (3 credit hours)
BIOL 6612, Advanced Molecular Genetics of Bacteria (3 credit hours)
BIOL 6615, Advanced Biotechnology Laboratory II (4 credit hours)
BIOL 6622, Advanced Molecular Cell Biology (3 credit hours)
BIOL 6632, Advanced Nucleic Acid Structure and Function ( 3 credit hours)
BIOL 6642, Advanced Plant Molecular Biology and Genetic Engineering (3 credit hours)
An equivalent graduate level course at another university may be substituted for one of the required courses, if approved by the Graduate Director

Maintenance of Status

All students are expected to maintain a GPA of 3.0 or better. Students will normally meet formally with their thesis committee, or if that has not been formed, with their advisor each year to maintain their status in the program.

## First-Year Experience

Ph.D. students in the Cellular and Molecular Biology emphasis area typically rotate through three different labs during their first semester before choosing/being accepted by a particular dissertation advisor. Ph.D. students in the Ecology Evolution and Systematics emphasis area typically are accepted by a particular dissertatior, advisor as part of the Ph.D. program application/acceptance process. All students are expected to become involved in research by the spring semester of their first year.

## Qualifying Examination

All students must pass a qualifying examination consisting of a written and oral component. Students beginning studies in the fall semester will normally take the qualifying examination at the end of their fourth semester of full-time study. Doctoral students who have earned an M.S. degree previously are encouraged to take the examination in their first year.

The examination for Ecology, Evolution and Systematics students evaluates knowledge of fundamental principles presented in formal courses and in papers of special importance in the field. The written exam will be given in April at the end of the spring semester, and the oral portion immediately afterwards.

The Qualifying Examination for Cellular and Molecular students is composed of a written portion in which the student prepares a formal research proposal on a topic different from that of her/his doctoral dissertation research, and an oral portion during which the student defends the research proposal as well as his/her knowledge of the fundamental concepts of molecular biology, cell biology, and biochemistry.

## Admission to Candidacy

To be admitted to candidacy, students must satisfy the requirements of the Graduate School, which includes passing all qualifying examinations and completing all required course work.

## Dissertation Proposal

All students must defend orally a written dissertation proposal to their dissertation committee. The approved proposal must be submitted to the director of graduate studies in biology. Doctoral students may not enroll in more than 4 credits of graduate research (Biology 6905) before they have received approval for their dissertation proposal. The proposal is to be successfully defended by the end of the sixth semester.

## Dissertation

A dissertation embodying the results of original research shall be submitted to and approved by the Department of Biology and the Graduate School. The general regulations of the Graduate School concerning the preparation of the dissertation must be met. These rules include a public oral defense of the written dissertation. Dissertations are to be presented in a style appropriate for one or more publications in scier tific journals.

## Teaching

At least one semester of supervised teaching is required of all doctoral students.

## Graduate Certificate in Biotechnology

The Graduate Certificate in Biotechnology is offered for students with a bachelor's degree who wish to ob:ain advanced level training in those fields of biology that pertain to biotechnology without necessarily earning a master's degree. Students who enter this program may have a variety of interests, including biochemistry', microbiology, molecular biology, cell biology, developmental biology, or molecular evolution.

## Admission

Students who wish to earn a Graduate Certificate in Biotechnology must apply to the Biotechnology Certificate Program for admission to the program. Students must be enrolled in the graduate program at the University of Missouri-St. Louis either as non-degree students or as master's students.

Students who wish to obtain a Master's degree with a Biotechnology Certificate must be accepted into the Master's degree program in Biology as well as into the Biotechnology Certificate Program. Students who apply to the certificate program as non-degree students will earn only the certificate.

Students must have at least a 3.0 GPA for undergraduate course work to be accepted into the program. ""he minimum course prerequisites for admission to the program are undergraduate courses in genetics, cell biology, and biochemistry.

## Requirements

Students must maintain a minimum GPA of 3.0 to remain in the certificate program. The certificate is awarded after completion of the courses listed below. Students enrolled in the Master's program may simultaneously earn a graduate degree and count the appropriate courses from the list below toward the Biotechnology Certificate.


BIOL 4402, Ornithology
BIOL 4422, Entomology
BIOL 4501, Flowering Plant Families Phylogeny and Diversification
BIOL 5122, Advanced Tropical Resource Ecology
BIOL 5123, Advanced Tropical Resource Ecology Field Studies
BIOL 5192, Community Ecology
BIOL 6102, Advanced Behavioral Ecology
BIOL 6112, Advanced Evolution of Animal Sociality
BIOL 6182, Advanced Population Biology
BIOL 6192, Applications of Geographic Information Systems
BIOL 6212, Theory and Application of Conservation Biology
BIOL 6222, Advanced Tropical Ecology and Conservation
BIOL 6889, Graduate Seminar, when relevant

## Economics <br> ECON 3300, International Economic Analysis <br> ECON 4550, Natural Resource Economics

History<br>HIST 3000, Selected Topics in History, when relevant<br>HIST 6114, Readings in Latin American History, when relevant<br>HIST 6115, Readings in African History, when relevant<br>Political Science<br>POL SCI 3480, Environmental Politics<br>POL SCI 3595, Studies in Comparative Politics, when relevant<br>POL SCI 3830, International Political Economy<br>POL SCI 3850, International Organizations and Global Problem Solving<br>POL SCI 3890, Studies in International Relations<br>POL SCI 4510, Comparative Public Policy and Administration<br>POL SCI 4850, International law<br>POL SCI 4940, Leadership and Management in Nonprofit Organizations<br>POL SCI 6448, Political Economy and Public Policy<br>POL SCI 6480, Proseminar in International Relations

Social Work
SOC WK 4950, Seminar in Social Work Issues, when relevant

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## UMSL Home

Department of Chemistry and Biochemistry Home Page

## Faculty

Christopher D. Spilling, Professor, Chairperson
Ph.D., The University of Technology, Loughborough, UK
Gearge Gokel, Distinguished Professor, Associate Director of the Center for Nanoscience
Ph.D., University of Southern California
Robert W. Murray, Curators' Professor Emeritus
Ph.D., Yale University
Lawrence Barton, Professor Emeritus
Ph.D., University of Liverpool
James S. Chickos, Professor
Ph.D., Cornell University
Joyce Y. Corey, Professor Emerita
Ph.D., University of Wisconsin
Thomas F. George, Professor and Chancellor
Ph.D., Yale University
Wesley R. Harris, Professor
Ph.D., Texas A. and M. University
David W. Larsen, Professor Emeritus
Ph.D., Northwestern University
Jingyue Liu, Professor, Director of the Center for Nanoscience
Ph.D., Arizona State University
James J. O'Brien, Professor
Ph.D., Australian National University
Keith J. Stine, Professor, Director of Undergraduate Studies
Ph.D., Massachusetts Institute of Technology
Alicia M. Beatty, Associate Professor
Ph.D., Washington University
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Ph.D., University of Detroit
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Ph.D., Ohio State University
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Ph.D., Iowa State University
Harold H. Harris, Associate Professor
Ph.D., Michigan State University
Stephen M. Holmes, Associate Professor
Ph.D., University of Illinois-Urbana-Champaign
Jane A. Miller, Associate Professor Emerita
Ph.D., Tulane University
Rudolph E. K. Winter, Associate Professor Emeritus;
Ph.D., The Johns Hopkins University
Zhi Xu, Associate Professor
Ph.D., University of Pittsburgh
Bauer, Eike, Assistant Professor
Ph.D., University of Erlangen-Nuremberg, Germany
Michael R. Nichols, Associate Professor
Ph.D., Purdue University
Janet B. Wilking, Associate Professor
Ph.D., Washington University

Chung F. Wong, Associate Professor
Ph.D., University of Chicago
Nigam P. Rath, Research Professor
Ph.D., Oklahoma State University
James Bashkin, Research Associate Professor
Oxford University, UK
Rensheng Luo, Research Assistant Professor
Ph.D., Wahan Institute of Physics and Mathematics Chinese Academy of Sciences
Anthony Mannino, Adjunct Associate Professor
Ph.D., Ohio State University
John Gutweiler, Lecturer
Ph.D., Saint Louis University

## Technical Staff

Joseph Kramer, Spectrometrist
Daniel Cranford, Coordinator, Laboratory Operations
Frank L. May, Research Investigator
Bruce Burkeen, Senior Research Engineering Technician
Joe Flunker, Glassblower

## General Information

## Degrees and Areas of Concentration

The Department of Chemistry and Biochemistry offers courses leading to the following baccalaureate deg ees:
B.A. in Chemistry
B.A. in Chemistry with a Biochemistry Certificate
B.S. in Chemistry (with a Chemistry or Biochemistry Option)
B.S. in Education with an emphasis in Chemistry (in cooperation with the College of Education)
B.A. in Chemistry with teacher certification.

The department is accredited by the American Chemical Society. Students completing the B.S. degree (chemistry or blochemistry option) are certified to the American Chemical Society. The B.S. degree is the professional degree in chemistry, and students who earn the B.S. degree are well prepared for a career int the chemical industry or for graduate work in chemistry. The department provides opportunities for undergraduates to become involved in ongoing research projects and to participate in departmental teaching activities.

The department also offers graduate work leading to the M.S. or Ph.D. degree in chemistry with most graduate courses being scheduled in the evening. A student may earn a M.S. degree with or without a thesis. The non-thesis option provides a convenient way for students who are employed full-time to earn an advanced degree. Research leading to a M.S. thesis or Ph.D. dissertation may be conducted in one of fou* emphasis areas, namely, inorganic chemistry, organic chemistry, physical chemistry, or biochemistry. The nature of the graduate program allows each student to receive individualized attention from his/her research mentor, and to develop hands-on experience with major instrumentation in the department.

## Fellowships and Scholarships

The following scholarships, fellowships and awards are available to chemistry majors:
The John J. Taylor Scholarship is given to a full-time student with high financial need, pursuing a chemistry degree and currently enrolled either of junior or senior status. There are two such scholarships available.

The Friends and Alumni Scholarship is given to a full-time student with high financial need and pursu ng a chemistry degree. There are two such scholarships available.

The Monsanto Scholarship in Biochemistry and Biotechnology is open to full-time Sophomore, Junior or Senior students at the University pursuing a Bachelor of Science degree in Biochemistry and Biotechnology.

William and Erma Cooke Chemistry Scholarships are given annually to outstanding full-time chemistry majors who are at least sophomores and have financial need.

The Lawrence Barton Scholarship is awarded to a junior, preferably a first generation college student
The Barbara Willis Brown Scholarship for Women in Chemistry is given annually to a female chem stry major who is at least 25 years of age. The student is encouraged to enroll in undergraduate research (CHEM 3905), however research is not requirement for this award. Student financial need is a consideration.

The Eric G. Brunngraber Memorial Scholarship is given to a chemistry major based on GPA, statement of research interests, and performance in completed course work.

Aid to Education Scholarships are given to junior or senior chemistry majors annually. Faculty select awardees on the basis of merit.

The M. Thomas Jones Fellowship is given each semester to the graduate student who is deemed by his/her peers to have presented the best research seminar.

The Graduate Research Accomplishment Prize is given annually. The recipient is chosen based on his/her publications, presentations at professional meetings, and seminars given at UMSL.

Alumni Graduate Research Fellowships are available for summer study for selected chemistry graduate students. Several undergraduate awards are given each year to outstanding students. The Chemical Rubber Company Introductory Chemistry Award is given to the outstanding student in introductory chemistry, the Outstanding Sophomore Chemistry Major award is made to the top sophomore chemistry student, the American Chemical Society Division of Analytical Chemistry Award is given to the outstanding student in analytical chemistry, the American Chemical Society-St. Louis Section, Outstanding Junior Chemistry Major Award is given to the outstanding junior chemistry major, and the outstanding senior receives the Alan $F$. Berndt Outstanding Senior Award.

## Departmental Honors

The Department of Chemistry and Biochemistry will award departmental honors to those B.A. and B.S. degree candidates in chemistry with an overall grade point average of 3.2. They must also successfully complete CHEM 3905, Chemical Research, and must present an acceptable thesis.

## Career Outlook

The St. Louis metropolitan area has long been a major center for industrial chemistry, and in the past decade it has become a focus for the establishment of life sciences research and development. A bachelor's degree in chemistry provides a student with the professional training needed to play a part in this ever-changing industry.

A major in chemistry provides excellent preprofessional training in the health sciences, and a double major in chemistry and biology is often chosen by premedical and predental students and those interested in graduate work in biochemistry and biology. A minor in chemistry provides the minimum qualification and training for a position as a laboratory technician in industry, hospital laboratories, etc.

A Master's degree in chemistry is often required for further advancement in the chemical industry, whereas a doctoral degree opens the door to many opportunities, including careers in the academic world, industrial research and development, and in government laboratories.

## Undergraduate Studies

## General Education Requirements

Students must satisfy the university and college general education requirements. Courses in chemistry may be used to meet the university's science and mathematics area requirement. The college's foreign language requirement fulfills the departmental requirements for B.A. candidates. B.S. degree candidates are not required to take a foreign language: however, the American Chemical Society (ACS) states that the study of a foreign language is highly recommended, especially for students planning to pursue graduate studies in chemistry.

Satisfactory/Unsatisfactory Restrictions
Chemistry majors may not take required chemistry, mathematics, or physics courses on a satisfactory/unsatisfactory basis.

## Degree Requirements

## Bachelor of Arts in Chemistry

This degree is intended primarily for preprofessional students in health science and related areas, as well as prelaw students interested in patent law. Candidates must complete the following chemistry courses:

CHEM 1111 , Introductory Chemistry I
CHEM 1121, Introductory Chemistry II
CHEM 2223, Quantitative Analysis
CHEM 2612, Organic Chemistry I
CHEM 2622, Organic Chemistry II
CHEM 2633, Organic Chemistry Laboratory
CHEM 3022, Introduction to Chemical Literature
CHEM 3312, Physical Chemistry I
CHEM 3322, Physical Chemistry II
CHEM 3333, Physical Chemistry Laboratory
CHEM 3412, Basic Inorganic Chemistry

CHEM 4897, Seminar (1 credit)
In addition, candidates must complete one laboratory course chosen from CHEM 3643, 4233, 4343, 4433, or 4733.

No more than 45 hours in chemistry may be applied toward the degree. Each chemistry major must presint a seminar and pass a comprehensive examination during the senior year. At least 12 credits at the 3000 level or higher must be completed at UMSL. The Department of Chemistry and Biochemistry may require students to pass a tracking test in order to enroll in the next level course, provided this or an equivalent test is administered to all students seeking to enroll in that course.

## Bachelor of Arts in Chemistry with a Biochemistry Certificate

The university offers a certificate program for science majors who are interested in careers in biochemistry. This is an interdisciplinary program that involves additional courses in biochemistry and biology. In addition to the usual requirements for the B.A. degree in chemistry, the student must take the following courses:

Chemistry
CHEM 4712, Biochemistry
CHEM 4722, Advanced Biochemistry
CHEM 4733, Biochemistry Laboratory
CHEM 4772, Physical Biochemistry
Biology
BIOL 1811, Introductory Biology: From Molecules to Organisms
BIOL 2012, Genetics
BIOL 3622, Cell Biology
BIOL 4602, Molecular Biology or BIOL 4614, Biotechnology Laboratory I
At least 12 hours at the 3000 level or above must be completed at UMSL.
Students may obtain a minor in biology by adding BIOL 1821 to the curriculum described above. The Biology department also offers a certificate in biochemistry.

## Bachelor of Science in Chemistry

This is the first professional degree in chemistry. It may be taken as a terminal degree by students intending to become professional chemists or for preparation for graduate work in chemistry or biochemistry. Students may choose to specialize in chemistry or biochemistry.

## Chemistry Option

Candidates must complete the requirements for the B.A. degree in chemistry. In addition, the following chemistry courses are required:

CHEM 3643, Advanced Organic Chemistry Laboratory
CHEM 4212, Instrumental Analysis
CHEM 4233, Laboratory in Instrumental Analysis
CHEM 4343, Physical Chemistry Laboratory II
CHEM 4412, Advanced Inorganic Chemistry
CHEM 4433, Inorganic Chemistry Laboratory
CHEM 4712, Biochemistry
Students must also take two elective hours of advanced work in chemistry at the 3000 level or above.
Students are encouraged to take CHEM 3905, Chemical Research, to fulfill the advanced elective requirernent.

## Related Area Requirements

Bachelor of Arts and Bachelor of Science in Chemistry
Candidates for both degrees must also complete:
MATH 1800, Analytic Geometry and Calculus I
MATH 1900, Analytic Geometry and Calculus II
MATH 2000, Analytic Geometry and Calculus III
PHYSICS 2111, Physics: Mechanics and Heat
PHYSICS 2112, Physics: Electricity, Magnetism, and Optics
Degrees with Certification to Teach Chemistry in Secondary Schools
One can be certified to teach chemistry at the secondary level with a degree either in Education or in Chemistry. All candidates for certification must enroll in a program that includes Levels I, II, and III course work in the College of Education. The Missouri Department of Elementary and Secondary Education requires that candidates for certification to teach secondary chemistry complete certain Science Core Courses and specialized courses in chemistry

Science Core Courses
Phil 3380, Philosophy of Science

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BIOL 1811, Introductory Biology I: From Molecules to Organisms
CHEM 1111, Introductory Chemistry I
CHEM 1121, Introductory Chemistry II
BIOL 1202, Environmental Biology, or another environmental science
PHYSICS 2111, Physics: Mechanics and Heat
and
GEOL 1001, General Geology or
ATM SCI 1001, Elementary Meteorology or
ASTRON 1001 or equivalent
Chemistry Endorsement
CHEM 2223, Quantitative Analysis
CHEM 2612, Organic Chemistry I
CHEM 2622, Organic Chemistry II
CHEM 2633, Organic Chemistry Laboratory
CHEM 3312, Physical Chemistry I or CHEM 3302, Physical Chemistry for the Life Sciences
CHEM 4712, Biochemistry
CHEM 4802 or SEC ED 3240, Curriculum and Methods of Teaching Physical Sciences
CHEM 4837, Chemistry/Physics Teaching Intern Seminar
SEC ED 4990, Secondary School Student Teaching
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Bachelor of Arts in Chemistry with Teacher Certification
Students must complete the B.A. in chemistry requirements, as well as the requirements for teacher certification. (See the College of Education section of this Bulletin.) There are a few science courses beyond the minimum listed above.

PHYSICS 2112, Physics: Electricity, Magnetism, and Optics
CHEM 3322, Physical Chemistry II
CHEM 3333, Physical Chemistry Laboratory I and one additional advanced laboratory course
CHEM 3412, Basic Inorganic Chemistry
Minor in Chemistry
Requirements for the Minor
Students may earn a minor in chemistry by completing the following program. The following five courses are required:

CHEM 1111, Introductory Chemistry I
CHEM 1121, Introductory Chemistry II
CHEM 2223, Quantitative Analysis
CHEM 2612, Organic Chemistry I
CHEM 2633, Organic Chemistry Laboratory
One course from the following list must be completed:
CHEM 2622, Organic Chemistry II
CHEM 3312, Physical Chemistry I
CHEM 3412, Basic Inorganic Chemistry
CHEM 4712, Biochemistry same as Biology 4712
Courses, which are prerequisites to subsequent courses in the minor, may not be taken on a satisfactory/ unsatisfactory basis. A GPA of at least 2.0 is required for the courses presented for the minor. At least three courses toward the minor must be completed at UMSL.

## Bachelor of Science in Biochemistry and Biotechnology

The Department of Chemistry and Biochemistry, in cooperation with the Department of Biology, offers a Bachelor of Science degree in Biochemistry and Biotechnology. Information about this degree program may be found at the Biochemistry \& Biotechnology Programs Home Page.

3+4 Chemistry - Optometry Program
This is a new program option for a Chemistry degree that would enable students to earn a BA in Chemistry in 3 years (likely requiring that some courses be taken over the summer semesters) and an Optometry degree in 4 years.

1st Semester (15)
CHEM 1111, Introductory Chemistry I (5)
BIOL 1811, Intro to Biology I (5)
MATH 1800, Analytic Geometry \& Calculus (5)
2nd Semester (18)
CHEM 1121, Introductory Chemistry II (5)

BIOL 1821, Intro to Biology II (5)
MATH 1900, Analytic Geometry \& Calculus II (5)
+PSYCH 1003, General Psychology (3)
Summer Option
Summer Semester (3-8)
CHEM 2612, Organic Chemistry I (3)
CHEM 2622, Organic Chemistry II (3)
CHEM 2633, Organic Chemistry Laboratory (2)
*Or General Education Courses
3rd Semester (13+)
MATH 2000, Analytic Geometry \& Calculus III (5)
PHYSICS 2111, Physics: Mechanics \& Heat (5)
**CHEM 2612, Organic Chemistry I (3)
*General Education Courses
4th Semester (15)
PHYSICS 2112, Physics: Elec, Mag \& Optics Chem (5)
CHEM 2223, Quantitative Analysis (3)
CHEM 3412, Basic Inorganic Chemistry (2)
**CHEM 2622, Organic Chemistry II (3)
**CHEM 2633, Organic Chemistry Laboratory (2)
Summer Option
Summer Semester (3-8)
CHEM 2612, Organic Chemistry I (3)
CHEM 2622, Organic Chemistry II (3)
CHEM 2633, Organic Chemistry Laboratory (2)
*Or General Education Courses
5th Semester (13+)
CHEM 3022, Intro. To Chemical Literature (1)
CHEM 3312, Physical Chemistry I (3)
\#CHEM 4712, Biochemistry (3)
\#CHEM 4733, Biochemistry Laboratory (2)
+PSYCH 2201, Psychological Statistics (4)
*General Education Course
6th Semester (11+1)
CHEM 3333, Physical Chemistry Lab I (2)
CHEM 3322, Physical Chemistry II (3)
CHEM 4897, Seminar (1)
+BIOL 2482, Microbiology
+BIOL 2483, Microbiology Laboratory 2
*General Education Courses

## Summer Option <br> Summer Semester <br> *General Education Courses

The basis for this $3+4$ program is that students are required to do the courses (and the prerequisites) for the Chemistry Bachelor of Arts degree with the exception that students can substitute Optometry's Physical Optics and Photometry course (OPTOM 8140) for the advanced laboratory which is required for the B.A. in chemistry degree; additionally CHEM 3322 (Physical Chemistry II and CHEM 4897 (Seminar) can be completed in the first year of enrollment in the Optometry program though this is NOT recommended because students in the Optometry program take more than 20 credit hours each semester. In order to complete the chemistry program in 3 years, it is likely that some courses would need to be taken over the summer sessions (between semester 2 and 3 and between semester 4 and 5). Three chemistry classes that also are offered over the summer are suggested as options in the above schedule. These are quite compacted classes so it is not generally advised as the best option. If that summer option is chosen for those chemistry clasises, however, some of the required General Education courses can be taken during the regular (3rd and 4th) semesters in place of the chemistry classes (CHEM 2612, 2622, 2633) that also are scheduled for the 3rc and 4th semester. Alternatively, General Education courses can be taken in the summer.

+ The College of Optometry requires two courses in English [e.g., Freshman Composition (ENGL 1100), junior English courses (e.g., ENGL 3160, 3100)] which is also a General Education requirement, two courses in Psychology, two Liberal Arts courses, a Statistics course, and a course in Microbiology with Lab. If Psychological Statistics (PSYCH 2201, 4 credits) is taken as the second Psychology course, that also satisfies the Statistics course requirement. One of the courses suggested in psychology (General Psychology, PSYi.H

1003) also satisfies one of the three-course requirement in Social and Behavioral Sciences Knowledge (see not below on General Education courses).
\# The College of Optometry strongly recommends a course in Anatomy or Physiology and a course in Biochemistry. BIOL 1102 satisfies the Anatomy or Physiology requirement but this course is not included in the schedule listed above. Another course recommended by the College of Optometry is Cell Biology (BIOL 3622, Cell Biology, 3 credits)- this is not listed above either.
** CHEM 2612, 2622, and 2633 are courses offered during the summer; currently, CHEM 2223 is not.
*General Education courses [(1) Communicating Skills (two 3 credit courses), (2) Managing Information Skills (one 3-credit course), (3) Valuing Skill (one 3-credit course, (4) Social and Behavioral Science Knowledge (three 3 -credit courses) (5) Humanities and Fine Arts Knowledge (three 3-credit courses), and (6) Mathematics and Life/Natural Sciences Knowledge (four 3-credit courses)] and Foreign Language courses (required for the Chemistry B.A. degree) are not listed specifically here. The requirements for Skill Goal 2 and Knowledge Goal 6 would be fulfilled by completing courses in the program listed above.

Gaining admission to Missouri's College of Optometry is a competitive process. Students selecting this 3+4 option should seek an initial interview with the Manager, Student and Special Services (and the PreOptometry Advisor) in the UMSL College of Optometry to insure that all prerequisites for the College of Optometry will be completed. In August following the completion of their second year of this $3+4$ program, students may apply formally to the UMSL College of Optometry and arrange to take the Optometry Admissions Test (OAT) early in the fall of their third year. The OAT is offered through computer sites and may be scheduled almost at any time. After receipt of a completed application in the Fall Semester of the candidate's third year and depending on the OAT outcome, the applicant may be invited for a formal interview in the College of Optometry. Following the formal interview, candidates with a 3.0 or better grade point average in the science prerequisites for optometry and a score of 310 or better in the OAT exam may be accepted into the UMSL College of Optometry.

## Competencies/Expectations/Outcomes that all students must demonstrate to complete the program successfully:

1. Knowledge and comprehension in areas of chemistry - Graduates should have a foundation of knowledge in chemistry as outlined by the American Chemical Society Committee on Professional Training in their guide to Undergraduate Professional Education in Chemistry. In order to achieve the goals of any one of our chemistry degrees, knowledge is required from the related areas of introductory physics and calculus.
2. Scientific problem-solving skills - Graduates should understand valid scientific approaches to problemsolving and be able to design experiments to test a hypothesis.
3. Data analysis/quantitative skills - Graduates should be able to draw valid conclusions from experimental data and observations. Graduates should be able to carry out statistical and linear regression analysis of data. Graduates should be able to evaluate the main possible sources of error in laboratory measurements.
4. Laboratory skills - Graduates should be able to carry out the basic techniques of preparative and analytical chemistry. An appreciation of the basic aspects of chemical spectroscopy should be achieved. B.S. degree graduates should have developed an appreciation of the application of advanced/specialized instrumentation to solving chemical problems. Graduates should be able to keep accurate records of experiments. Graduates should be able to work effectively in the laboratory individually or as a part of a small team. Graduates should have an awareness of the basic aspects of safe laboratory practices.
5. Communication skills - Graduates should be able to communicate scientific ideas clearly both orally and in written form. This includes the effective presentation of quantitative data and of scientific concepts or procedures using diagrams and/or figures.
6. Library/Information skills - Graduates should be able to search for and retrieve information from scientific journals, databases, and handbooks, especially those widely used by professional chemists.
7. Computer/software skills - Graduates should be proficient in the use of software widely used by practicing scientists, including word processors, scientific plotting and analysis software, spreadsheets, data acquisition software interfaced to commercial instruments, and simulation software.

## Graduate Studies

## Admission Requirements

Individuals with at least the equivalent of the B.A. degree in chemistry may be admitted to the Graduate School as candidates for the M.S. degree or as precandidates for the Ph.D. degree in chemistry. A student in the M.S. program may request to transfer to the Ph.D. program by petition to the department.

The department admissions committee considers applicants' grade point averages and normally requires above-average performance in all areas of chemistry as well as physics and mathematics, or other evidence
of high aptitude for graduate work in chemistry. Applicants' GRE scores, letters of recommendation, and academic programs are also considered. In some cases the committee may require successful completion of undergraduate course work as a condition of enrollment as a regular student.

Students with bachelor's degrees in fields other than chemistry may be admitted to pursue graduate studies in chemistry, but they must make up background deficiencies, usually by taking undergraduate course work.

## Financial Support

Teaching assistantships are available to qualified applicants. Research assistantships and fellowships are available for advanced students. For further information, contact the Graduate Studies Committee, Department of Chemistry and Biochemistry.

## Preliminary Advisement

Students who have been admitted for graduate work in chemistry will be contacted by the Director of Graduate Studies in order to develop a tentative plan of study which takes into consideration the student's background and interests. Entering students are required to demonstrate proficiency at the undergraduate level in four areas of chemistry (biochemistry, organic, inorganic, physical, and analytical).

Proficiency may be demonstrated in one of the following ways:

- Outstanding performance in recent undergraduate course work.
- Satisfactory performance in standardized placement examinations. These examinations are given twice a year, approximately one week before the beginning of the fall and winter semesters.
- Successful completion of assigned course work.

The ultimate choice of whether students may enroll in the M.S. or Ph.D. degree programs resides with the chemistry faculty.

## Distribution Requirement

All graduate students (M.S. and Ph.D.) must fulfill the distributing requirements as described under "Doctoral Degree Requirements."

## Master's Degree Requirements

## Master of Science in Chemistry

Candidates for the M.S. degree in chemistry must demonstrate proficiency in organic, inorganic, physical, and analytical chemistry within two years of initial enrollment.

A minimum of 30 hours is required, normally including 3 hours in CHEM 6897 Chemistry Colloquium. No more than 3 hours in CHEM 6897 may be applied toward the required minimum of 30 credit hours.

## Master of Science in Chemistry with Thesis

Students selecting this option must be enrolled full-time for at least two consecutive semesters. During this time, students are expected to enroll in CHEM 6905, Graduate Research in Chemistry, and conduct their thesis research. A maximum of 12 hours of CHEM 6905 may be applied toward the required 30 hours. At least 9 hours must be at the 5000 level, excluding CHEM 6905. A maximum of 9 hours in 3000 level or above courses outside the department may be accepted if students receive prior approval of their advisers and the Director of Graduate Studies. Students are expected to follow all other general requirements of the Graduate School regarding master's degree and thesis requirements.

## Master of Science without Thesis

Unlike the thesis option, students need not be enrolled full-time. Of the required 30 hours, 15 credits must be at the 5000 level. A maximum of 6 credits of CHEM 6905, Graduate Research in Chemistry, may be included in place of 4000 level courses. A maximum of 12 hours taken in 3000 level or above courses outside the department may be accepted with prior approval of the Director of Graduate Studies.

## Doctoral Degree Requirements

Incoming doctoral students must demonstrate proficiency in biochemistry, organic, inorganic, physical, and analytical chemistry within one year of initial enrollment. A minimum of 60 hours is required, including research hours.

## Distribution Requirement

Students must take chemistry courses for graduate credit at the 4000 and 5000 levels. Students may choose to concentrate the majority of their coursework in one of four areas (biochemistry, inorganic chemistry, organic chemistry, or physical chemistry). Students must complete at least 6 hours of chemistry coursework in one (or more) sub-disciplines(s) outside of their major emphasis area. The following courses may not be used to fulfill the distribution requirement: Chem. 4212, 4233, 4302, 4343, 4412, and 4433.

## Qualifying Examinations

In addition to the requirements set forth by the Graduate School, each student seeking the Ph.D. degree must successfully complete a qualifying examination in his/her major area of specialization prior to
advancement to candidacy. The format of the qualifying examination depends upon the student's major area of emphasis (biochemistry, inorganic, organic or physical). In general, the qualifying examination consists of either comprehensive written and/or oral examinations, usually administered near the end of the 4th semester, or a series of cumulative examinations given eight times a year. In the latter case, a student must pass a minimum of two cumulative examinations per year and eight cumulative examinations before the end of the 6th semester. At least six of these cumulative examinations must be in the student's major area of specialization. For more detailed information, contact the Director of Graduate Studies in the Department of Chemistry \& Biochemistry.

## Seminar Requirement

Students must present a seminar in their third year and during each subsequent year. The third year seminar may be the defense of the doctoral dissertation proposal. One of the seminars is for the purpose of describing dissertation research. Students must enroll in Chemistry 6897, Chemistry Colloquium, each semester they are in residence.

## Advancement to Candidacy

In addition to general Graduate School requirements for advancement to candidacy, students must complete the following:

1) 21 hours of nondissertation work. This may not include:

CHEM 4212, Instrumental Analysis
CHEM 4233, Laboratory in Instrumental Analysis
CHEM 4302, Survey of Physical Chemistry with Application to the Life Sciences
CHEM 4343, Physical ChemistryLaboratory II
CHEM 4412, Advanced Inorganic Chemistry
CHEM 4433, Inorganic Chemistry Laboratory
CHEM 6196, Advanced Reading in Chemistry
CHEM 6487, Inorganic Problem Seminar
CHEM 6687, Organic Problem Seminar
CHEM 6787, Biochemistry Problem Seminar
CHEM 6812, Introduction to Graduate Study in Chemistry
CHEM 6822, Introduction to Graduate Research in Chemistry
CHEM 6897, Chemistry Colloquium
but should include at least six credit hours of coursework outside of their major area of emphasis (see Distribution Requirement)
Courses in areas other than chemistry may be included with prior departmental approval.
2) Successfully pass a qualifying examination or cumulative examinations.
3) Present at least one seminar to the department on the dissertation research.
4) Participate in the undergraduate academic program as a teaching assistant for at least one semester.
5) Be in good standing.

## Dissertation

Three copies of the dissertation must be submitted upon completion of the graduate research problem.

## Probation and Dismissal

Students are dismissed from the Ph.D. program if they fail to pass their qualifying examination or otherwise fail to meet the academic and professional standards set forth by the Graduate School and the Department of Chemistry and Biochemistry.

## Master of Science in Biochemistry and Biotechnology

The Department of Chemistry and Biochemistry, in cooperation with the Department of Biology, offers a Master of Science degree in Biochemistry and Biotechnology. Information about this degree program may be found at the Biochemistry \& Biotechnology Programs Home Page.

## Course Descriptions

Prerequisites may be waived by consent of the department or instructor. Some courses as indicated in the course description may be taken concurrently with the listed offering. Consult your department adviser for further information.

CHEM 1011 Chemistry in the Environment and Everyday Living (3) [MI, MS]
This course examines the role of chemistry in everyday life and in the environment, and is intended for students not pursuing scientific or engineering majors. Chemical principles are introduced to the extent necessary for understanding of issues, but this course does not provide the basis for further technical courses. Two hours of lecture per week; on alternate weeks, one hour of discussion or two hours of laboratory.

CHEM 1052 Chemistry for the Health Professions (4) [MI, MS]
An introduction to general, nuclear, structural organic, organic reactions and biochemistry. This course is designed primarily for students in nursing and related health professions, and should not be taken by students
majoring in the physical or biological sciences. Chemistry majors may include neither CHEM 1052 nor $10 \in 2$ in the 120 hours required for graduation. Four hours of lecture per week.

CHEM 1062 Organic and Biochemistry for the Health Professions (2) [MI, MS]
Prerequisite: any college chemistry course. An introduction to organic reactions and biochemistry. CHEM 1062 is offered during the second half of the semester. Four hours of lecture per week.

CHEM 1111 Introductory Chemistry I (5) [MS]
Prerequisites: Mathematics through college algebra and trigonometry (may be taken concurrently). Presents an introduction to the fundamental laws and theories of chemistry. Laboratory experiments are designed to demonstrate some aspects of qualitative and quantitative analysis and to develop skills in laboratory procedures. Chemistry majors may not include both CHEM 1011 and CHEM 1111 in the 120 hours required for graduation. Three hours of lecture and one hour of discussion per week; one hour of laboratory-lecture and three hours of laboratory per week.

CHEM 1121 Introductory Chemistry II (5) [MI, MS]
Prerequisite: CHEM 1111 or advanced placement. Lecture and laboratory are a continuation of CHEM 1111. Three hours of lecture and one hour of discussion per week; one hour laboratory-lecture and three hours of laboratory weekly.

## CHEM 1134 Special Topics in Introductory Chemistry (1-5)

Prerequisite: Consent of instructor. A lecture or laboratory course to assist transfer students in meeting the requirements of CHEM 1111 and CHEM 1121. Students enrolling in this course should contact the instructor prior to the first day of class for guidelines on course requirements, to choose a lab or workshop section, and to request enrollment in the course website.

CHEM 2223 Quantitative Analysis (3) [C, MI, MS]
Prerequisite: CHEM 1121. Principles and practice of elementary quantitative chemistry. The lecture treats descriptive statistics with emphasis on small samples; various types of competing equilibria pertaining to 3 cidbase, complexometric and potentiometric titrations; and an introduction to spectrophotometric processes. The laboratory provides exercises in titrimetric, gravimetric, and spectrophotometric techniques. Both portions of the course deal with the analytical chemistry of environmentally-significant problems. Two hours of lectu e and four and one-half hours of laboratory weekly.

CHEM 2612 Organic Chemistry I (3) [MS]
Prerequisite: CHEM 1121. An introduction to the structure, properties, synthesis, and reactions of aliphatic and aromatic carbon compounds. Three hours of lecture per week.

CHEM 2622 Organic Chemistry II (3) [MI, MS]
Prerequisite: CHEM 2612. A systematic study of organic reactions and their mechanisms; organic synthetic methods. Three hours of lecture per week.

CHEM 2633 Organic Chemistry Laboratory (2) [C, MS]
Prerequisite: CHEM 2612. An introduction to laboratory techniques and procedures of synthetic organic chemistry including analysis of organic compounds. One hour of lecture and four and one-half hours of laboratory per week.

## CHEM 3022 Introduction to Chemical Literature (1)

Prerequisites: CHEM 2622 (may be taken concurrently) and CHEM 3412. The course will familiarize the student with the literature of chemistry and its use. One hour of lecture per week.

CHEM 3302 Physical Chemistry for the Life Sciences (3)
Prerequisites: CHEM 2612 and MATH 1800 or MATH 1100, and PHYSICS 1012. Principles and applications of physical chemistry appropriate to students pursuing degree programs in the life sciences. Topics will include thermodynamics, equilibria, kinetics, and spectroscopy. This course is intended for undergraduates seeking the B.S. degree in Biochemistry and Biotechnology and does not fulfill the physical chemistry requiremen: for other Chemistry B.A. and B.S. degree programs.

CHEM 3312 Physical Chemistry I (3)
Prerequisites: CHEM 1121 and MATH 2000 (may be taken concurrently), and PHYSICS 2111. Principles of physical chemistry, including thermodynamics, theory of gases, phase equilibria, kinetics, crystal structure, spectroscopy, and quantum mechanics. Three hours per week.

CHEM 3322 Physical Chemistry II (3)
Prerequisite: CHEM 3312. Continuation of CHEM 3312. Three hours of lecture per week.
CHEM 3333 Physical Chemistry Laboratory 1 (2)
Prerequisites: CHEM 2223 and CHEM 3312. Experiments designed to illustrate principles introduced in CHEM 3312. One hour of lecture and four and one-half hours of laboratory per week.

CHEM 3412 Basic Inorganic Chemistry (2) [MI, MS]

Prerequisite: CHEM 1121. Review of principles of atomic structure, covalent and ionic bonding. Properties of the elements and synthesis reactions and boding aspects of important compounds of main group and transition metal elements. Two hours lecture per week.

CHEM 3643 Advanced Organic Chemistry Laboratory (2)
Prerequisites: CHEM 2223, CHEM 2622, CHEM 2633. CHEM 3022 may be taken concurrently. Identification of organic compounds by classical and spectroscopic methods; advanced techniques in synthesis and separation of organic compounds. One hour of lecture and four and one-half hours laboratory per week. Not for graduate credit.

## CHEM 3905 Chemical Research (1-10)

Prerequisite: Consent of instructor. Independent laboratory and library study, in conjunction with faculty member, of fundamental problems in chemistry. A written report describing the research is required.

CHEM 4212 Instrumental Analysis (2)
Prerequisite: CHEM 3322. Principles and applications of modern methods of instrumental analysis for analytical chemistry measurements. Topics will be selected from the areas of electrochemistry, absorption and emission spectroscopy, chromatography, mass spectrometry, surface analysis, and nuclear magnetic resonance. Two hours of lecture per week.

CHEM 4233 Laboratory in Instrumental Analysis (2)
Prerequisites: CHEM 4212 and CHEM 3333. Experiments designed to illustrate the principles and practices of instrumental analysis, involving the use of modern instrumentation in analytical chemistry applications. One hour of discussion and four and one-half hours of laboratory per week.

CHEM 4302 Survey of Physical Chemistry with Applications to the Life Sciences (3)
Prerequisites: CHEM 2612 and MATH 1800 or MATH 1100, and PHYSICS 1012. Principles of physical chemistry with applications to the life sciences. Topics will include thermodynamics, equilibria, kinetics, and spectroscopy. This course will be taught simultaneously with CHEM 3302, but students in 4302 will have additional assignments or projects. No student may receive credit for both CHEM 3302 and 4302.

## CHEM 4343 Physical Chemistry Laboratory II (2)

Prerequisites: CHEM 3322 (may be taken concurrently) and CHEM 3333. Experiments designed to illustrate principles introduced in CHEM 3322. One hour of lecture and four and one-half hours of laboratory per week. Not for graduate credit.

## CHEM 4412 Advanced Inorganic Chemistry (3)

Prerequisites: CHEM 3322 (may be taken concurrently) CHEM 3412 and CHEM 2622. An introduction to the chemistry of the elements, including atomic and molecular structure, acids and bases, the chemistry of the solid state, and main group and transition metal chemistry. Three hours of lecture per week.

## CHEM 4433 Inorganic Chemistry Laboratory (2)

Prerequisites: CHEM 3333, CHEM 4412 and CHEM 3643, (CHEM 3643 may be taken concurrently). The more sophisticated techniques of physical and analytical chemistry will be used to study inorganic compounds and their reactions. One hour of lecture and four and one-half hours of laboratory per week. Not for graduate credit.

## CHEM 4652 Spectroscopic Identification of Organic Compounds (3)

Prerequisite: CHEM 3643. An applied approach to the use of spectroscopic techniques in organic chemistry.
Topics to include integrated applications of infrared and Raman spectroscopy, nuclear magnetic resonance 13 C and $1 \mathrm{H}, \mathrm{cw}$ and pulsed and mass spectroscopy for the purpose of elucidating the structure of organic compounds. Three hours of lecture per week.

## CHEM 4712 Biochemistry (3)

Same as BIOL 4712. Prerequisites: CHEM 2612 and either BIOL 1811 or CHEM 2622. Examines the chemistry and function of cell constituents, and the interaction and conversions of intracellular substances, Students may not receive credit for both BIOL 4712 and CHEM 4712.

## CHEM 4722 Advanced Biochemistry (3)

Prerequisite: CHEM 4712. Selected advanced topics in the chemistry of life processes. Three hours of lecture per week.

## CHEM 4733 Biochemistry Laboratory (2)

Prerequisites: CHEM 4712 (may be taken concurrently), and CHEM 2223. Laboratory study of biochemical processes in cellular and subcellular systems with emphasis on the isolation and purification of proteins (enzymes) and the characterization of catalytic properties. One hour of lecture and four and one-half hours of laboratory per week.

CHEM 4772 Physical Biochemistry (3)
Prerequisite: CHEM 3312 or CHEM4712/BIOL 4712. Designed to acquaint students with concepts and methods in biophysical chemistry. Topics that will be discussed include protein and DNA structures, forces involved in
protein folding and conformational stability, protein-DNA interactions, methods for characterization and separation of macromolecules, electron transfer, and biological spectroscopy. Three hours of lecture per week.

CHEM 4797 Biochemistry and Biotechnology Seminar (1)
Same as BIOL 4797. Prerequisite: Senior standing in the Biochemistry and Biotechnology program. This course will focus on selected publications related to biochemistry and biotechnology from both refereed journals and news sources. Students are expected to participate in discussions and to prepare oral and w-itten presentations. Completion of the Major Field Achievement Test in Biochemistry \& Biotechnology is a course requirement. May not be taken for graduate credit.

CHEM 4802 Curriculum and Methods of Teaching Physical Sciences (3)
Prerequisites: TCH ED 3310 and a near major in the subject matter. A study of the scope and sequence of the physical science courses in the school curriculum, with emphasis on the selection and organization of matarials and methods of instruction and evaluation. Attention is also directed toward learning the techniques and research tools of the scholar in the field of science. To be taken prior to student teaching. This course must be completed in residence.

## CHEM 4814 Special Topics in Chemistry (1-10)

Prerequisite: Consent of instructor. A reading and seminar course in selected advanced topics.

## CHEM 4837 Chemistry / Physics Teaching Intern Seminar (1)

Same as PHYSICS 4837. Prerequisite: CHEM 4802 or PHYSICS 4800. A seminar to accompany student teaching covering integration of physical science curricula and methods into the classroom setting. To be taken concurrently with Secondary Student Teaching, SEC ED 3290. One-hour discussion per week.

## CHEM 4897 Seminar (1)

Prerequisites: CHEM 3022 and senior standing. Presentation of papers by students, faculty, and invited speakers. Chemistry majors must enroll during the semester in which they intend to graduate. Completion of a comprehensive examination is a course requirement. One hour of lecture and one hour of discussion per week.

CHEM 5394 Special Topics in Physical Chemistry (1-3)
Prerequisite: Consent of instructor. Selected topics in physical chemistry. May be taken more than once for credit.

## CHEM 5396 Directed Readings in Physical Chemistry (1-3)

Prerequisite: Consent of Physical Chemistry Faculty. A series of readings of monographs, review papers, and/or research publications for a particular student directed at providing that student with appropriate background preparation for experimental or theoretical Ph.D. level research in an area of physical chemistry. The particular readings will be selected by the physical chemistry staff. Potential topics include but are nct limited to advances in Electrochemistry, Surface Chemistry, Thermodynamics, Molecular Spectroscopy, Quantitative Absorption Spectroscopy using new Methodologies, Applications of Group Theory in Spectroscopy, and Computational chemistry. Assessment may be in various forms including by assignments and semina-s. Students may take this course more than once for credit though the particular topic must be different in sach case.

## CHEM 5422 Coordination Chemistry (3)

Prerequisite: CHEM 4412 or an equivalent course. Chemistry of the coordination compounds of the transition metals including such topics as kinetics and mechanisms of reaction, stereochemistry, ligand field theory, stability and electronic spectra. Three hours of lecture per week.

## CHEM 5462 Organometallic Chemistry of the Transition Elements (3)

Prerequisite: CHEM 4412 or an equivalent course. A study of the transition metal compounds containing metal-carbon bonds and related metal-element bonds, including their synthesis, structure and bonding, and reactions. Applications in organic synthesis and catalysis will also be presented. Three hours of lecture $p \in r$ week.

## CHEM 5494 Special Topics in Inorganic Chemistry (1-3)

Prerequisite: Consent of instructor. Selected topics in inorganic chemistry. May be taken more than once for credit.

## CHEM 5602 Advanced Organic Chemistry I - Physical Organic (3)

Prerequisites: CHEM 2622 and CHEM 3322 Mechanism and theory of organic chemistry. Topics to include kinetics, transition state theory, reaction intermediates, and stereochemical analysis. Three hours of lecture per week.

## CHEM 5612 Advanced Organic Chemistry II - Reactions and Synthesis (3)

Prerequisite: CHEM 2622. Examination of a variety of organic transformations typically utilized in organic synthesis. Topics will include carbon-carbon bond formation, pericyclic reactions, oxidation, reduction, and functional group interconversions. Mechanism and stereochemistry will be emphasized. Three hours of lecture per week.

5㱍 CHEM 5694 Special Topics in Organic Chemistry (3)
Prerequisite: Consent of instructor. Advanced topics of special current interest. May be taken more than once for credit. Topics that may be offered include: methods of organic synthesis, organometallics in organic synthesis, topics in bio-organic chemistry, organic thermochemistry, natural products chemistry, stereochemistry, photochemistry, heterocyclic chemistry, medicinal chemistry.

CHEM 5774 Bioinformatics (3)
Prerequisite: CHEM 4712 or equivalent. This course introduces modern approaches in bioinformatics and computational biochemistry. Topics to be covered include a survey of biological databases, predictions from protein and DNA sequences, sequence alignment and sequence database searches, building phylogenetic trees, three-dimensional protein structure prediction, and molecular modeling and simulation.

CHEM 5794 Special Topics in Biochemistry (1-3)
Prerequisite: Consent of instructor. Selected topics in biochemistry. May be taken more than once for credit.
CHEM 6196 Advanced Reading in Chemistry (1)
Prerequisite: Admission to the Ph.D. degree program. Reading and examinations in the subdisciplines of chemistry. Enrollment must begin after completion of any course deficiencies.

CHEM 6487 Problem Seminar in Inorganic Chemistry (1)
Prerequisite: Consent of the inorganic chemistry staff. Problems from the current literature, presentations and discussions by faculty, students and visiting scientists. Ph.D. students may take more than once for credit. Up to three credits may be applied to the M.S. degree program. credit. Up to three credits may be applied to the M.S. degree program.

CHEM 6687 Problem Seminar in Organic Chemistry (1)
Prerequisite: Consent of the organic chemistry staff. Problems from the current literature, presentations, and discussions by faculty, students, and visiting scientists. Ph.D. students may take more than once for credit. Up to three credits may be applied to the M.S. degree program.

CHEM 6787 Problem Seminar in Biochemistry (1)
Prerequisite: Consent of the biochemistry staff. Problems from the current literature, presentations and discussions by faculty, students and visiting scientists. Ph.D. students may take more than once for credit. Up to three credits may be applied to the M.S. degree program.

CHEM 6812 Introduction to Graduate Study in Chemistry (1)
Prerequisite: Consent of Graduate Adviser. Topics to be covered include: techniques of teaching of Chemistry in colleges and universities, methods of instruction and evaluation; and responsibilities of the Graduate Teaching Assistant in laboratory instruction; safety in the undergraduate laboratory, safety practices, emergency procedures; selection of research project and thesis adviser.

CHEM 6822 Introduction to Graduate Research in Chemistry (1)
Prerequisite: Consent of Graduate Adviser. Topics include: safety in the research laboratory, safety practices, emergency procedures, hazardous materials, waste disposal, radiation safety; research ethics; chemistry information retrieval, computer assisted information retrieval, types of databases, searching bibliographic data bases.

CHEM 6897 Chemistry Colloquium (1)
Presentation of papers by students, faculty, and invited speakers. One hour per week.
CHEM 6905 Graduate Research in Chemistry (1-10)

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## UMSL Home

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## Faculty

Finn-Aage Esbensen, E. Des Lee Professor of Youth Crime and Violence, Chairperson
Ph.D., University of Colorado
Robert Bursik, Curators' Professor
Ph.D., University of Chicago
Richard Rosenfeld, Curators' Professor
Ph.D., University of Oregon
Richard Wright, Curators' Professor
Ph.D., University of Cambridge
Janet L. Lauritsen, Professor
Ph.D., University of Illinols-Urbana
Beth Marie Huebner, Associate Professor, Ph.D. Director
Ph.D., Michigan State University
David Klinger, Associate Professor
Ph.D., University of Washington
Kristin Carbone-Lopez, Assistant Professor
Ph.D., University of Minnesota
Stephanie DiPietro, Assistant Professor
Ph.D., University of Maryland
Lee Ann Slocum, Assistant Professor
Ph.D., University of Maryland
Terrance J. Taylor, Assistant Professor
Ph.D. University of Nebraska
Timothy Maher, Associate Teaching Professor, Undergraduate Director, Undergraduate Advisor
Ph. D., University of Missouri-St. Louis
G. David Curry, Professor Emeritus

Ph.D., University of Chicago
Allen E. Wagner, Associate Professor Emeritus
Ph.D., Washington University
Kristy Matsuda, Assistant Research Professor
Ph.D., University of California, Irvine
Dena Carson, Assistant Research Professor
Ph.D. University of Missouri-St. Louis
Criminology and criminal justice faculty represent several academic disciplines. By integrating practice with theory, faculty members are able to present a comprehensive picture of crime and the justice system. Tr is nexus of theory and application is found most directly in the department's emphasis on understanding policy in criminology and criminal justice. All components of crime and justice are represented in the curriculum including criminal behavior, delinquency, crime prevention, arrest, prosecution, defense, court processing. probation, prison, and parole. A special feature of the program is the cadre of local professionals who supplement the regular faculty.

## General Information

## Degrees and Areas of Concentration

The department offers courses leading to the Bachelor of Science, the Master of Arts, and Ph.D. in criminzlogy and criminal justice.

## Cooperative Programs

Faculty members in the criminology and criminal justice department hold appointments as fellows in the Center for International Studies and the Women's and Gender Studies Program. Workshops, projects, credit
courses, and other social services are brought to the criminal justice community.

## Internships

Majors are strongly encouraged to participate in CRIMIN 3280 Internship in Criminology and Criminal Justice, during their junior or senior year. The internship affords students the opportunity to gain experience in a criminal justice agency under the joint supervision of agency personnel and criminology and criminal justice faculty.

## Minor in Criminology and Criminal Justice

The minor gives recognition to those students from other major areas who find that criminology and criminal justice courses fit their academic or professional needs and/or interests.

## Chair's List

Each year, faculty members nominate undergraduates who have done outstanding work in one or more of their courses to the department's Chair's List. In addition to being nominated by a faculty member, the student must meet a cumulative grade-point average threshold for placement on the Chair's List. The list is featured on the department's website, and the Dean of Arts and Sciences is notified of their accomplishment.

## Undergraduate Studies

## General Education Requirements

Majors must satisfy the university and college general education requirements. Courses used to fulfill the social science or state requirement may not be taken from courses in the major. Foreign language proficiency is not required, although students are encouraged to take foreign language courses. Majors may not take the following courses on a satisfactory/unsatisfactory basis: criminology and criminal justice courses; SOC 3220, Quantitative Techniques in Sociology; or SOC 3230, Research Methods. Additionally, substitutions approved by departmental advisers for these courses may not be taken on a satisfactory/ unsatisfactory basis.

## Degree Requirements

Courses used to fulfill the social science or state requirements may not be taken from courses in the major. Students may register for 3000-5000 level courses only after completing ENGL 3100 (Advanced Expository Writing).

Students may register for 3000-5000 level courses only after obtaining a signature from the adviser in criminology and criminal justice or consent of the instructor. All prerequisites must be satisfied prior to enrolling in a course.

Criminology majors may not take course numbers 1100,2260 , or 3345 offered through UM-Independent Studies to fulfill degree requirements in the major.

## Expected Learning Outcomes

1. Acquire basic knowledge of the theories, methods and substance of issues in criminology and criminal justice.
2. Develop critical thinking skills through the application of criminological theory and social science research methods.
3. Develop fundamental understanding of interdisciplinary underpinnings (e.g., from sociology, psychology, political science, economics) of criminology and criminal justice issues and policies.
4. Acquire knowledge about the structure and functioning of the fundamental institutions (e.g., legislatures, police, punishment, supervisory) that are part of criminal justice systems.
5. Acquire understanding of the role of research and its application for informing policies about criminal justice issues.

## Core Curriculum

Bachelor of Science in Criminology and Criminal Justice candidates must complete the core curriculum listed below:

## Core Curriculum

The following courses in criminology and criminal justice are required:
CRIMIN 1100, Introduction to Criminology and Criminal Justice
CRIMIN 1110, Theories of Crime
CRIMIN 1120, Criminal Law
CRIMIN 2130, Criminal Justice Policy
CRIMIN 2210, Research Methods in Criminology and Criminal Justice
CRIMIN 2220, Statistical Analysis in Criminology and Criminal Justice
CRIMIN 4390, Seminar in Criminology and Criminal Justice
One of the following courses in Criminology and Criminal Justice:
CRIMIN 3305, Comparative Criminology and Criminal Justice

CRIMIN 4330, Violence Against Women
CRIMIN 4325, Gender, Crime, and Justice
CRIMIN 4340, Race, Crime, and Justice
One course from the following three:
CRIMIN 2240, Policing
CRIMIN 2250, The Courts
CRIMIN 2260, Corrections
One of the following courses in Criminology and Criminal Justice:
CRIMIN 3305, Comparative Criminology and Criminal Justice
CRIMIN 4330, Violence Against Women
CRIMIN 4325, Gender, Crime, and Justice
CRIMIN 4340, Race, Crime, and Justice
Three additional courses at the 3000, 4000, or 5000 level:
CRIMIN 3043, History of Crime and Justice
CRIMIN 3230, Crime Prevention
CRIMIN 3270, Juvenile Justice and Delinquency
CRIMIN 3305, Comparative Criminology and Criminal Justice
CRIMIN 3310, Computers in Criminal Justice
CRIMIN 3320, The Death Penalty
CRIMIN 4330, Violence Against Women
CRIMIN 3330, White Collar Crime
CRIMIN 3345, Rights of the Offender
CRIMIN 4300, Communities and Crime
CRIMIN 4320, Forms of Criminal Behavior
CRIMIN 4325, Gender, Crime, and Justice
CRIMIN 4335, Probation and Parole
CRIMIN 4340, Race, Crime, and Justice
CRIMIN 4350, Victimology
CRIMIN 4380, Special Topics in Criminology and Criminal Justice
Elective Courses
CRIMIN 1150, Violence in America
CRIMIN 2180, Alcohol, Drugs and Society
CRIMIN 2251, Youth Gangs
CRIMIN 2265, Capital Punishment
CRIMIN 3280, Internship in Criminology and Criminal Justice
CRIMIN 3290, Special Readings
Candidates must also have a cumulative grade point average of 2.0 or better in the major.
Requirements for the Minor
The minor has been designed to ground students in the basics of criminology and criminal justice.
All minor candidates must take:
CRIMIN 1100, Introduction to Criminology and Criminal Justice
The candidate must then select from two of the following three courses:
CRIMIN 1110, Theories of Crime
CRIMIN 1120, Criminal Law
CRIMIN 2130, Criminal Justice Policy
Candidates must then complete 6 hours of criminology and criminal justice course work at the 2000 level or above.

Candidates must also have a cumulative grade point average of 2.0 or better in the minor. None of the courses may be taken on a satisfactory/ unsatisfactory ( $\mathrm{s} / \mathrm{u}$ ) basis.

## Graduate Studies

## Master of Arts in Criminology and Criminal Justice

The department offers a Master of Arts degree in Criminology and Criminal Justice, which provides students with advanced theoretical and methodological training for research and management careers in criminal justice.

## Admission Requirements

The minimum GPA for regular admission to graduate study is 3.0 on a 4-point scale and students are expected to begin their course of study in the Fall semester. Admission is competitive.

## Degree Requirements

The M.A. in Criminology and Criminal Justice requires the completion of 33 credit hours, at least 21 of which are required to be in courses housed in the Department of Criminology and Criminal Justice. 12 of these hours represent the core of the curriculum Students may choose between a thesis and nonthesis course of study. Students whose cumulative GPAs fall below 3.0 after 9 or more hours of work will be placed on probation and given one semester to raise their cumulative GPAs to at least the 3.0 threshold.

## Expected Learning Outcomes

1. Develop a comprehensive understanding of the theories, methods and substance of issues in criminology and criminal justice and demonstrate an ability to synthesize knowledge in these areas.
2. Develop a comprehensive understanding of interdisciplinary underpinnings (e.g., from sociology, psychology, political science, economics) of criminology and criminal justice issues and policies.
3. Develop critical thinking and communication skills through the application of criminological theory and social science research methods.
4. Develop a comprehensive understanding of the structure and functioning of the fundamental institutions (e.g., legislatures, police, punishment, supervisory) that are part of criminal justice systems.
5. Develop comprehensive understanding of the role of research and its application for informing policies about criminal justice issues.

## Plan of Study

Required Coursework
CRIMIN 6400, Proseminar: Criminology and Criminal Justice (3; core)
CRIMIN 6405, Methods (3; core)
CRIMIN 6410, Statistical Applications in Criminology and Criminal Justice (3; core)
Three additional Criminology and Criminal Justice seminars at the 6000 level (9; non-core)

## Electives (12 hours)

Twelve elective hours of coursework are required; some or all of these credits may be earned in Criminology and Criminal Justice 6000 level seminars not counted toward the 21 hour requirement. Students may take a maximum of two 4000 -level courses in partial fulfilment of this requirement but they must have the prior approval of the Graduate Committee. All electives taken outside the College of Arts and Sciences also must receive prior approval of the Graduate Committee.

## Transfer Courses

Transfer courses are evaluated for acceptance on a case-by-case basis subject to the rules and regulations of the Graduate School. A maximum of 11 credit hours earned at other institutions can be credited toward the UMSL M.A. degree in Criminology and Criminal Justice.

## Ph.D. Program in Criminology and Criminal Justice

## Eligibility

Undergraduate applicants must have a baccalaureate degree or expect one by the end of the academic year in which they apply. Applicants must have a grade point average of 3.0 or greater (on a scale of $A=4.0$ ) for the last 60 hours of undergraduate work. Admission is competitive.

Graduate applicants who have or will have a master's degree must have a grade point average of 3.0 or greater (on a scale of $A=4.0$ ) for their graduate course work.

## Application

To consider an applicant for admission, the Department of Criminology and Criminal Justice must have transcripts, three letters of recommendations, GRE scores and a writing sample. Applicants with master's degrees should include a chapter of their thesis. International students whose native language is not English are required to submit scores from the TOEFL examination.

## Amount of Course Work

Sixty post-baccalaureate hours of graduate work are required for the Ph.D. More than half of these hours must be completed in residence. Twelve credit hours of dissertation research (CRIMIN 7499) are required. Students may enroll for dissertation credits (CRIMIN 7499) only when all other degree requirements have been completed.

Required courses for the Ph.D. are:
CRIMIN 6400, Proseminar
CRIMIN 6405, Methods
CRIMIN 6410, Statistical Applications in Criminology and Criminal Justice
CRIMIN 6420, Contemporary Criminological Theory
CRIMIN 6440, Nature of Crime
CRIMIN 6450, Criminal Justice Process and Policy
CRIMIN 6465, Qualitative Research Design

CRIMIN 6470, Quantitative Research Design
CRIMIN 6471, Evaluating Criminal Justice Interventions
CRIMIN 6480, Multivariate Statistics in Criminology

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Students are also required to complete at least 9 hours from the following courses:
CRIMIN 5533, Philosophy of Law
CRIMIN 5555, Ethical and Legal Issues in Criminal Justice
CRIMIN 6431,
CRIMIN 6434, Human Rights
CRIMIN 6435, Gender Crime and Criminal Justice
CRIMIN 6441, Juvenile Delinquency
CRIMIN 6442, Communities and Crime
CRIMIN 6443, Violent Crime
CRIMIN 6445, Property Crime
CRIMIN 6446, Sex Crime
CRIMIN 6447, Public Order Crime
CRIMIN 6448, Victimization
CRIMIN 6452,
CRIMIN 6454, Corrections
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Additional courses beyond the above requirements are taken as elective courses. These courses may be at the 5000 level. Students are also encouraged to take courses outside the Department of Criminology and Criminal Justice.

## Comprehensive Examination

Graduate students in the Ph.D. program do not become recognized as Ph.D. candidates until they have p.assed the comprehensive examination. The goals of the comprehensive examination are to assess the student's familiarity with substantive literature, theory and methods of criminology and criminal justice and to evaluate the student's intellectual imagination and ability to apply knowledge to broad criminological questions.

Further information about the qualifying exam is available from the department.

## The Dissertation

The dissertation is required of all Ph.D. candidates and demonstrates the student's scholarly expertise. The dissertation process formally begins when all other requirements of the Ph.D. program have been met. Tie dissertation committee assists in selecting and developing the research problem and evaluates the student's work on that problem.

## Career Outlook

The orientation of the criminology and criminal justice faculty and of the degree program prepares the graduate to work professionally for local, state, and federal agencies concerned with maintaining public safety by the prevention of crime and apprehension and rehabilitation of offenders. The B.S. in criminology and criminal justice is also advantageous for careers with various social agencies, especially those connected with the juvenile court system, probation and parole, and local police. Many students use the B.S. in criminology and criminal justice as preparation for law school.

The interdisciplinary curricula unify a body of knowledge from criminology, social science, law, public administration, and corrections, and provide the student with an understanding of the assumptions, values, and processes of the system of justice. Many prelaw students choose criminology and criminal justice as an undergraduate major because of the excellent preparation offered for law school. An internship program is offered for college credit. The liaison, supervision, and experience with public agencies that form an integral part of this program help the student arrive at a career decision.

## Course Descriptions

Prerequisites may be waived by consent of the department or instructor.
CRIMIN 1100 Introduction to Criminology and Criminal Justice (3)
Introduction to the basic concepts and approaches in the study of criminology and criminal justice. The major components of the criminal justice system are examined. Course fulfills the state requirement for noncriminal justice majors.

CRIMIN 1110 Theories of Crime (3)
Prerequisite: CRIMIN 1100. Introduction to major theoretical approaches to the study of crime and justice.
CRIMIN 1120 Criminal Law (3)
Prerequisite: CRIMIN 1100. Analysis of substantive criminal law, evidence and judicial procedure.
CRIMIN 1150 Violence in America (3) [SS]
Prerequisite: CRIMIN 1100 or consent of instructor. Overview of patterns and correlates of violence in
America. Emphasis on the variety of forms of violent crime, such as murder, assault, robbery, rape, and gang violence. Includes an examination of violence as a response to lawbreaking.
CRIMIN 1200 Foundations of Law: An Introduction to Legal Studies (3)
Same as POL SCI 1200. As a broad liberal-arts approach to the study of law, this course is designed to familiarize students with legal ideas, legal reasoning, and legal processes. It also provides comparative and historical perspectives on law that will help explain legal diversity and legal change. Finally, it offers opportunities to explore some of the persistent issues in law and legal theory: for example, issues about the sources of law, the responsibilities of the legal profession, or the relative merits of the adversary system.
CRIMIN 2130 Criminal Justice Policy (3)
Prerequisite: CRIMIN 1100. Examination of situational, social, and legislative approaches to the prevention of crime and delinquency. Emphasis on theories, implementation and consequences of these approaches.
CRIMIN 2180 Alcohol, Drugs, and Society (3)
Same as SOC 2180. Prerequisite: SOC 1010 or PSYCH 1003. This course examines the medical, legal, and social aspects of alcohol and drug use. Medical aspects considered include treatment approaches and the role of physicians in controlling such behavior. In the legal realm, past and present alcohol and drug laws are explored. Cultural and social influences on alcohol and drug use are discussed.
CRIMIN 2210 Research Methods in Criminology and Criminal Justice (4)
Prerequisite: CRIMIN 1100. Examination of basic methods of research design, measurement and data collection in criminology and criminal justice.
CRIMIN 2220 Statistical Analysis in Criminology and Criminal Justice (4)
Prerequisites: CRIMIN 2210 and the university math proficiency requirement. An introduction to techniques of quantitative data analysis. Both descriptive and inferential statistics are applied to problems in criminology and criminal justice. Includes a one hour lab. Courses with CRIMIN 2220 prerequisite require a minimum grade of " C " to be earned by the student in this course.

## CRIMIN 2226 Law Politics and Society (3)

Same as POL SCI 2260. Prerequisite: POL SCI 1100 or POL SCI 1200 or consent of instructor. This course will cover the litigation process, access to the courts, how and why individuals and groups bring litigation to pursue political and policy goals, and how lawyers, judges and other political actors use the law to solve policy problems. Attention will be placed on current legal policy issues facing American society.
CRIMIN 2240 Policing (3)
Prerequisite: CRIMIN 1100. Overview of current and historical perspectives on the function of American policing. Emphasis on the management of police organizations and relationships with the community.

## CRIMIN 2250 The Courts (3)

Prerequisite: CRIMIN 1100. This course provides an overview of current and historical perspectives on the function of the American courts. Emphasis on the dynamics of courthouse justice, with special attention placed on the roles of the prosecutors, judges, defense attorneys, defendants, victims, and jurors regarding the decisions that impact the adjudication process.

CRIMIN 2251 Youth Gangs (3)
Prerequisite: CRIMIN 1100 or consent of instructor. This course provides an overview of research and policy concerning youth gangs. Definitional and methodological issues will be examined, along with both qualitative and quantitative research. Topics include: the causes of gangs and gang involvement; crime, victimization, and drug involvement; and variations by race, gender, time period, and geography.

## CRIMIN 2252 Philosophical Foundations of Criminal Justice (3)

Same as PHIL 2252. Addresses fundamental conceptual and ethical issues that arise in the context of the legal system. Questions may include: How does punishment differ from pre-trial detention? How, if at all, can it be justified? Is the death penalty ever justified? When is it morally permissible for juries to acquit defendants who are legally guilty? Is plea bargaining unjust? When might people be morally obligated to obey?

## CRIMIN 2260 Corrections (3)

Prerequisite: CRIMIN 1100. Examination of correctional philosophies and practices. Emphasis on the history of correction, the formal and informal organization of correction facilities, inmate rights, and correctional
alternatives.
CRIMIN 3043 History of Crime and Justice (3)
Same as HIST 2043. Prerequisite: Sophomore standing or consent of instructor. The analysis, development, and change in philosophies and responses to crime. Emphasis on major forms and definitions of crime, the emergence of modern policing, the birth of the prison, and the juvenile court.

CRIMIN 3209 Forensic Anthropology (4)
Same as ANTHRO 3209. Prerequisite: ANTHRO 1005 or BIOL 1102 or consent of instructor. Students learn basic human dental and skeletal anatomy and the methods used by biological anthropologists and

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archaeologists to collect and analyze human skeletal remains, including how to age and sex skeletal remains, identify ethnic markers, determine stature and handedness, and identify the presence of trauma and/or pathology. Also covers the role of the forensic anthropologist in crime scene investigations and human richts issues. In the weekly lab section students will have an opportunity for hands-on application of techniques to skeletal remains.

## CRIMIN 3230 Crime Prevention (3)

Prerequisites: Junior standing, CRIMIN 1110, CRIMIN 1120, CRIMIN 1130, CRIMIN 2210, CRIMIN 2220, a 1 ENGL 3100 , or consent of instructor. Examination of situational, social, and legislative approaches to the prevention of crime and delinquency. Emphasis on theories, implementation and consequences of these approaches.

## CRIMIN 3270 Juvenile Justice \& Delinquency (3)

Prerequisites; Junior Standing, CRIMIN 1110, CRIMIN 1120, CRIMIN 2130, CRIMIN 2210, CRIMIN 2220, (must earn at least a "C" grade in CRIMIN 2220) and ENGL 3100, or consent of instructor. Examination of formal and informal responses to juvenile delinquency. Emphasis on theories of delinquency and the decisionmaking processes of police, court and probation officials.

CRIMIN 3280 Internship in Criminology and Criminal Justice (3)
Prerequisite: Junior standing. Internship under faculty supervision in a criminal justice setting. May be repeated once.

CRIMIN 3290 Special Readings (1-6)
Prerequisite: Consent of instructor. Individualized study, under regular faculty supervision, designed to meet particular educational needs of selected students.

## CRIMIN 3305 Comparative Criminology and Criminal Justice (3)

Prerequisites: CRIMIN 1120, CRIMIN 2130, CRIMIN 2210, CRIMIN 2220, (must earn at least a "C" grade $n$ CRIMIN 2220) and ENGL 3100, or consent of instructor. Analysis of crime and criminal justice systems in selected cultures. Emphasis on the ways in which these cultures define and respond to criminal behavior. Fulfills Crimin diversity requirement.

## CRIMIN 3310 Computers in Criminal Justice (3)

Prerequisites: CRIMIN 1120, CRIMIN 2130, CRIMIN 2210, CRIMIN 2220, (must earn at least a "C" grade n CRIMIN 2220) and ENGL 3100, or consent of instructor. Use of computers, data base systems, and software applications in research and professional practice.

CRIMIN 3320 The Death Penalty (3)
Prerequisite: CRIMIN 1100. An examination of the history, application, and attitudes toward the death penalty.

## CRIMIN 3330 White Collar Crime (3)

Prerequisites: Junior Standing, CRIMIN 1110, CRIMIN 1120, CRIMIN 1130, CRIMIN 2210, CRIMIN 2220, end ENGL 3100, or consent of instructor. This course examines the physical and financial harm caused by cri nes committed by corporations and business employees. Theoretical and empirical perspectives will be examined. Topics include: definitional issues and ethics; public perceptions; social, political and economic impact; and legal decision-making.

CRIMIN 3345 Rights of the Offender (3)
Prerequisites: CRIMIN 1120, CRIMIN 2130, CRIMIN 2210, CRIMIN 2220, (must earn at least a "C" grade in CRIMIN 2220), and ENGL 3100, or consent of instructor. Analysis of the objectives of criminal law regarding the rights of persons suspected or convicted of crime. Emphasis on rights regarding the police, the court, and in correctional settings.

## CRIMIN 4300 Communities and Crime (3)

Same as SOC 4300. Prerequisites: CRIMIN 1110, CRIMIN 1120, CRIMIN 1130, CRIMIN 2210, CRIMIN 22:0, and ENGL 3100 or consent of instructor. Analysis of the sources, consequences, and control of crime within communities. Emphasis on social and ecological theories of crime, and on population instability, family structure, and the concentration of poverty as causes of crime.

## CRIMIN 4320 Forms of Criminal Behavior (3)

Same as SOC 4320. Prerequisites: CRIMIN 1110, CRIMIN 1120, CRIMIN 1130, CRIMIN 2210, CRIMIN 22:!0, and ENGL 3100 or consent of instructor. Examination of major types of criminal behavior including violent, property, public order, and organizational offenses. Emphasis on theories of and responses to these crimes.

## CRIMIN 4325 Gender, Crime, and Justice (3)

Same as SOC 4325. Prerequisites: CRIMIN 1110, CRIMIN 1120, CRIMIN 1130, CRIMIN 2210, CRIMIN 22:0, and ENGL 3100 or consent of instructor. Analysis of the role of gender in crime and in the justice system. Emphasis on gender differences in crime commission, criminal processing, and the employment of wome in criminal justice agencies. Fulfills CRIMIN diversity requirement.

Same as GS 4330. Prerequisites: Junior Standing, CRIMIN 1110, 1120, 1130, 2210, 2220, and ENGL 3100, or consent of instructor. This course examines the nature, extent, causes and consequences of various types of violence against women, including rape, sexual assault, stalking, and intimate partner violence. Criminal justice policy and practice regarding violence against women are also examined.

CRIMIN 4335 Probation and Parole (3)
Prerequisites: CRIMIN 1110, CRIMIN 1120, CRIMIN 2130, CRIMIN 2210, CRIMIN 2220, (must earn at least a " $C^{\prime \prime}$ grade in CRIMIN 2220) CRIMIN 2260, and ENGL 3100 or consent of instructor. Analysis of alternatives to incarceration and postincarceration supervision. Emphasis on diversion, restitution, and community reintegration.

CRIMIN 4340 Race, Crime, and Justice (3)
Same as SOC 4340. Prerequisites: CRIMIN 1110, CRIMIN 1120, CRIMIN 2130, CRIMIN 2210, CRIMIN 2220, CRIMIN 2260 or consent of instructor. Analysis of the involvement of racial minorities in crime and the criminal justice system. Emphasis on group differences in offending, processing, victimization, and employment in criminal justice agencies. Fulfills CRIMIN diversity requirement.

CRIMIN 4350 Victimology (3)
Prerequisites: CRIMIN 1110, CRIMIN 1120, CRIMIN 2130, CRIMIN 2210, CRIMIN 2220, (must earn at least a " $C^{\prime \prime}$ grade in CRIMIN 2220) and ENGL 3100, or consent of instructor. Analysis of major perspectives on victimization. Emphasis on patterns of victimization, the role of victims in the generation of crime, and the experience of the victim in the criminal justice system.

CRIMIN 4380 Special Topics in Criminology and Criminal Justice (3)
Prerequisites: CRIMIN 1110, CRIMIN 1120, CRIMIN 2130, CRIMIN 2210, CRIMIN 2220, (must earn at least a " $\mathrm{C}^{\prime \prime}$ grade in CRIMIN 2220) and ENGL 3100, or consent of instructor. In-depth study of a selected topic in criminology and criminal justice.

## CRIMIN 4390 Seminar in Criminology and Criminal Justice (3)

Prerequisites: CRIMIN 1110, CRIMIN 1120, CRIMIN 2130, CRIMIN 2210, CRIMIN 2220, (must earn at least a "C" grade in CRIMIN 2220) and ENGL 3100, and senior standing, or consent of instructor. In this capstone course, students demonstrate the ability to work independently, integrating theory and research in criminology and criminal justice in a major research paper supervised by the instructor.

## CRIMIN 4487 Philosophy of Law (3)

Same as PHIL 4920. Prerequisite: CRIMIN 1100, and 3 hours of philosophy or consent of instructor. An examination of typical problems raised by law, including the basis of legal obligations and rights, relations between law and morality, the logic of legal reasoning, and the justification for punishment. This is a variable content course and may be taken again for credit with consent of instructor and department chair.

## CRIMIN 5415 Foundations of Criminological Theory (3)

Same as SOC WK 5415. Prerequisites: Graduate standing and consent of instructor. Examination of the history of criminological thought incorporating the major works of such theorists as Bentham, Beccaria, Marx, Durkheim, Lombroso, Sutherland and Merton.

## CRIMIN 6400 Proseminar (3)

Prerequisite: Graduate standing. Must be taken in the first semester. A critical examination of theoretical, methodological and policy issues in criminology and criminal justice. Focus is on the nature of crime, policing, pretrial processes, adjudication, and corrections.

## CRIMIN 6405 Methods (3)

Prerequisite: Graduate standing. Examination of basic methods for research design and data collection. Topics include participant observation and interviewing, survey research, aggregate data analysis, and experimental design.

## CRIMIN 6410 Statistical Applications in Criminology and Criminal Justice (3)

Prerequisite: CRIMIN 6405. Examination of elementary principles of quantitative analysis and their application to crime and justice problems. Topics include univariate, bivariate and multivariate procedures for discrete and continuous data, and a comprehensive introduction to ordinary least squares regression.

## CRIMIN 6420 Contemporary Criminological Theory (3)

Prerequisite: Graduate standing or consent of instructor. Examination of contemporary explanations of crime and criminal justice. Theories covered include strain, control, cultural, labeling, conflict, as well as more recent attempts at theoretical integration and multidiscipilinary integration.

CRIMIN 6435 Gender, Crime and Criminal Justice (3)
Same as GS 6435. Prerequisite: Graduate Standing. This course provides an analysis of theories of crime, crime processing and gender. Topics examined include the role of gender in criminal offending and victimization. The impact of gender on criminal/juvenile justice system processing and treatment will be addressed.

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CRIMIN 6436 Comparative Legal Systems (3)
Prerequisite: Graduate standing or consent of instructor. Examination of crime and criminal justice systems in world perspective.

## CRIMIN 6440 Nature of Crime (3)

Prerequisite: Graduate standing or consent of instructor. Examination of patterns and correlates of crime at the individual, situational, and aggregate levels. Topics include definitions of crime, offending typologies, and criminal careers.

## CRIMIN 6441 Juvenile Delinquency (3)

Prerequisite: Graduate standing or consent of instructor. Examination of youth crime and juvenile offenders. Topics include definitions of juvenile crime, and theories of juvenile crime causation in the United States

CRIMIN 6442 Communities and Crime (3)
Prerequisite: Graduate standing or consent of instructor. Examination of the trends and sources of crime and social disorder across communities. The course emphasizes relationships among crime, fear of crime, neighborhood change, neighborhood responses to crime, and public policies.

## CRIMIN 6443 Violent Crime (3)

Prerequisite: Graduate standing or consent of instructor. Examination of the sources and patterns of violent offending across time and space. Topics include conceptions and typologies of violent crimes and offende $s$, victim-offender relationships, and efforts to predict and control violent offending.

## CRIMIN 6445 Property Crime (3)

Prerequisite: Graduate standing or consent of instructor. Examination of the sources and patterns of property offending across time and space. Topics include conceptions and typologies of property crimes and offencers, victim-offender relationships, and efforts to predict and control property offending.

## CRIMIN 6446 Sex Crime (3)

Same as GS 6446. Prerequisites: Graduate standing and consent of instructor. Examination of consensual and non-consensual sexual offending. Topics include historical development of laws regulating sexual conduct, controversies surrounding the application of these laws, and the nature and distribution of sexual offenses.

CRIMIN 6448 Victimization (3)
Prerequisite: Graduate standing or consent of instructor. Examination of the risks and consequences of crime for its victims. Issues considered include victim-offender relationships, characteristics of victims, the nature of the injuries they experience and criminal justice procedures that involve them.

CRIMIN 6450 Criminal Justice Process and Policy (3)
Prerequisite: Graduate standing. An analysis of criminal justice as a network of decisions and complex organizations. Topics include sources of criminal justice policy, policy agendas, implementation and evaluation.

## CRIMIN 6452 The Police (3)

Prerequisite: Graduate standing or consent of instructor. Historical, social and political analysis of policing in America. Examination of federal, state, county, and municipal agencies.

## CRIMIN 6454 Corrections (3)

Prerequisite: Graduate standing or consent of instructor. Examination of the history, forms, and functions of correctional philosophies, institutions, programs, and policies. Topics include the structure and functions of prisons and jails, community corrections, intermediate sanctions, and the growth of correctional control in modern society.

CRIMIN 6465 Qualitative Research Design (3)
Prerequisite: Graduate standing. Examination of participant observation and informant and respondent interviewing. Topics include gaining access, sampling, data collection and analysis, and legal and ethical concerns.

CRIMIN 6470 Quantitative Research Design (3)
Prerequisite: Graduate standing or consent of instructor. Examination of experimental, longitudinal, and cross-sectional designs. Sources of data, sampling procedures, operational definitions, and issues of reliability are also discussed.

## CRIMIN 6471 Evaluating Criminal Justice Interventions (3)

Prerequisites: CRIMIN 6405 and CRIMIN 6410. This course examines a broad range of interventions designed to prevent crime or improve some aspect of the criminal justice system. The validity, reliability, and feasibility of differing intervention designs are addressed. Several major criminal justice evaluations are discussed.

CRIMIN 6480 Multivariate Statistics in Criminology (3)
Prerequisites: CRIMIN 6405 and CRIMIN 6470. Introduction to the general linear model with applications to
multivariate problems in criminal justice and criminology. Topics include advanced ordinary least squares, modeling, time series analysis, simultaneous equations, and analysis of limited dependent variables.

CRIMIN 6485 Directed Readings/Research in Criminology and Criminal Justice (1-6)
Prerequisite: Consent of Instructor. Directed reading and research, under faculty supervision, designed to meet particular educational needs of selected students.

CRIMIN 6495 Internship in Criminology and Criminal Justice (3)
Prerequisite: Graduate standing or consent of instructor. Supervised placements with criminal justice agencies. Designed primarily for students with limited field experience.

CRIMIN 6498 M.A. Thesis Research (1-6)
Prerequisites: Graduate standing and consent of instructor.
CRIMIN 7499 Ph.D. Dissertation Research (1-6)
Prerequisite: Graduate standing or consent of instructor. To be arranged.

# BULLETIN $2 川 1$ $2(1) 2$ <br> Department of Anthropology, Sociology, and Languages 

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## UMSL Home

## General Information

The Department of Anthropology, Sociology and Languages in the College of Arts and Sciences at the University of Missouri-St. Louis includes programs in each of the three disciplines. The faculty of this department are distinguished scholars with a common commitment to quality with respect to teaching and research related to the global biological, cultural, and historical diversity of humanity. We are committed to advancing the understanding of social and cultural forces that shape the beliefs, behaviors, and relations iips of individuals as members of the larger society, and to promoting an interdisciplinary approach to learning. Visit the individual pages for Anthropology, Sociology and Languages programs.

## Degrees Offered:

Bachelor of Arts in Anthropology
Bachelor of Arts in Modern_Language - Concentrations in French, German, Japanese, and Spanish
Bachelor of Science in Sociology


The economics faculty considers research an integral part of good teaching. Research projects in recent years have dealt with energy, public choice, industrial organization, property rights, wage discrimination, urban economic development, health economics, economics of science, economics of gender, poverty and welfare, economics of culture, and government regulations.

The economics department also offers courses at the undergraduate level in geography.
A graduate program offers work leading to the M.A. degree in economics in preparation for careers in teaching, research, government, and industry. The program includes course work in microeconomic theory, macroeconomic theory, and econometrics, as well as elective courses in international trade, international finance, monetary theory, industrial organization, public finance, labor, urban, and natural resource economics. The program can accommodate prospective full-time students as well as those who wish to study part-time. Classes are small, and student-faculty interaction is encouraged.

## Departmental Honors

A student may earn departmental honors with a GPA of 3.6 in economics and the recommendation of the department.

## Minor in Economics

A minor in economics is also available. See the following section for requirements.

## Undergraduate Studies

Students completing the B.A. and B.S. in Economics are expected to have achieved the following learning outcomes:

1. Use economic reasoning to interpret and evaluate social, political and economic arguments, and policies.
2. Use mathematical methods to interpret and analyze economic models to assess their logical validity and to model economic phenomena.
3. Use statistical methods to interpret and analyze economic data and to assess the empirical validity of economic propositions.
4. Employ their understanding of key market institutions such as property rights and contracts and economic organizations such as the Federal Reserve System and the International Monetary Fund :o analyze economic behavior and evaluate public policy.
5. Identify the causes and consequences of poverty and prosperity across and within societies.
6. Predict changes in key macroeconomic variables in response to changes in social, political, and economic policy as well as non-economic events such as terrorist attacks, natural disasters, and changes in consumer confidence.
7. Write a research paper that employs sound economic reasoning and, where appropriate, uses data and statistical methods to analyze an economic policy.

## General Education Requirements

All undergraduate economics majors must meet the university and college general education requirements. Candidates for the B.A. degree may take any foreign language to meet this requirement. Candidates for the B.S. degree take mathematics and quantitative courses instead of the foreign language requirement. Courses in economics may be used to meet the university social sciences requirement.

Education majors specializing in economics must fulfill the requirements for the B.A. degree. These majors are responsible for obtaining an adviser in the Department of Economics.

All prerequisites for economics courses must be completed with a C - or better.

## Satisfactory/unsatisfactory Option

Courses outside the major field and ECON 1001, Principles of Microeconomics, and ECON 1002, Principles of Macroeconomics, may be taken on a satisfactory/unsatisfactory basis.

## Degree Requirements

## Bachelor of Arts in Economics

Candidates for the B.A. degree must take at least 33, but no more than 45, hours in economics. At least 27 hours must be above the 2000 level. All required courses for the major must be completed with a grade of $C$ or better. The following courses are required:
ECON 1001, Principles of Microeconomics
ECON 1002, Principles of Macroeconomics
ECON 3001, Intermediate Economic Theory: Microeconomics
ECON 3002, Intermediate Economic Theory: Macroeconomics
ECON 3100, Economic Statistics
ECON 3200, Money, Banking, and Monetary Theory
ECON 3800, History of Economic Thought; or ECON 2800, History of American Economic Development

## Bachelor of Science in Economics

Candidates for the B.S. degree must complete at least 36, but no more than 50, hours in economics. At least 30 hours must be at or above the 2000 level. All required courses for the major must be completed with a grade of C - or better. The following courses are required:
ECON 1001, Principles of Microeconomics
ECON 1002, Principles of Macroeconomics
ECON 3001, Intermediate Economic Theory: Microeconomics
ECON 3002, Intermediate Economic Theory: Macroeconomics
ECON 3100, Economic Statistics
ECON 3200, Money, Banking, and Monetary Theory
ECON 4100, Introduction to Econometrics
MATH 1800, Analytic Geometry and Calculus I, or MATH 1100, Basic Calculus

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Also required are two of the following:
ECON 4040, Analysis of Business Cycles
ECON 4030, Managerial Economics
ECON 4110, Applied Econometrics
ECON 4120, Time Series Econometrics for Economics and Finance
ECON 4130, Econometric and Time Series Forecasting
ECON 4150, Mathematical Economics
ECON 4160, Geospatial Economic Analysis or any mathematics course numbered 1900 or above (with consent of adviser)
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## Complementary Areas of Study

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The department encourages all majors to develop breadth in related disciplines. Course work and minors are available in a number of areas such as business administration, computer science, statistics, and political science. Students should check with their advisers for recommendations concerning courses in these areas. The department suggests the following supplemental course work for students interested in pursuing doctorallevel graduate work in economics or careers in general business. It also encourages all students to obtain work experience by enrolling in the Internship in Applied Economics (ECON 4990).
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## Graduate School Preparation:

It is recommended that students considering doctoral-level graduate work in economics also take:
MATH 1900, Analytical Geometry and Calculus II
MATH 2000, Analytical Geometry and Calculus III
MATH 2020, Differential Equations
MATH 2450, Elementary Linear Algebra
MATH 4100, Advanced Calculus
MATH 4200, Mathematical Statistics I
General Business Preparation:
It is recommended that students interested in pursuing careers in business also take:
BUS AD 2400, Fundamentals of Financial Accounting
BUS AD 2410, Managerial Accounting
BUS AD 2900, Legal Environment of Business
BUS AD 3500, Financial Management
BUS AD 3700, Basic Marketing

## Requirements for the Minor.

Candidates for a minor in economics must take a minimum of 15 hours in economics.
The following courses are required:
ECON 1001, Principles of Microeconomics
ECON 1002, Principles of Macroeconomics
For the remaining 9 hours, 3 hours must be at or above the 2000 level and 6 hours must be at or above the 3000 level. It is recommended that students take ECON 3001, Intermediate Economic Theory:
Microeconomics and/or ECON 3002, Intermediate Economic Theory: Macroeconomics. ECON 3100, Economic Statistics, cannot be counted towards the economics minor if the student has also taken LOM 3300, MATH 1320, or the equivalent.

A GPA of 2.0 or better is required for courses presented for the minor. The satisfactory/ unsatisfactory (s/u) option may be applied to ECON 1001 and ECON 1002 only.

## Graduate Studies

Students completing the M.A. in Economics are expected to have achieved the following learning outcomes:

1. Interpret and analyze economic models and assess their validity.
2. Use theoretical and empirical tools to design effective business and government policies.
3. Use econometric methods to interpret and analyze economic data, to assess the empirical validity of economic propositions, evaluate business and government policies, and to forecast economic variables.
4. Develop at least one topic area of expertise through familiarity with the relevant scholarly and professional literatures, policy issues, institutions, and current data trends.
5. Develop at least one methodological area of expertise through the acquisition of the theoretical and empirical tools needed to understand scholarly and professional contributions to the literature to facilitate lifelong professional development and refinement of expertise.
6. Write a professional quality research paper.
7. Develop sufficient proficiency in the use of theoretical and empirical tools and in understanding of economic institutions to excel in a Ph.D. program.

## B.S./M.A. Dual Degree Program in Economics

The B.S./M.A. (also known as the " $2+3^{\prime \prime}$ ) program is an accelerated program that allows students to comjlete a B.S. and a M.A. in economics in five years. The program allows students to apply 12 of the M.A. credit hours towards the B.S., reducing the overall required hours for the two degrees from the standard 150 (120 for the B.S. plus 30 for the M.A.) to 138 hours.

The M.A. in Economics requires 30 credit hours; at least 21 hours must be completed in residence.
The following 3 courses ( 9 credit hours) are required:
ECON 5001, Microeconomics Analysis
ECON 5002, Macroeconomics Analysis
ECON 5100, Econometric Theory and Methods
In addition, 21 credit hours of electives must be completed. At most, six of these credit hours may be economics courses at the 4000 level (excluding Economics 4100 and ECON 4150 which cannot be utilized as part of the M.A. degree); all other electives must be at the 5000 level or higher.

Of the 30 hours taken in the M.A. program, 12 of these hours (per the approval of the Graduate Director will also count toward the undergraduate B.S. requirements. All other requirements for the B.S. degree remain in effect.

## Admission Requirements

Applicants must have completed between 60 and 108 credit hours. Applicants must have a minimum G. J.A. of 3.0 (both overall and in economics courses) and must be nominated by a full-time regular economics faculty member. Applicants must have completed all of the general education requirements as well as ccllege algebra (or a higher level mathematics course), introductory microeconomics and introductory macroeconomics. Those accepted with fewer than 90 semester credit hours are accepted only on a provisional basis. Once the student has completed 90 semester hours of coursework (typically including ECON 3001, 3002, 3100, 3200, MATH 1800, and preferably ECON 4100) with a satisfactory G.P.A. (minimum G.P.A. of 3.0 overall and in economics courses) the provisional status is dropped.

It is recommended that applicants apply when they have completed 90 credit hours; further, it is recommended that applicants should complete intermediate microeconomics (ECON 3001) and/or introductory econometrics (ECON 4100) before applying.

## Awarding of Degree

Both degrees (the B.S. and M.A.) will be awarded when all requirements for the entire program have been completed. In other words, the B.S. and M.A. degrees will be simultaneously awarded at the completion of study.

Students who officially withdraw from the B.S./M.A. Dual Degree Program in Economics and who have successfully completed all of the requirements for the B.S. degree will be awarded the B.S. degree.

## Master of Arts in Economics

## Admission Requirements

An undergraduate major in economics is not required for acceptance into the program. Application for admission may be submitted at any time, although class work formally begins in late August, mid-January, and mid-June. Candidates must meet the general admission requirements of the Graduate School, submit GRE scores (Advanced Economics optional), and submit two letters of recommendation from persons qualified to judge the candidate's potential for success in the program.

The admissions decision is based on the applicant's academic transcript, GRE scores, letters of recommendation, and a personal narrative on the application form.

## Departmental Monors

A student may earn departmental honors with a GPA of 3.75 in all required courses for the M.A. degree and the recommendation of the department.

## Degree Requirements

The M.A. in Economics requires 30 credit hours; at least 21 hours must be completed in residence.
Candidates need not have an undergraduate degree in economics. However, students are expected to have taken intermediate micro- and macro-economics, mathematical economics, and introductory econometrics prior to the beginning of the core curriculum. Students that do not have these courses will take these courses first; credits earned in these courses do not count towards the 30 hours required for the MA.

## Required Core Courses

The following courses or their equivalents are required for the M.A. in Economics. Students with previous education in economics or business may waive some of these courses.

ECON 5001, Microeconomic Analysis
ECON 5002, Macroeconomic Analysis
ECON 5100, Econometric Theory and Methods

## Electives

Candidates must complete at least 21 hours of electives. A maximum of 6 hours of economics electives may be taken at the 4000 level. With the approval of the graduate coordinator, students may take up to 9 hours of graduate courses outside the Department of Economics. In particular, students interested in business economics may take up to three approved graduate business courses for their electives.

## Dual M.B.A./M.A. in Economics

For as few as 15 hours of additional course work in economics, a Master of Arts in Economics may be obtained along with your Master of Business Administration (M.B.A.) degree. Students apply for the M.A. during the last semester of M.B.A. studies; the usual on-line application is utilized. Full-time students may be able to complete the M.A. degree in as little as a year, while part-time students can be accommodated over a longer time period. The total number of additional courses will depend on which electives the student has taken in their M.B.A. program; students are advised to contact the Director of Graduate Studies in Economics regarding the choice of possible M.B.A. electives.

The following course of study is recommended for dual degree-seekers. It is assumed that students have already completed at least one course in calculus.
I) Core requirements - 9 hours

ECON 5001, Microeconomic Analysis
ECON 5002, Macroeconomic Analysis
ECON 5100, Econometric Theory and Methods

## II) Electives - 21 hours

Twelve hours of graduate-level business electives (excluding BUS AD 5000, BUS AD 5001, and BUS AD 5002, INFSYS 6800 and LOG OM 5300) to be incorporated from your M.B.A. degree program. Six additional graduate hours in economics, three hours of which may be at the 4000 level.

Applicants need not have an undergraduate degree in economics. However, students are expected to have taken, either at the baccalaureate or M.B.A. level: Intermediate Microeconomics (ECON 3001 or BUS AD 5001), Intermediate Macroeconomics (ECON 3002 or BUS AD 5002), Mathematical Economics (ECON 4150), Money and Banking (ECON 3200), Statistical Analysis for Management Decisions (LOG OM 5300) and Introductory Econometrics (ECON 4100). Students that do not have these courses will take these courses first; credits earned in these courses do not count towards the hours required for the M.A.

Students must take at least 30 hours to complete the M.A. in Economics degree-core requirements (I) and electives (II) - and these courses must be completed within a period of six years.

## Career Outlook in Economics

Nearly every decision that a person, business, or government makes falls under the purview of economic analysis. In economics course work, students learn to think analytically and apply their knowledge to a broad range of topics and problems. These skills are highly valuable in our ever changing economy, as well as in everyday life. For this reason, those with economics degrees are in high demand in a wide number of occupations, whether in business or government. In addition, economics majors are especially sought after by law schools, M.B.A. programs and, of course, graduate programs in economics. Job prospects for those with economics degrees at both the undergraduate and graduate levels are expected to remain strong over the next decade. For additional information on the undergraduate program, contact the Director of Undergraduate Studies at 516-5562 or 516-5306. Regarding the graduate program, contact the Director of Graduate Studies at 516-5553. Additional information is also available at the Department of Economics website.

## Course Descriptions

Courses in this section are grouped as follows: Economics, Geography, and Home Economics. Prerequisites may be waived by consent of the department.

## Economics

ECON 1000 Introduction to the American Economy (3) [V, SS]
Introduction to economic analysis and problems through an examination of the development and operatio is of the American economy; study of its evolution, institutions, and principal problems. ECON 1000 does not substitute for ECON 1001 or ECON 1002. Students who have already completed ECON 1001 or ECON 100:? may not take ECON 1000 for credit.

## ECON 1001 Principles of Microeconomics (3) [V, SS]

Prerequisite: MATH 1030. Introduction to the determinants of household demand, production and cost, and market prices. Applies the principles of individual decision-making behavior to understanding goods, serviees, and resource markets.

## ECON 1002 Principles of Macroeconomics (3) [SS]

Prerequisite: ECON 1001. Introduction to the determination of levels of and changes in aggregate income, output, employment, and prices. Applies economic principles of choice to the formulation and achievement of public policies that affect national employment, income distribution, and economic growth.

ECON 1003 Microeconomics in the News: A Virtual Classroom (1)
Prerequisite: ECON 1000 or ECON 1001 or equivalent (may be taken concurrently). This course uses a virtual chatroom to host one hour of discussion weekly about current news events with microeconomic content. News articles will focus on business, public policy, and individual choices that can be understood within a microeconomics framework. Chatroom can be accessed from any location-on or off-campus-within Internet access.

## ECON 1004 Macroeconomics in the News: A Virtual Classroom (1)

Prerequisite: ECON 1002 or equivalent (may be taken currently). This course uses a virtual chatroom to host one hour of discussion, weekly, about current news events with macroeconomic content. News articles will focus on macroeconomic phenomena - e.g., interest rates, the global economy, the Federal Reserve and public policy decisions - that can be understood within a macroeconomics framework. Chatroom can be accessed from any location - on or off - campus - with Internet access.

## ECON 1005 Family Economics and Household Development (3)

Provides social service professionals that work with low income individuals and families with an understarding of the principles of personal financial management. Case studies are used to apply course content and to develop training strategies for clients to improve household financial management. The role of financial institutions and government policies as well as their impact on low income families is also examined.
Resources to use with clients will be identified. Economics 1005 does not count toward a major or minor $n$ Economics.

## ECON 1500 Entertainment Economics: The Movie Industry (3) [SS]

Same as MEDIA ST 1500. This survey course examines the interrelationships between economics and the movie industry. It explores the impact of economic factors on the production, distribution and exhibition of movies, focusing on the rise and fall of the studio system, role of technological change in the evolution of cinematography and the movie marketplace, financing and market segmentation, globalization and chançing industrial structure within which films are produced. To the extent that movies reflect and contribute to popular economic perspectives, this course also evaluates the soundness of the movie industry's depiction of a variety of economic doctrines. Classes will consist of lecture, discussion, and brief film screenings. This ccurse does not count towards the hours required for an economics major.

ECON 2410 Work, Families, and Public Policy (3) [MI, SS]
Same as GS 2410. Prerequisite: ECON 1000 or ECON 1001. This course compares the economic behavior of women and men in both the labor market and the household. Topics include: the family as an economic (production) unit, gender differences in labor force participation, occupations and earnings; the effectiveriess of human capital theory and labor market discrimination in explaining the male-female wage gap; remed es for reducing the wage gap; family structure and economic well-being; and alternative policies to alleviate poverty. Students who have completed ECON 3400 may not take ECON 2410 for credit.

ECON 2610 The Economics of Professional Sports (3) [V, SS]
Prerequisite: ECON 1000 or equivalent or consent of instructor. This course will survey the economic organization of professional sports team industries and the relationship of sports teams to their employe.as, fans, and governments. Economic issues relating to salaries and labor disputes, monopoly practices, cartels and pricing, team location decisions, and public subsidies for professional sports teams will be analyzed.

ECON 2650 Law and Economics (3)
Prerequisite: ECON 1001. Analysis of the economic role of property rights and contracts in the private fo *profit and not-for-profit sectors of the economy. Considers economic incentives to form organizations as one alternative and to form contracts as another. Considers the economic efficiency of the common law and judicial systems in use in the United States.

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ECON 2800 History of American Economic Development (3) [MI, SS]
Same as HIST 2800. Prerequisite: ECON 1000 or ECON 1001 or consent of instructor. Uses economic concepts to explain historical developments in American economy, beginning with hunter-gatherers who crossed the Bering land bridge around 12,000 B.C. Main topics include Native American economies, European exploration and conquest, colonial economies, indentured servitude, American Revolution, U.S. Constitution, westward expansion, transportation, Industrial Revolution, state banking and free banking, slavery, Civil War, postbellum agriculture, rise of big business and antitrust, banking panics, Federal Reserve Act, First and Second World Wars, New Deal, and growth of government in postwar economy.

ECON 3001 Intermediate Economic Theory: Microeconomics (3)
Prerequisites: ECON 1001 and ECON 1002. Analysis of prices in terms of equilibrium of the business firm and consumer demand in markets of varying degrees of competition.

ECON 3002 Intermediate Economic Theory: Macroeconomics (3)
Prerequisites: ECON 1001, ECON 1002; ECON 3200 is recommended. Study of national income, expenditure, and the forces determining the level of economic activity. Special emphasis on the theory of income determination and its application to public policy.

## ECON 3003 Game Theory and Strategic Decision Making (3)

Prerequisite: ECON 1001. When the best course of action depends on the decisions made by others, strategy becomes important. Game theory provides the tools for analyzing such strategic decision making. Strategic behavior is analyzed in the context of business, logistics, biology, war, government, politics, and everyday life. A wide variety of in-class experiments are used to illustrate key concepts.

## ECON 3052 Microeconomics for the School Curriculum (1-3)

Prerequisite: Junior standing. Analysis of market forces, with emphasis on business firms, households, and productive-factor markets, price determination, and resource allocation. Special reference to topics included in elementary and secondary school social science curricula. ECON 3052 may not be used by economics majors to meet degree requirements.

## ECON 3055 Economics Issues for the School Curriculum (3)

Prerequisites: Junior standing and consent of instructor. An analysis of selected economic issues appropriate to instruction in secondary and elementary schools. May be taken more than once for credit, provided the topic of the course is different each time. May not normally be used by economics majors to meet degree requirements. This course does not fulfill the undergraduate economics requirement for education majors.

## ECON 3100 Economic Statistics (3)

Prerequisites: MATH 1030, ECON 1001, and ECON 1002. Introduction to economic data sources, data interpretation and statistical inference as used in economic analysis. Emphasizes the testing of economic hypotheses and the development and estimation of economic models. Introduces the use of statistical software used in economics.

ECON 3200 Money, Banking, and Monetary Theory (3)
Prerequisites: ECON 1001 and ECON 1002. Factors influencing bank reserves and the money supply. Ability of the Federal Reserve System and the Treasury to control these factors. Introduction to monetary theory; integration of monetary phenomena with national income theory. Analysis of current policy issues.

ECON 3300 International Economic Analysis (3)
Prerequisite: ECON 1001. Introduction to the theories of international trade and finance including determinants of trade, the effects of trade on overall economic performance, trade restrictions, balance of payments, exchange rates, international economic integration and international financial crises. Discussion of current institutions and economic developments in the global economy.

ECON 3320 Economic Development (3)
Prerequisites: ECON 1001 and ECON 1002. Survey of economic growth as applied to developed and underdeveloped countries. Analysis of development policies with emphasis on case studies. Case studies may include the United States, Western Europe, or Latin America.

## ECON 3400 Labor Economics (3)

Prerequisite: ECON 1001. Examines the labor market in the economy. Considers the theories of labor supply, labor demand, and market determination of wages. Other topics include noncompetitive markets, internal labor markets, the theory of human capital, compensating wage differentials, labor market discrimination, unions and collective bargaining, unemployment, and poverty and the distribution of income.

ECON 3450 Labor in the Global Political Economy (3)
This course will examine current issues, trends, and developments which are shaping labor in today's global economy. Students will analyze the shifting balance of power between labor and capital, the role of government, and evaluate the strategic options for workers and unions operating in a global environment. ECON 3450 may not be used by economics majors to meet degree requirements.

Prerequisites: ECON 1002 and ECON 3001. Analysis of the role of government expenditures and taxation. Topics include: (1) analysis of public goods and externalities, models of collective choice, elements of bentfitcost analysis, the theory of bureaucracy, governments as agents in markets; and (2) analysis of the econcmic role of governments, subsidies and taxes in the federal system, criteria for tax evaluation, the nature of tax legislation, private decision making under different tax institutions, and government borrowing.

## ECON 3600 Industrial Organization (3)

Prerequisite: ECON 1001. A theoretical and empirical analysis of the actions of firms under alternative forms of market organization. The role of economics of scale, product differentiation, mergers, and advertising in affecting industry structure, and the impact of the resulting industry structure on pricing, output, promotion, and technology decisions of firms.

ECON 3800 History of Economic Thought (3)
Prerequisites: ECON 1001 and ECON 1002. The evolution of economic thought from the ancients through post-Keynesian theory.

ECON 3900 Selected Topics in Economics (3)
Prerequisites: ECON 1001 and ECON 1002. Analysis of a selected economic topic. The topic selected will vary from semester to semester. This course may be taken for credit more than once as long as the topic discussed in each semester is different.

## ECON 4030 Managerial Economics (3)

Prerequisites: ECON 3001 or equivalent; MATH 1800 or MATH 1100 recommended. Application of microeconomic theory to decision-making process in the business firm. Topics include pricing and profit strategy, cost analysis, decision making under uncertainty, technology, innovation, and productivity growth, and the structure and organization of firms. Problem-solving and case-study approach used.

ECON 4040 Analysis of Business Cycles (3)
Prerequisites: ECON 3200; ECON 3002; ECON 3100. This course focuses on the empirical regularities in macroeconomics commonly referred to as the business cycle. It examines the variability and co-movemerts of aggregate economic variables and explores alternative theoretical explanations of these phenomena.

ECON 4100 Introduction to Econometrics (4)
Prerequisites: ECON 1001; ECON 1002; ECON 3100 or MATH 1320 or LOM 3300 ; MATH 1800 or MATH 11100. An introduction to quantitative analysis of economic behavior. The ordinary least squares technique and the assumptions underlying it are developed. Methods designed to detect and correct for the violations of these assumptions are examined. Special emphasis is given to the practical application of the procedures discussed through the use of computer exercises.

## ECON 4105 Quantitative Methods and Modeling in Economics, Business and the Social Sciences (3)

Prerequisites: MATH 1030; ECON 1001 or junior standing. This course focuses on the application of mathematical techniques to model building. The course reviews various mathematical techniques and shows students how they can be used for describing various social and business phenomena. Specific examples trom the business, economics, criminology and other social sciences will be employed to reinforce the mathematical tools and concepts discussed. Students who have previously completed ECON 4150 or MATH 1800 or MATH 1100 may not take this course for credit.

ECON 4110 Applied Econometrics (4)
Prerequisite: ECON 4100 or equivalent. Concepts, techniques, and advanced applications of econometrics Emphasis on developing a critical understanding of the appropriateness and limitations of a variety of state-of-the-art techniques used to model economic or political processes. Topics will include joint tests of hypotheses, estimation of lagged effects, models of qualitative choice, simultaneous systems, and outlier diagnostics. This course includes laboratory work in quantitative economic analysis.

## ECON 4120 Time Series Econometrics for Economics and Finance (4)

Prerequisites: ECON 4100 or equivalent and a solid foundation in statistics. Introduction to application of econometric methods to time-series data. Emphasis on model specification as it applies to macroeconomic or financial data. Topics include: Stationary and non-stationary time-series, seasonality, random walks, unit roots, Dickey-Fuller tests, cointegration, ARCH/GARCH models, and general to specific modeling (ADLs). Specific applications to macro-economics, international economics and/or financial markets.

ECON 4130 Business and Economic Forecasting (4)
Prerequisite: ECON 4100 or equivalent. Alternative forecasting methodologies for economic time series will be analyzed and discussed. The focus of the course will be: (1) the development of time-series (ARIMA) models and their application to forecasting; (2) the use of standard econometric models for forecasting; and (3) evaluation and comparison of these methods and the conditions under which each is the appropriate methodology. This course includes laboratory work in quantitative economic analysis.

ECON 4150 Mathematical Economics (3)
Prerequisite: MATH 1800 or MATH 1100; ECON 3001 or BUS AD 5000, or BUS AD 5001. This course uses
calculus and other mathematical tools to analyze economic phenomena. In addition to exploring techniques used to solve unconstrained and constrained optimization problems, the course also examines how matrix algebra is used in economic modeling. This course allows students to mathematically analyze economic models that receive graphical treatment in lower level courses.

ECON 4160 Geospatial Analysis in the Social Sciences (3)
Prerequisites: Junior standing, ECON 1001, or consent of instructor. Analysis of geospatial data relating to a variety of social phenomena using geographic information systems (GIS) software. Students will learn how geospatial analysis can be integrated into research projects and presentations (e.g., creating maps to present and analyze social, political and economic data). Students will also learn how criminal activity, economic activity, voting patterns and other social behavior are spatially correlated with demographic data. As a culminating project, students will learn how to apply GIS techniques, including but not limited to sophisticated spatial modeling of social behavior.

ECON 4170 Fundamentals of Cost-Benefit Analysis (3)
Prerequisite: ECON 3001 or equivalent. The purpose of this course is to provide a systemic and rigorous way of thinking about the measurement of benefits and costs when evaluating public projects, programs or regulations. Cost-benefit analysis has wide application, including: environmental resource use, highway construction projects, safety regulations, taxation of cigarettes, and investment in higher education. Given the prevalence of cost-benefit analysis in government budgetary processes, this course will develop critical appraisal skills to evaluate the appropriateness of these analyses.

ECON 4210 Financial Markets and Institutions (3)
Prerequisite: ECON 3200. Demand, supply, and flow of funds in the macrofinancial system, including money, capital, futures, and foreign exchange markets. Examines types and historical development of domestic and international financial intermediaries operating within these markets, decision-making within individual intermediaries, their regulatory environment, and how their portfolio decisions affect flows in the financial system.

## ECON 4500 Public Finance: State and Local (3)

Prerequisites: ECON 1001 and ECON 1002 and junior standing. A study of expenditure, taxation, and financial administration of state and local governments, with emphasis on problems of current interest. Special attention given to research methods, as well as financial relations between various levels of government.

ECON 4510 Public Choice (3)
Prerequisite: ECON 3001 or consent of instructor. Public choice is the analysis of government and governmental institutions through the logic of economics. It assumes the same principles that economists use to analyze actions in the marketplace, and applies them to actions made in collective decision-making. Topics covered include: the efficiency of democracy, voting methods, the incentives of legislators, bureaucrats and lobbyists, political competition, and public institutions and economic growth.

ECON 4550 Natural Resource Economics (3)
Prerequisites: ECON 1001, or consent of instructor, junior standing. The relationship between human activity and the world's natural resources requires choices. This course uses an economics perspective to study these choices. This perspective uses the view of the environment as an asset for its starting point. Issues concerning the optimal and sustainable use of natural resources are examined in this context. Special emphasis is given to potential policy responses to environmental problems.

ECON 4700 Urban and Regional Economics (3)
Prerequisites: ECON 1001 and ECON 1002. A survey of factors affecting the location of economic activity, industrial diversity, determinants of urban growth, and the role of urban public economy. Special emphasis is given to critiques of economic impact studies and urban public policies.

ECON 4720 The Economics of Real Estate and Land Use Policy (3)
Prerequisites: ECON 3001 and ECON 4100. This course will introduce economic theory and analysis of the real estate market's micro and macro characteristics. Public policy impacting both the residential and commercial property markets will be discusses using the models developed in the course. Topics include price and location theory, growth and growth patterns, urban sprawl, migration, regulation of land and capital, provision of public goods, and non-market valuation econometric modeling. Hands on applications of various non-market econometric models will be provided.

ECON 4900 Advanced Topics in Economic Analysis (3)
Prerequisite: ECON 3001 or ECON 3002 or consent of instructor. Study of a specific topic in Economics that may vary from semester to semester. May be taken for credit more than once if the topics are different.

ECON 4980 Special Readings (1-6)
Prerequisites: Consent of instructor; grade point of 3.0 or higher in economics. Unscheduled, independent directed readings on topics mutually acceptable to student and instructor. Maximum credit limited to six hours.

ECON 4990 Internship in Applied Economics (2-6)

Prerequisites: Junior standing, ECON 3001, and consent of instructor. Independent study involving work with appropriate private firm or public agency. Maximum of 6 hours may be earned, only 3 of which may be applied to economics major.

## ECON 5001 Microeconomic Analysis (3)

Prerequisites: ECON 3001 or BUS AD 5001; ECON 3002 or BUS AD 5002; ECON 4150 . Survey of microeconomic comparative statistics. Detailed examination of demand and supply, product, and factor markets. Partial equilibrium in competitive, imperfectly competitive, and monopolistic markets.

## ECON 5002 Macroeconomic Analysis (3)

Prerequisites: ECON 3200; ECON 3001 or BUS AD 5001; ECON 3002 or BUS AD 5002; ECON 4150. Aggreqate economic theory, including analysis of the determinants of income, output, employment, and prices. Employment and price-level effects of consumer and investment demand, the money supply and interest rates, and government policies.

## ECON 5010 Microeconomics for Policy Analysis (3)

Same as P P ADM 6080. Prerequisite: Graduate Student Standing. This course introduces microeconomic analysis of consumers, firms, and government, with an emphasis on policy applications. It assumes no priar training in economics and is appropriate for graduate students in public policy administration, nonprofit management, political science, gerontology, criminology and criminal justice, and other related fields. This course may not be used by economics students to meet $M$. A. degree requirements.

ECON 5052 Microeconomics for the School Curriculum (1-3)
Prerequisite: Bachelor's degree from an accredited institution or consent of instructor. Analysis of market forces, with emphasis on business firms, households, productive factor markets, price determination and resource allocations. Special reference to topics included in the elementary and secondary school social science curricula.

## ECON 5055 Economic Issues for the School Curriculum (1-3)

Prerequisites: Junior standing and consent of instructor. An analysis of selected economic issues appropriate to instruction in secondary and elementary schools. May be taken more than once for credit, provided the topic of the course is different each time. May not normally be used by economics majors to meet degree requirements.

ECON 5100 Econometric Theory and Methods (3)
Prerequisites: ECON 3001 or BUS AD 5001; ECON 3002 or BUS AD 5002; ECON 4150 ; ECON 4100 or LOG OM 5300; MATH 2450 or equivalent. A rigorous review of statistical models and methods relevant to the estimation and testing of economic relationships. Emphasis on the theoretical underpinnings of techniques commonly used for single and multiple equation estimation and hypothesis testing. Topics include ordinary' and generalized least squares, robust regression, and simultaneous equations estimation.

ECON 5110 Topics in Applied Econometrics (3)
Prerequisite: ECON 4100, or ECON 5100 or LOG OM 5300. Concepts and application of advanced econome:tric techniques. Students will develop a thorough understanding of the appropriateness and application of a variety of state-of-the art techniques. Topics will include specification tests, polynomial distributed lags, discrete choice, pooled time-series cross-section, simultaneous equations and outlier detection.

## ECON 5120 Advanced Topics in Time Series Econometrics (3)

Prerequisites: ECON 4100 or equivalent and a solid foundation in statistics. Application of econometric methods to time-series data. Emphasis on model specification as it applies to macroeconomic or financial data. Advanced Topics include: Stationary and non-stationary time-series, seasonality, random walks, unit roots, Dickey-Fuller tests, cointegration, ARCH/GARCH models, and general to specific modeling (ADLs). Specific applications to macro-economics, international economics and/or financial markets.

## ECON 5130 Advanced Topics in Business and Economic Forecasting (3)

Prerequisites: ECON 3001 or BUS AD 5001, ECON 3002 or BUS AD 5002, ECON 4150 , ECON 4100 or LOG OM 5300 . This course develops the alternative techniques which are used to forecast economic time series. Each forecasting technique will be evaluated in terms of its theoretical soundness and predictive track record. Students will also learn to use these techniques to differentiate among competing economic models.

## ECON 5200 Monetary Theory and Policy (3)

Prerequisites: ECON 3200; ECON 3001 or BUS AD 5001; ECON 3002 or BUS AD 5002; ECON 4150. An examination of how monetary policy has affected the economy in the past and how it can improve econornic performance in the future. Topics include: the origins of money, money supply, money demand, the determinants of real and nominal interest rates, the term structure of interest rates, the impact of discretionary monetary policy on the domestic economy and foreign exchange markets, and the domestic economy and foreign exchange markets, and the relationship between monetary policy and federal government deficits.

ECON 5210 Financial Markets (3)
Prerequisites: ECON 3200; ECON 3001 or BUS AD 5001; ECON 3002. Demand, supply, and flow of funds in
allocating credit and distributing risk in the macrofinancial system. The saving investment process, the rationale for financial markets, and the role of financial intermediaries are studied within the framework of the flow of funds accounts. Special attention is given to the operation of money, capital, futures, and foreign financial markets and the impact of public policy on the structure and performance of financial markets.
ECON 5300 International Trade (3)
Prerequisite: ECON 3001 or BUS AD 5001. Survey of the modern theories of international trade and their applications including factor endowments and other, trade restrictions, foreign investment, trade and economic development, and balance of payments and exchange rates. Discussion of current institutions and economic developments in the global economy.
ECON 5301 International Finance (3)
Prerequisite: ECON 3200, ECON 3001 or BUS AD 5002. Application of economic theory to international financial issues and discussion of current financial institutions and developments in the global economy. Topics include the international payments mechanism, the balance of payments, foreign exchange markets, international linkages, world inflation, capital flows, and macroeconomic policy in open economies.

ECON 5400 Labor Economics: Theory and Public Policy (3)
Prerequisite: ECON 3001 or BUS AD 5001. This course examines labor supply, labor demand, and market determination of wages. Topics covered include the effect of technological change on employment, trends in labor force participation, the impact of government taxes and transfers on labor supply, poverty, and its economic consequences, the human capital model and its implications for investment in education and on-the-job training, and theories of economic discrimination and empirical measurement issues. Throughout the course, current public policy debates are examined using the theoretical models developed.
ECON 5500 Public Sector Microeconomics (3)
Same as P P ADM 6210. Prerequisite: ECON 3001 or BUS AD 5001, or P P ADM 6080. Application of tools of intermediate microeconomics to address public sector issues. Special emphasis is placed on critically analyzing current public policy debates using the models developed. Topics covered include: cases in which competitive market fails to allocate resources efficiently (e.g., externalities and public goods), importance of property rights, incentive effects of the tax and transfer system, and the fundamentals of cost-benefit analysis.

## ECON 5510 Public Choice (3)

Prerequisite: ECON 3001 or consent of instructor. Public choice is the analysis of government and governmental institutions through the logic of economics. It assumes the same principles that economists use to analyze actions in the marketplace, and applies them to actions made in collective decision-making. Topics covered include: the efficiency of democracy, voting methods, the incentives of legislators, bureaucrats and lobbyists, political competition, and public institutions and economic growth.

## ECON 5600 Structure and Performance of United States Industry (3)

Prerequisites: ECON 3001 or BUS AD 5001; ECON 4150. An analysis of the functioning of business firms under alternative market arrangements. Topics include: the theory and measurement of monopoly power and the role of economies of scale, product differentiation, and entry conditions in affecting this power; the impact of market power on the price-setting behavior, advertising and promotional strategies, and technological innovation of firms; the role of government policy in promoting or preventing competition among firms.

ECON 5630 Economics of Telecommunications (3)
Prerequisites: ECON 3001, BUS AD 5000 or BUS AD 5001 and ECON 4150. Application of economic theory and techniques to the telecommunications industry. Topics include demand theory for telephone access and use, consumer surplus models for subscription choice, nonlinear pricing strategies including pure and mixed bunding and multi-part tariffs, the incentives of the firm under various regulatory regimes, a comparison of rate-of-return regulation and incentive (price cap) regulation, and the impact of carrier-of-last-resort responsibilities.

## ECON 5640 Transportation Economics (3)

Prerequisite: ECON 3001 or BUS AD 5000. This course makes use of range of economic concepts to examine the nature of markets in which transport services are provided. This course is designed for future transportation professionals who wish to explore the fundamentals of economics in their field and for graduate students in public policy and economics wishing an economics-based understanding of transportation issues. Basic concepts covered include the theory of transportation demand, transportation costs and investment planning, and current topics in transportation economics such as regulation-deregulation and social cost pricing.

## ECON 5700 Regional and Urban Economics (3)

Prerequisite: ECON 3001. Investigate the spatial aspects of urban and regional economics: location theory, market areas, and agglomerations. The focus in on the description and explanation of the spatial allocation of economic activity with particular attention paid to the role of cities. Topics will include regional development and regional development strategies, the growth of cities, firm location decision, spatial externalities, sprawl, and firm location.

ECON 5720 Real Estate Economics (3)
Prerequisites: ECON 3001 and ECON 4100. This course will introduce economic theory and analysis of the eal estate market's micro and macro characteristics. Public policy impacting both the residential and commerc al property markets will be discussed using the models developed in the course. Topics include price and location theory, growth and growth patterns, urban sprawl, migration, regulation of land and capital, provision of public goods, and non-market valuation econometric modeling. Hands-on applications of various non-market econometric models will be provided.

ECON 5750 The Political Economy of Health Care (3)
Prerequisite: ECON 3001 or BUS AD 5000 or consent of instructor. This course investigates the impact of government policy on health care provision and financing, focusing on the effect of entitlement programs, tax policy, and government regulation. Applying standard economics techniques, students will analyze incentives facing the decision makers in the health care system and ways in which they are altered by government policy. Attention will also be given to rationales for government intervention and roles of interest groups int the formulation of U.S. health care policy. The course will provide a detailed review of specific federal and state government financing programs, primarily focusing on Medicare and Medicaid, and will include discussion of the economic aspects of current health finance reform proposals.

ECON 5760 Health Economics (3)
Prerequisite: ECON 3001 or BUS AD 5001. This course applies microeconomic theory and statistical techniques to understand decision making in health care markets. The effects of government policies on the health care choices of consumers and providers are identified and quantified; attention is given to federal and state entitlement programs, regulations, tax policies and antitrust enforcement. The role of insurance as a risk-sharing device is explored, along with its implications for pricing and health care utilization.

ECON 5900 Advanced Topics in Economic Analysis (3)
Prerequisite: Consent of the instructor. Study of a specific economics topic, which may vary from semeste * to semester. May be taken more than once if the topic is different.

ECON 5980 Directed Readings (1-6)
Prerequisite: Consent of instructor. Independent study through readings, reports, research projects, and conferences.

## Geography

GEOG 1001 Introduction to Geography (3) [MI, SS]
An introduction to geography as a social science. The identification and explanation of order in the human landscape. A survey of the social, political, economic, and psychological factors which influence geographic: patterns.

## GEOG 1002 World Regions (3)

Survey of the major regions of the world. Designed to give the student an awareness of the character of each of these major regions through the interrelationships of the various attributes of place. Each semester the geographic perspective will be applied in greater depth to one significant country such as Afghanistan, Iraq, or North Korea.

GEOG 2001 Cultural Geography (3) [CD]
This course examines the effect of geography on culture and cultural groups. Essential to the geographic perspective is identifying the effect on cultures of the current trend toward increasing globalization. Topics include language, religion, attitudes, and the effect of technology. The major goals are to increase awareness of the diversity of human cultures and to prepare students for a world of increasing intercultural communication and conflict. Satisfies cultural diversity requirement.

## GEOG 3900 Special Readings in Geography (3)

Prerequisite: Consent of Instructor. This course will provide a more in-depth analysis of the various factors; which influence geographic patterns. The topic selected will vary from semester to semester. This course may be taken for credit more than once as long as the topic discussed in each semester is different.

GEOG 4900 Advanced Readings in Geography (3)
Prerequisite: Consent of Instructor. This course will provide a more in-depth analysis of the various factors: which influence geographic patterns employing methods appropriate to graduate level instruction. The topic selected will vary from semester to semester. This course may be taken for credit more than once as long as the topic discussed in each semester is different.

## Home Economics

HOME EC 1110 Nutrition in Mealth (3)
A study of dietary nutrients essential for health, proper selection of foods to provide them, and current iss ses affecting them.

# BULLETIN <br> 2012 <br> Department of English 

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## UMSLHome <br> Department of Enclish Home Page <br> Faculty

Richard M. Cook, Professor and Chairperson
Ph.D., University of Michigan
Joseph Carroll, Curators' Professor
Ph.D., University of California-Berkeley
Eamonn Wall, Jefferson Smurfit Professor Of Irish Studies and Professor
Ph.D., City University of New York
Sylvia J. Cook, Professor
Ph.D., University of Michigan
Sally Barr Ebest, Professor
Ph.D., Indiana University
Francis Grady, Professor
Ph.D., University of California-Berkeley
Mary Troy, Professor
M.F.A., University of Arkansas

Deborah Aldrich-Watson, Associate Professor
Ph.D., Columbia University
John Dalton, Associate Professor
M.F.A., University of Iowa

Suellynn Duffey, Associate Professor
Ph.D., The Ohio State University
Kathy Gentile, Associate Professor
Ph.D., University of Oregon
Steven Schreiner, Associate Professor
Ph.D., Wayne State University
Kurt Schreyer, Assistant Professor
Ph.D., University of Pennsylvania
Nancy Robb Singer, Associate Professor
Ph.D., University of Missouri-St. Louis
Benjamin Torbert, Assistant Professor
Ph.D., Duke University
Nancy Gleason, Teaching Professor
M.A., University of Missouri-St. Louis

William Klein, Teaching Professor
Ph.D., Michigan Technological University
William Mayhan, Teaching Professor
Ph.D., Washington University
Susan Grant, Associate Teaching Professor
M.A., Southern Illinois University-Edwardsville

Jennifer MacKenzie, Associate Teaching Professor
M.A., Purdue University

Thomas Scott McKelvie, Associate Teaching Professor
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Ph.D., University of Missouri-Kansas City
Kathleen Butterly Nigro, Assistant Teaching Professor
Ph.D, Saint Louis University

Lynn Staley, Assistant Teaching Professor<br>Ph.D., St. Louis University<br>Drucilla Mims Wall, Assistant Teaching Professor<br>Ph.D., University of Nebraska-Lincoln<br>Allison, Jeanne, Lecturer<br>M.A., University of Missouri-St. Louis<br>Paula Coalier, Lecturer<br>MA, University of Missouri-St. Louis<br>David Linzee, Academic Coordinator<br>MA, ESL Southern Illinois University<br>Peter Wolfe, Curators' Professor Emeritus<br>Ph.D., University of Wisconsin<br>David Carkeet, Professor Emeritus<br>Ph.D., Indiana University<br>Charles Dougherty, Professor Emeritus<br>Ph.D., University of Toronto<br>Howard Schwartz, Professor Emeritus<br>M.A., Washington University<br>James E. Tierney, Professor Emeritus<br>Ph.D., New York University<br>Jane Zeni, Professor Emerita<br>Ed.D., University of Missouri-St. Louis<br>Bruce L. Liles, Associate Professor Emeritus<br>Ph.D., Stanford University<br>Nanora Sweet, Associate Professor Emerita<br>Ph.D., University of Michigan<br>Jane Williamson, Associate Professor Emerita<br>Ph.D., Bryn Mawr College<br>David Rota, Teaching Professor Emeritus<br>Ph.D., Southern Illinois University-Carbondale<br>Ellie Chapman, Senior Lecturer Emerita<br>M.A., Murray State University<br>Judy Gurley, Senior Lecturer Emerita<br>M.A., University of Arkansas<br>Judith Linville, Senior Lecturer Emerita<br>M.A., University of Arkansas<br>Terence Martin, Senior Lecturer Emeritus<br>Ph.D., Southern Illinois University-Carbondale

## General Information

## Degrees and Areas of Concentration

The English department offers or participates in offering the B.A. in English, the B.A. in English with certification for secondary teaching, and the B.S. in secondary education with an emphasis area in English. The department also offers a minor in English. Additionally, students with any major in the university may earn a Certificate in Writing so that they may demonstrate evidence of training in creative, journalistic, or technical writing.

The department has a graduate program leading to the Master of Arts degree. Students may pursue a literature track where they acquire a broad coverage in British and American writers or a writing track where half of the course work deals with composition and writing theory. The department also offers the Master of Fine Arts in creative writing, in which half of the courses are writing workshops and independent writing projects. In addition, the department of English participates in a Graduate Certificate in the Teaching of Writing.

## Learning Outcomes

Recipients of the undergraduate degree will demonstrate the following outcomes:

- Demonstrate advanced skills in reading and analyzing texts and a knowledge of literary and rhetorical terms and concepts.
- Demonstrate mastery of content in at least three specific fields in language, literature, and written literacy.
- Demonstrate knowledge of historical and critical context for these fields and the relevance to them of a variety of critical approaches.
- Understand the role played by gender, race, class, and ethnicity (where appropriate) in language, literature, and literacy.
- Demonstrate the ability to write clear analytical essays incorporating both primary textual evidence and secondary scholarly and critical sources.


## Departmental Honors

Candidates for departmental honors in English must achieve a 3.2 average in English at graduation and complete an undergraduate or graduate seminar in English, the final paper for which must be acceptable to the instructor as an honors thesis.

## Undergraduate Studies

## General Education Requirements

English courses may be used to meet the university's humanities requirement, except the following:
ENGL 1100, First Year Writing
ENGL 1110, First Year Writing for International Students
ENGL 2120, Topics in Writing
ENGL 2810, Traditional Grammar
ENGL 3090, Writing About Literature
ENGL 3100, Junior-Level Writing
ENGL 3110, Junior-Level Writing for International Students
ENGL 3120, Junior-Level Business Writing
ENGL 3130, Junior-Level Writing: Engineering and Technology
ENGL 3140, News Writing
ENGL 3150, Feature Writing
ENGL 3160, Writing in the Sciences
ENGL 3180, Reporting
ENGL 4860, Editing
ENGL 4870, Advanced Business and Technical Writing
ENGL 4880, Writing for Teachers
ENGL 4885, The Curriculum and Methods of Teaching English
ENGL 4890, Independent Writing Project
The college's foreign language requirement may be met in any language.

## Satisfactory/Unsatisfactory Option

A maximum of 6 satisfactory/unsatisfactory hours may be taken in the department. Majors must complete at least 18 graded (i.e., not satisfactory/unsatisfactory) hours in English courses at the 3000 level or above nith a grade point of 2.0 or better in these courses.

English majors may take any English course on a satisfactory/unsatisfactory basis except the following:
ENGL 1100, First Year Writing
ENGL 1110, First Year Writing for International Students
ENGL 3090, Writing About Literature
ENGL 3100, Junior-Level Writing
ENGL 3110, Junior-Level Writing for International Students
ENGL 3120, Junior-Level Business Writing
ENGL 3130,Junior-Level Writing: Engineering and Technology
ENGL 3140, News Writing
ENGL 3150, Feature Writing
ENGL 3160, Writing in the Sciences
ENGL 3180, Reporting
ENGL 4860, Editing
ENGL 4870, Advanced Business Writing
ENGL 4880, Writing for Teachers
ENGL 4885, The Curriculum and Methods of Teaching English
ENGL 4890, Independent Writing Project

## Degree Requirements

## Bachelor of Arts in English

English majors must complete at least 39, but no more than 48, hours in English exclusive of ENGL 1100, Freshman Composition; ENGL 1110, Freshman Composition for International Students; and ENGL 3090, Writing About Literature.

1) Students majoring in English must take:

ENGL 2310, English Literature before 1790
ENGL 2320, English Literature after 1790
ENGL 2710, American Literature Before 1865
ENGL 2720, American Literature After 1865
Plus one of the following:
ENGL 2280, Contemporary World Literature
ENGL 2330, Introduction to Poetry
ENGL 2340, Introduction to Drama

ENGL 2350, Introduction to Fiction
Work in 2000-level course provides background in literary history and forms, as well as the means for discussing literary issues, on paper and orally. Thus:

- ENGL 2310 or consent of instructor is a prerequisite or corequisite for all 4000 -level courses in British literature before 1790.
- ENGL 2320 or consent of instructor is a prerequisite of corequisite for all 4000 -level courses in British Literature after 1790.
- ENGL 2710 or consent of instructor is a prerequisite or corequisite for all 4000 -level courses in American Literature to 1865
- ENGL 2720 or consent of instructor is a prerequisite or corequisite for all 4000 -level courses in American literature after 1865.
- Both ENGL 2710 and ENGL 2720 or consent of instructor are prerequisites or corequisites for ENGL 4650.

All survey courses should be taken before the major has completed 90 hours toward a degree.
2) ENGL 2810, Traditional Grammar (Students with sufficient background may gain exemption from the English 2810 requirement by passing the English-Education Test of Basic Grammar. This test may be taken only twice.)
3) ENGL 3090, Practical Criticism: Writing About Literature. (For English majors, this course is a prerequisite or corequisite for 4000-level courses in English.)
4) Upper Division Courses
a. Six courses ( 18 hours) are required at the 4000 level. Students majoring in English must take all of these hours in residence and maintain a GPA of 2.0 or better, or receive a special consent of the department. b. Within the six courses listed above, three courses must fulfill distribution requirements: one course ( 3 hours) in British literature before 1790, one course ( 3 hours) in British literature after 1790, and one course (3 hours) in American literature.
c. If a student elects to pursue an emphasis area (EA) or areas, 3 courses ( 9 hours) at the 3000/4000 level are required within each emphasis area (EA). Only 1 of these courses ( 3 hours) may be at the 3000 level. d. A student may not use the same course to satisfy both a distribution requirement and an emphasis area (EA).
e. In the list of $3000 / 4000$-level courses, those courses that count in one or another emphasis area are indicated with an asterisk*.

## Distribution Requirements:

Distribution Requirement: British Literature to 1790 (choose one)
ENGL 4260 Chaucer
ENGL 4270 Medieval English Literature
ENGL 4320 Sixteenth-Century Poetry and Prose
ENGL 4340 Early Seventeenth-Century Poetry and Prose
ENGL 4350 Milton
ENGL 4360 Tudor and Stuart Drama
ENGL 4370 Shakespeare: Tragedies and Romances
ENGL 4380 Shakespeare: Comedies and Histories
ENGL 4420 Age of Dryden and Pope
ENGL 4450 The Eighteenth-Century English Novel
ENGL 4931 English Women Writers, 1300-1750
Distribution Requirement: British Literature after 1790 (choose one)
ENGL 4510 Early romantic Poetry and Prose
ENGL 4520 Later Romantic Poetry and Prose
ENGL 4540 The Nineteenth-Century English Novel
ENGL 4550 Novels into Film: The Nineteenth Century
ENGL 4560 Prose and Poetry of the Victorian Period
ENGL 4580 Literature of the Late Nineteenth and Early Twentieth Centuries
ENGL 4750 Modern British Fiction
ENGL 4934 Austen and the Brontes
ENGL 4935 Women Heroes and Romantic Tales
Distribution Requirement: American Literature (choose one)
ENGL 4610 Selected Major American Writers (I)
ENGL 4620 Selected Major American Writers (II)
ENGL 4640 American Fiction to World War I
ENGL 4650 Modern American Fiction
ENGL 4740 Poetry since World War II
Emphasis Areas (EA) (*denotes course listed in two emphasis areas)
British Literature Emphasis Area:
ENGL 4260 Chaucer
ENGL 4270 Medieval English Literature
ENGL 4320 Sixteenth-Century Poetry and Prose
ENGL 4340 Early Seventeenth-Century Poetry and Prose
ENGL 4350 Milton
ENGL 4360 Tudor and Stuart Drama
ENGL 4370 Shakespeare: Tragedies and Romances
ENGL 4380 Shakespeare: Histories and Comedies
ENGL 4420 Age of Dryden and Pope
ENGL 4450 The Eighteenth-Century English Novel
ENGL 4510 Early Romantic Poetry and Prose
ENGL 4520 Later Romantic Poetry and Prose
ENGL 4540 The Nineteenth-Century English Novel
ENGL 4550 Novels into Film: The Nineteenth Century
ENGL 4560 Prose and Poetry of the Victorian Period
ENGL 4580 Literature of the Late Nineteenth and Early Twentieth Centuries
ENGL 4750 Modern British Fiction
*ENGL 4770 Modern Poetry (also American EA)
*ENGL 4930 Studies in Gender and Literature (also Women's/Gender EA)
ENGL 4931 English Women Writers, 1300-1750
*ENGL 4932 Female Gothic (also Women's/Gender EA)
ENGL 4935 Women Heroes and Romantic Tales
*ENGL 4936 Tales of the Islamic East (also Ethnic/World EA)
ENGL 4950 Special Topics in Literature (with at least $50 \%$ British emphasis)
American Literature Emphasis Area
*ENGL 4060 Adolescent Literature (also Ethnic Worid EA)
ENGL 4610 Selected Major American Writers (I)
ENGL 4620 Selected Major American Writers (II)
*ENGL 4630 African American Literature prior to 1900 (also Ethnic/World EA)
ENGL 4640 American Fiction to World War I
ENGL 4650 Modern American Fiction
ENGL 4740 Poetry since World War II
*ENGL 4770 Modern Poetry (also British EA)
*ENGL 4910 Studies in African/African American Literature, Criticism, \& Diaspora (also Ethnic/World EA)
*ENGL 4937 Irish \& Irish-American Women Writers (also Women/Gender EA)
*ENGL 4938 American Women Poets of 20th/21st Centuries (also Women/Gender EA)
ENGL 4950 Special Topics in Literature (with at least 50\% American emphasis)
Ethnic and World Literature Emphasis Area
*ENGL 4060 Adolescent Literature (also American EA)
*ENGL. 4630 African American Literature prior to 1900 (also American EA)
ENGL 4760 Modern Drama
*ENGL 4910 Studies in African/African American Literature, Criticism, \& Diaspora (also American EA)
ENGL 4920 Major Works of European Fiction
*ENGL 4933 Female Novel of Development (also Women's/Gender EA)
*ENGL 4936 Tales of the Islamic East (also British EA)
ENGL 4950 Special Topics in Literature (with at least 50\% Ethnic/Worid emphasis)
Women's and Gender Studies Emphasis Area
ENGL 3800 Topics in Women and Literature
*ENGL 4930 Studies in Gender and Literature (also British EA)
*ENGL 4932 Female Gothic (also British EA)
*ENGL 4933 Female Novel of Development (also Ethnic/Worid EA)
ENGL 4934 Austen and Brontes
*ENGL 4937 Irish \& Irish-American Women Writers (also American EA)
*ENGL 4938 American Women Poets of 20th/21st Centuries (also American EA)
Language and Writing Emphasis Area
ENGL 3140 News Writing
ENGL 3150 Feature Writing
ENGL 3160 Writing in the Sciences
ENGL 3180 Reporting
ENGL 3280 Public Relations Writing
ENGL 4160 Special Topics in Writing (with at least $50 \%$ writing studies emphasis)
*ENGL 4800 Linguistics (also Theory/Criticism EA)
ENGL 4810 English Grammar
ENGL 4820 History of the English Language
ENGL 4850 Topics in Teaching of Writing
ENGL 4860 Editing
ENGL 4870 Advanced business \& Technical Writing
ENGL 4880 Writing for Teachers
Creative Writing Emphasis Area
ENGL 3030 Poetry Writing Workshop
ENGL 3040 Fiction Writing Workshop: Narrative Techniques
ENGL 4130 Advanced Poetry Writing Workshop
ENGL 4140 Advanced Fiction Writing Workshop
ENGL 4160 Special Topics in Writing (with at least 50\% creative writing emphasis)
ENGL 4895 Editing Litmag
Theory and Criticism Emphasis Area
ENGL 4030 Contemporary Critical Theory
ENGL 4050 Forms and Modes of Poetry
ENGL 4080 Narrative, Cognition, and Emotion
ENGL 4160 Special Topics in Writing (with at least $50 \%$ theory/criticism emphasis)
*ENGL 4800 Linguistics (also Language/Writing EA)
Students should consult with faculty advisers to determine which upper-level courses best satisfy their major needs and interests.

## Bachelor of Arts in English with Certification for Secondary Education

All candidates for certification to teach English must enroll in a program in the College of Education involving Level I, Level II, and Level III coursework plus student teaching. See the Division of Teaching and Learning in this Bulletin for information.
In addition to the requirements for the B.A. in English, students must meet the following requirements for secondary certification:

1) Two courses in American literature. This requirement may be met by courses counted for the major.
a. American literature must include a unit or course in the literature of ethnic groups.
b. American literature must include a unit or course in literature for adolescents.
2) Twelve hours in composition and rhetoric:

ENGL 1100, First Year Writing, may be counted.
ENGL 3090, Practical Criticism: Writing About Literature, is required.
ENGL 4880/SEC ED 4880, Writing For Teachers, is required.
Recommended courses include creative writing, journalism, and business writing.
3) English language requirements
a. ENGL 2810, Traditional Grammar Students with sufficient background may gain exemption from the ENGL 2810 requirement by passing the English-Education Test of Basic Grammar. This test may be taken only twice. Certification candidates must pass ENGL 2810 or the Test of Basic Grammar before applying for student teaching.
b. ENGL 4810, English Grammar
c. ENGL 4800, Linguistics, or ENGL 4820, History of the English Language

## Bachelor of Science in Secondary Education with an Emphasis Area in English

All candidates for certification to teach English must enroll in a program in the College of Education involving Level I, Level II, and Level III coursework plus student teaching. See the Division of Teaching and Learning in this Bulletin for information.

The required courses in English and professional education are the same as those for the B.A. with certification for secondary education. However, students fulfill the general education requirements of the College of Education rather than those of the College of Arts and Sciences. For example, students seeking the B.S. in Education are not required to study a foreign language.

## Certification to Teach Secondary Speech and Drama

All candidates for certification to teach Speech and Drama must enroll in a program in the College of Education involving Level I, Level II, and Level III coursework plus student teaching. See the Division of Teaching and Learning in this Bulletin for information.

In addition, undergraduates who wish to be certified to teach Speech and Drama must meet the requirements for a major in Communication as well as requirements set by the Theatre faculty.

Minor in English
A student may minor in English by taking at least 18 hours of English courses exclusive of Basic Writing, EvGL 1100, First Year Writing, and ENGL 1110, First Year Writing for International Students. ENGL 3090 is requi ed, and 12 of the 18 hours must be in literature courses, 9 of which must be in courses at the 3000 or 4000 level. ENGL 3090 is required, and 12 of the 18 hours must be in literature courses, 9 of which must be in courses at the 3000 or 4000 level. Every student taking a minor in English must consult with an adviser in the English department to ensure a coherent program of studies. The GPA in courses for the minor must be 2.0 or bet:er. Nine of the 18 hours must be taken in residence at UMSL. No more than 3 hours taken on a satisfactory/unsatisfactory basis may be counted toward the 18 -hour minimum.

## Professional Writing Certificate

Students earn the Professional Writing Certificate by completing 18 hours in selected writing courses with is grade point average of 3.0 or better. Twelve of the 18 hours must be taken at the University of Missouri-St. Louis. Courses may not be taken on a satisfactory/unsatisfactory basis.

MEDIA ST 2212, Broadcast Writing and Reporting
ENGL 2810, Traditional Grammar
ENGL 2030, Poetry Writing
ENGL 2040, Short Story Writing
ENGL 2080 or MEDIA ST 2080, Advertising Copywriting
ENGL 2120, Topics in Writing
ENGL 3030, Poetry Writing Workshop
ENGL 3040, Intermediate Fiction Writing
ENGL 3090, Practical Criticism: Writing About Literature
ENGL 3100, Junior-Level Writing
ENGL 3110, Junior-Level Writing for International Students
ENGL 3120, Junior-Level Business Writing
ENGL 3130, Junior-Level Writing: Engineering and Technology
ENGL 3140 or MEDIA ST 3214, News Writing
ENGL 3150, Feature Writing
ENGL 3160, Writing in the Sciences
ENGL 3180, Reporting
ENGL 3280 or MEDIA ST 2228, Writing for Public Relations
ENGL 4130, Advanced Poetry Writing
ENGL 4140, Advanced Fiction Writing
ENGL 4160, Special Topics in Writing
ENGL 4810, English Grammar
ENGL 4850, Topics in Teaching Writing
ENGL 4860, Editing
ENGL 4870, Advanced Business and Technical Writing
ENGL 4880, Writing for Teachers
ENGL 4890, Writing Internship (This course is required. It is to be taken as the last course a student will take in the program, and it is to be used to generate an extensive final project or internship.)
ENGL 4892, Independent Writing Project
ENGL 4895, Editing Litmag
HONORS 3100, Writing the City

## Creative Writing Certificate

Students earn the Certificate in Writing by completing 18 hours in selected writing courses with a grade point average of 3.0 or better. The creative writing emphasis focuses the students' efforts toward producing original fiction or poetry and can include other literary endeavors such as writing creative nonfiction, editing, feature writing, and copywriting. The specific requirements for the Creative Writing emphasis are listed below.

Courses for the certificate should be chosen with the guidance of the Writing Certificate Coordinator. If tht: student elects to complete English 4890 as one of the courses for the certificate, he or should schedule a meeting with the coordinator to make arrangements for the internship.

When the student has completed requirements for the certificate, the coordinator will notify the university registrar and the college from which the student will graduate. Upon the student's graduation, completion of the Certificate in Writing will be noted on the official transcript and a certificate will be mailed to the student's residence. Students who have graduated before completing the Certificate in Writing will receive the certificate in the mail and will have the certificate entered on their official transcripts.

To receive this certificate, the student must take 18 hours chosen from the courses listed below. Students must take at least two of the following: $3030,3040,4130,4140,4895,4890$ and at least one must be a 4000-level course.

2000-Level Courses (Students may take no more than two 2000-level courses) ENGL 2030, Beginning poetry writing workshop (CW)

ENGL 2040, Beginning fiction writing workshop (CW)
ENGL 2330, Introduction to poetry (Lit)
ENGL 2340, Introduction to fiction (Lit)
ENGL 2350, Introduction to drama (Lit)
Creative Writing and Literature Courses
ENGL 3030, Poetry Writing Workshop
ENGL 3040, Fiction workshop: narrative structure
ENGL 3090, Practical criticism: writing about literature
ENGL 3100, Junior-Level writing
ENGL 4130, Advanced poetry writing
ENGL 4140, Advanced fiction writing
ENGL 4160, Special topics in writing
ENGL 4890, Writing Internship
ENGL 4892, Independent Writing Project
ENGL 4895, Editing Litmag
Professional Writing Courses (Students are encouraged to take at least one professional writing course, but no more than two.)
ENGL 2080, Advertising Copywriting (or MEDIA ST 2080)
ENGL 3150, Feature Writing (or MEDIA ST 3150)
ENGL 4860, Editing
This capstone course may be $4895,4890,4140$, or 4130 . If 4890 is used, it will be an internship in literary publishing, feature writing, or advertising copywriting. To use 4130 or 4140 , the student must obtain the teacher's permission and do extra work in the course. The editing Litmag course, 4895, may also be used as the final course for this certificate.

Technical Writing Emphasis
The technical writing emphasis provides a more career-specific strategy for students enrolled in the Writing Certificate program. The technical writing emphasis is composed of three required courses:

ENGL 3130, Junior-Level Writing: Engineering and Technology
ENGL 4860, Editing
ENGL 4870, Advanced Business and Technical Writing or
ENGL 4890, Writing Internship
In addition, students take three electives for a total of 18 hours chosen from the following:

## Business Administration

INFSYS 1800, Computers and Information Systems
Media
MEDIA ST 1065, Introduction to Information Technology
Computer Science
CMP SCI 1250, Introduction to Computer Science (Prerequisite: MATH 1030, College Algebra)
English
ENGL 3120, Junior-Level Business Writing
ENGL 3140, News Writing
ENGL 3150, Feature Writing
ENGL 3160, Writing in the Sciences
ENGL 3280, Public Relations Writing
ENGL 4870, Advanced Business and Technical Writing (if 4890) is taken as requirement)
ENGL 4890, Independent Writing Project (if 4870 is taken as requirement)

## Graduate Studies

## Admission Requirements

To enter the graduate program in English a candidate must satisfy the requirements both of the Graduate School and the Department of English. A candidate should have a bachelor's degree, with at least 18 hours in English above the freshmen level, 12 of which must be in literature. Normally, only students with a grade point average of 3.0 in undergraduate English courses and an overall undergraduate average of 2.75 will be considered. Though the English department welcomes scores from the Graduate Record Aptitude Exam and letters of recommendation, it does not require either of these. (Students applying for Teaching Assistantships, please see "Financial Aid and Teaching Assistantships.")

The graduate coordinator of the English Department with the advice of the graduate committee will use the undergraduate record and, and if available, the scores of the GRE general test as the basis for a decision. We welcome letters of recommendation from the applicant's former English instructors and a sample of
expository prose. Applications to the MA in English are considered at all times. However, because spaces in graduate courses are limited, it is strongly advised that prospective students submit their applications well before the semester begins in order to gain admission into their appropriate classes.

## Teaching Assistantships

A number of teaching assistantships are available for qualified applicants. In addition to the undergraduate record and the scores on the GRE general test, applications should include two letters of recommendation from former English instructors. Applications should be submitted to the graduate coordinator of the English department no later than March 15 preceding the academic year for which the appointment is desired.

## Degree Requirements

## Master of Arts in English

In addition to the Graduate School requirements, students must complete at least 36 hours, 24 hours of which must be in 5000 -level courses. Twelve hours may be taken in 4000 -level courses approved by the department and Graduate School.

Required of both concentrations, literature and writing studies:
ENGL 5000: Introduction to Graduate Study in English. Focuses upon bibliography, research methods, and literary criticism. Should be taken at the outset of the program, for graduate (not undergraduate) credit.

Students who choose a literature track must also take at least one course in each of the following six areas:
Area 1, British literature before 1660
Area 2, British literature between 1660 and 1900
Area 3, Twentieth-century literature (British, American, post-colonial, or in translation)
Area 4, American literature
Area 5, Theories of writing, criticism, language, and/or culture
Area 6, Literature in translation study of a particular literary genre, or a course in another relevant discipline.
Students who choose the writing studies track must take
18 hours in literature courses providing broad coverage rather than a narrow focus on a particular genre or historical period (ENGL 5000 constitutes three of these required literature credits)

18 hours in writing studies courses (including ENGL 5840).
If students choose the thesis option (6 hours) they will take 15 hours in literature and 15 hours in writing studies.

## Thesis Options

Students may elect the thesis option, which requires a total of 6 hours of thesis credit. The thesis will eng age the student in sustained and self-motivated study through the processes of research, conferring with advisors, drafting and revising text. The thesis must be approved and assigned a grade by a thesis committee. The student will select a major professor who, after consulting with the chair and the graduate coordinator, will select two other members of the committee.

Literature Emphasis: The thesis should demonstrate original thought and substantial research and may be a critical study of literary works or a theoretical exploration of issues related to literature.

Writing Studies Emphasis: The final document will demonstrate significant familiarity with scholarship in Writing Studies through the critical analysis and clear synthesis of published research, observational data (where appropriate) and the student's thoughts/views/reflections/positions. The thesis may be a critical study, theoretical exploration or descriptive assessment of fieldwork drawing on writing, language, rhetorical, sociocultural or reading theories; literacy; and the history of writing instruction; composition pedagogies; technologies.

## Master of Fine Arts in Creative Writing

The application process is identical to that for the master of arts degree, with these exceptions: there is one annual deadline for all applications, Feb. 15; a writing sample is required (15-20 poems or 20-40 pages of fiction); the GRE test is required only if the applicant seeks financial aid or a teaching assistantship.

In addition to the Graduate School requirements, students must complete at least 39 hours, 30 of which must be in 5000 -level courses. Nine hours may be taken in 4000 -level courses approved by the department and Graduate School. Students will specialize in one genre, poetry or fiction. They must complete the following course work: 15 hours of workshops, three hours of literary journal editing (ENGL 5190), 3 hours of eithe * ENGL 5170 or ENGL 5180 depending on specialization (fiction writers take 5170 and poets take 5180), 3 hours thesis (ENGL 6010). Total designated hours, 24. Any of the following can make up the remaining 15 hours, but we especially recommend the first three; 1) ENGL 5180 for fiction writers and ENGL 5170 for poets, the opposite of the students' specialization. 2) A contemporary literature class offered by the MFA
program or the MA program 3) A composition theory course, recommended mainly for those who want to teach later 4) another workshop 5) ENGL 5190, literary journal editing, a second time 6) Any other graduate level class in literature, linguistics, or composition offered by the Department of English 7) 5200-MFA readings course, or an independent study-IF you can find someone to work with you. 8) Up to 3 ( 9 hours) of 4000 level undergrad lit or linguistics classes offered by the Department of English, recommended especially for those without an English background. 9) One three hour class outside the Department of English, at least a 4000 level, and with all needed permissions from both departments that will enhance the student's writing. Complete information may be found in The Master of Fine Arts in Creative Writing, available from the English department.

## Graduate Certificate in the Teaching of Writing, Gateway Writing Project.

Jointly housed in the Division of Teaching and Learning and the Department of English, this Graduate Certificate prepares teachers at all levels ( $\mathrm{K}-12$, college, adult) to improve their students' performance in writing. The program also emphasizes using writing as a means to promote learning in all content areas. All courses provide opportunities for teachers to write, revise, share feedback, and reflect on their own writing development. Based on the National Writing Project's core belief that teachers of writing must themselves be writers, the Graduate Certificate in the Teaching of Writing brings together sound pedagogy, composition theory, and writing practice.

The Certificate is an 18 -hour program through the Gateway Writing Project (GWP); it may also be coordinated with other graduate programs. Certificate courses may be applicable to the M.A. in English with emphasis in composition or to various M.Ed. programs. The GWP Certificate is especially appropriate for post-master's candidates who wish to pursue a specialization in teaching writing. The Graduate Certificate in the Teaching of Writing requires a 12 semester-hour core of courses developed by the Gateway Writing Project: The GWP invitational institute ( 6 hrs ), a designated "topics" course ( 3 hrs .), and an exit course ( 3 hrs .). The Certificate requires a minimum of 12 semester hours at the 5000 or 6000 level or above. Electives ( 6 hrs.) may be chosen from approved offerings in English or Education.

## Admission:

Applicants must be admitted to Graduate School and be selected by the faculty admissions committee for the Gateway Writing Project's Certificate in the Teaching of Writing. The committee will review candidates on the basis of an interview, an application essay, and supporting documentation. Criteria include experience teaching writing at any level and academic record, especially in writing and the teaching of writing.

## Prerequisites:

- ENGL/SEC ED 4880, "Writing for Teachers" or an equivalent course in teaching writing
- Coursework or competency in basic computer application.


## Required Core Courses (12 semester hours)

- ENGL 4850/TCH ED 5850, Topics in the Teaching of Writing (designated topics, 3 sem. hrs.)
- ENGL 6880/SEC ED 6880, Gateway Writing Project ( 6 sem. hrs.)
- TCH ED 6890, Seminar in Professional Writing for Teachers (exit course, 3 sem. hrs)


## Electives ( 6 sem. hrs.)

Electives may be chosen from other Gateway Writing Project offerings or from courses offered by the appropriate academic department with advisor's approval. These electives must include at least one more 5000-6000 level course.

## Suggested electives applicable to an MA in English with writing emphasis:

- ENGL 5800, Modern Linguistics
- ENGL 5840, Theories of Writing
- ENGL 5860, Writing/Reading Theory
- ENGL 5870, Composition Research
- ENGL 5890, Teaching College Writing


## Suggested electives applicable to an M.Ed. in Elementary or Secondary Education

- ELE ED 6387, Literacy Acquisition and Learning for Urban Students
- ELE ED 6482, Problems \& Research in Elementary Reading
- ED REM 6714, Action Research in Education

Courses in adult and higher education may also be appropriate. For complete information, see The GatewayWriting Project's Graduate Certificate in Teaching Writing, available from the English Department, the Division of Teaching and Learning, and the GWP Director.

## Career Outlook

In addition to traditional employment as teachers at the primary, secondary, and community-college levels, recent UMSL graduates in English are working in journalism, editing, advertising, public relations, and other
fields that place a premium upon creation and interpretation of the written word. Numerous recent English majors have successfully entered law school.

## BULLETIN こけ11 2012

## Cender Studies Program

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#### Abstract

UMSL Home Gender Studies Program Home_Page Director


Sally Barr Ebest, Professor, English
Ph.D., Indiana University

## Affiliate Faculty

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Ph.D., Arizona State University
Janet Murray, E. Desmond Lee Professor for Developing Women Leaders and Entrepreneurs, Business
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Ph.D., University of Missouri, Columbia
Ruth Bohan, Professor, Art and Art History
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Ph.D., Eastman School of Music
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Jill Petzall, Adjunct Lecturer, Film Studies
M.A., Washington University

Vivian Eveloff, Director, Sue Shear Institute for Women in Public Life
Malaika Horne, Director, Executive Leadership Consrtium
Ph.D., St. Louis University
Dayna Stock, Manager of the Sue Shear Institute for Women in Public Life
M.P.P.A., University of Missouri-St. Louis

## General Information

The Gender Studies Program has three central missions: to provide a comprehensive undergraduate and graduate gender studies curriculum, to support research on gender and women's issues, and to sponsor events and provide community outreach. Faculty engage in disciplinary and interdisciplinary scholarship to enhance our understanding of the ways in which gender, sex, and sexuality have structured human societ' and experience across time and cultures. Faculty and students draw upon the rich body of interdisciplinary feminist scholarship to investigate emerging theories and research on women, men, and gender. Our courses encourage a reassessment of female and male roles in society and facilitate career goals that focus on ger der issues. Gender Studies classes promote the exchange of knowledge among people of different races, genders, classes, ethnicities, sexualities and cultural conditions. Gender Studies courses enable students to broaden their educational experiences and develop new insights into their own lives and aspirations.

## The Gender Studies Major

Undergraduate students may design their own major through the Bachelor's in Interdisciplinary Studies. The Bachelor of Interdisciplinary Studies (BIS) provides a flexible, individualized program of study for the selfdirected learner. It is intended for students who have unique educational goals that cannot be met by any other UMSL degree program. Each degree program is developed by the student, with advising by faculty a nd a professional Student Services Coordinator. It is open to all students, including those enrolled in the Pierre Laclede Honors College. The BIS degree enables a student to combine courses from at least three different disciplines, taken at the intermediate or advanced level. This allows students to study a subject from mult ple academic perspectives (for example, Gender Studies, including History, English, Criminology and Criminal Justice, Sociology, and/or Social Work), or to combine courses for a specific career goal (for example, leadership or non-profit management). Student may also receive credit for professional internships, research internships, or community service, under the supervision of a UMSL faculty member. Some BIS degree programs may be completed entirely with evening courses.

The BIS requires the student to define a personalized Area of Study of at least 36 credit hours, no more than 15 hours of which can be in one department. All courses in the Area of Study must be at the 2000 -level or above, and 18 credits must be earned at UM-St. Louis after the student is admitted to the BIS program. Up to six hours may be taken as faculty-supervised professional internship, research internship, or communit/ service, which must be approved by the faculty member in advance. In order to be admitted to the BIS, students must also have a campus grade point average of 2.0 or above. Please contact Dr. Kathleen Nigro, Gender Studies Advisor, at nigrok@umsleedu for more information.

## Gender Studies Minor

For a Minor in Gender Studies, students must take at least 12 hours of Gender Studies courses. 9 hours must include 3 core courses:

1) GS 2102 Introduction to Gender Studies
2) GS 3033 Sexuality and Gender Theory or other 3000-5000 level course in feminist or gender theory.
3) Capstone experience: Students must complete a final research project or practicum. The Capstone requirement may be satisfied by GS 4352 Independent Study in Women's and Gender Studies, GS 4353 Internship in Women's and Gender Studies, or by a 4000 -level Gender Studies course or other 4000 -level seminar where student completes a final research and writing project that focuses on gender studies.

The remaining 3 hours may be cross-listed courses with the student's major department or Gender Studies electives from various disciplines.

## Undergraduate Certificate

## Requirements

## For Admission:

Undergraduate certificate candidates must meet the University's general education requirements. Applicants must have a cumulative G.P.A. of at least 2.5 and must maintain a minimum 2.5 G.P.A. in Gender Studies courses. Candidates for undergraduate certificates are asked to register with Gender Studies after taking one or two courses. Students will then be enrolled in the program and will be placed on our mailing list for class information and announcements of upcoming events.

## Certificate Requirements

Students must take at least 18 hours in Gender Studies courses. 9 hours must include 3 core courses:

1) GS 2102 Introduction to Gender Studies
2) GS $\mathbf{3 0 3 3}$ Sexuality and Gender Theory or other 3000-5000 level course in feminist or gender theory
3) Capstone Experience: Students must complete a final research project or practicum. The Capstone requirement may be satisfied by GS 4352 Independent Study in Women's and Gender Studies, GS 4353 Internship in Women's and Gender Studies, or by a 4000 -level Gender Studies course or other 4000 -level seminar where student completes a final research and writing project that focuses on gender studies.

9 hours may be cross-listed courses with student's major department or Gender Studies electives from various disciplines.

Gender Studies Certificate in Women's Leadership (Pending Coordinating Board of Higher Education approval)
For the Gender Studies Certificate in Women's Leadership, students must take at least 18 hours of Gender Studies courses. 6 hours must include 2 core components:

1) GS 2102 Introduction to Gender Studies
2) Capstone Experience: The capstone requirement may be satisfied by GS 4352, Independent Study in Gender Studies, or GS 4353, Internship in Gender Studies (which includes the Sue Shear Institute for Women in Public Life, the Women's University Mentoring Program, the Women's Executive Leadership Institute, or a comparable program approved by the GS director).

The remaining 12 hours may be selected from the following choices; take no more than two courses per curricular designation.

COMM 3337, Male-Female Communication
COMM 2232, Communication in Organizations: Tools for Leadership
GS 2150, Special Topics in Gender Studies: Women's Leadership
MGMT 3600, Management and Organizational Behavior (Same as SOC 3600)
MGMT 3611, Advanced Management and Organization Behavior
MGMT 3623, Industrial and Organizational Psychology. (Same as PSYCH 3318)
MGMT 3625, Leadership in Organizations
MKTG 3785, Women in International Entrepreneurship, (Prerequisites: MKTG 3700 basic Marketing) and
MKTG 3780, (International Marketing)
PHIL 2253/GS 2253, Philosophy and Feminism
POL SCI 2380, The Politics of Gender in the United States
POL SCI 3590, Women and Leadership World-Wide, Breaking the Glass ceiling
PSYCH 2230, Psychology of Women
PSYCH 3316, Fundamentals of Leadership
PSYCH 3318, Industrial and Organizational Psychology (Same as MGMT 3623)
SOC 3600, Management and Organizational Behavior (Same as MGMT 3600)

## Graduate Certificate

The graduate certificate in Gender Studies is designed for students who wish to receive post-baccalaureate training in gender studies.

## Requirements

## For Admission:

Baccalaureate degree
2.75 G.P.A.

Official transcripts of all previous undergraduate/graduate work
Two letters of recommendation
If you are not currently enrolled at UMSL, you must apply through the Graduate School. This certificate is available to students with Bachelor's or Master's degrees and students enrolled in graduate degree prograrr s. A student need not be enrolled in a degree program to earn the Gender Studies graduate certificate. Post B.A./B.S. students may enroll in the undergraduate or graduate certificate program.

## Certificate Requirements

At least 18 hours of Women's and Gender Studies courses at the 4000,5000 , and/or 6000 level 1) 3 hours must include a graduate feminist or gender theory course, which may be GS 5033, Advanced Sexuality and Gender Theory, GS 5040 Feminist Critical Theory, or other theory course.
2) 3 hours must include either a graduate internship or practicum, or final writing project, which may be an independent study GS 6452 Special Readings in Women's and Gender Studies, or a substantial research ard writing project for a GS graduate seminar, which may be GS 6450 Seminar in Women's and Gender Studies, or other cross-listed, 5000 or 6000 -level seminar
3) 12 hours must be at the 5000 level or above, while up to 6 hours of 4000 -level courses may be taken fir graduate credit, as long as student completes graduate level work for the course.
4) No more than 6 hours may be taken as Directed or Independent Study credit.

Most Gender Studies courses are cross-listed with other departments and count toward a department's degree requirements we well as toward the certificate.

## Course Descriptions

GS 1004 The History of Women in the United States (3)
Same as HIST 1004 A survey of women's history from the colonial era to the present.
GS 2100 Women in Contemporary Society (3)
Same as SOC 2100. Prerequisite: SOC 1010 or GS 2102 or consent of instructor. An introduction to the sociological analysis of the status of women in society, including their work, family, and political roles. Socialization, education, and the women's movement will also be considered, as these affect the position and participation of women in a variety of social arenas.

## GS 2102 Introduction to Gender Studies (3)

Same as SOC WK 2102, HIST 2102, and SOC 2102 This core class is required for all Gender Studies Certificate earners. This class introduces students to cultural, political and historical issues that shape gerider. Through a variety of disciplinary perspectives in the humanities, social sciences, and natural sciences, the course familiarizes students with diverse female and male experiences and gendered power relationships.

GS 2140 Female Sexuality (3)
Prerequisite: PSYCH 1003, or BIOL 1012, or its equivalent.
GS 2150 Special Topics in Gender Studies* (3)
An introduction to a particular topic area in women's and gender studies (topics will be announced prior to registration), drawing on the theories and methods of such disciplines as sociology, psychology, political science, history, philosophy, art history, and others to examine particular aspects of gender in social and cultural life. Course may satisfy the distribution requirement for humanities or social sciences depending on the topic.

## GS 2230 Psychology of Gender (3) [V,SS]

Same as PSYCH 2230 Prerequisite: PSYCH 1003. Evaluation of psychological theories and research regarding physiological, cognitive, and personality sex differences, female problems in adjustment, and clinical

GS 2232 Psychology of Victims (3)
Same as PSYCH 2232. Prerequisite: PSYCH 1003. This course is designed to review the psychological effects of crime, violence, war, natural disasters, and other traumas. Particular attention is paid to the development of specific psychopathology and other negative consequences of traumatic events. The process of recovery from distress following psychological events is further emphasized. The role of gender and its relationship to victimization and the development of psychopathology and recovery are considered throughout the course.

## GS 2253 Philosophy and Feminism (3)

Same as PHIL 2253 A critical examination of what various philosophers have said about issues of concern to women. Sample topics include oppression, racism, women's nature, femininity, marriage, motherhood, sexuality, pornography, and the ethics of care.

## GS 2290 Gender and the Law (3)

Same as POL SCI 2290. This course examines the ways in which laws and interpretations of laws affect gender equality in the United States. Emphasizing how traditional roles impact both women and men historically and currently, the course highlights major pieces of legisiation and court rulings related to employment, economics, education, sexual harassment, pornography, rape, reproductive rights, and domestic relations. The course stresses the impact of federal and state institutions and non-governmental influences on equality. It also addresses gender representation in the legal profession and its effect on judicial decisions. (This course satisfies State requirements in American History and Government.)

## GS 2380 The Politics of Gender in the United States (3)

Same as POL SCI 2380. Prerequisite: POL SCI 1100 or consent of instructor. This course examines the role of gender in political institutions, practices and policy in the United States, past and present. It focuses on various movements for political equality, the relationship between gender and political participation, vote choice, and public opinion, and how legislative executive, and judicial offices are gendered at the national, state and local levels. (This course satisfies State requirements in American History and Government.)

## GS 2410 Work, Families, and Public Policy (3)

Same as ECON 2410. This course compares the economic behavior of women and men in both the labor market and the household. Topics include: the family as an economic (production) unit, gender differences in labor force participation, occupations and earnings; the effectiveness of human capital theory and labor market discrimination in explaining the male-female wage gap; remedies for reducing the wage gap, family structure and economic well-being, and alternative policies to alleviate poverty. Students who have completed ECON 3400 may not take GS 2410 for credit.

## GS 3031 History of Gender in the United States (3)

Same as HIST 3031 Prerequisite: Junior standing or consent of the instructor. Development of women's economic, political, and social role in the United States with special emphasis on the nineteenth and twentieth centuries; women and work; women and the family; women and reform movements; women and education; feminist theorists and activists; images of women.

## GS 3032 History of Gender in Comparative Cultures (3)

Prerequisite: Junior standing or consent of the instructor. An introduction to the historical development of women's status in a variety of cultures and periods within the areas of Africa, Europe, the Far East, Latin America, and the Middle East. The course analyzes women's political, economic, familial, and sexual roles and the economic, demographic, ideological, and political forces which promoted change and continuity in these roles.

## GS 3033 Sexuality and Gender Theory (3)

Same as HIST 3033. Prerequisite: Junior Standing or consent of instructor. This course examines the ways in which contemporary sexuality and gender theory has challenged and changed the study of culture and history. The course introduces students to sexuality and gender theory in late twentieth and early twenty-first century contexts. It then explores dynamic links between theory and the formal structures of political economy as well as the informal structures of everyday life.

GS 3034 History of Sexuality (3)
Prerequisite: Junior Standing or consent of instructor. This course locates sexuality at the center of history and examines its impact over time on politics, society, culture and economics. In particular, the course focuses on changing definitions of sexual deviance, the historical evolution of formal and informal regulations of sexual practices and the manner in which sex has been deployed in broader historical struggles involving gender, race, class, migration and state building.

## GS 3224 Marriage and the Family (3)

Same as SOC 3224 Prerequisite: SOC 1010 or consent of instructor. The study of patterns of close relationships and how these relationships are influenced by larger social forces. Topics include: love, dating, mate selection, cohabitation, alternative lifestyles, working families, parenting, single mothers, families in crisis, domestic violence, and divorce. Universal and variable aspects of family organization, family role
systems, and changes in family social structure.
GS 3250 Sociology of Victimization (3)
Same as SOC 3250. Prerequisite: SOC 1010. Examines the role of social factors in a wide range of kinds of victimization-crime, violence, natural disasters, accidents, disease, etc. The topic of social reactions to various kinds of victimization is also covered. Sociological theories of victimization are emphasized.

GS 3350 Special Topics in Women's and Gender Studies (3)*
Prerequisite: GS 2102 or consent of instructor. Special Topics in Women's and Gender Studies. Topics vary by semester.

GS 3352 Independent Studies in Women's and Gender Studies (1-3)
Prerequisites: Junior standing; two courses in Women's and Gender Studies, including 2102; and consent of the instructor and the Institute. Directed independent work in selected women's and gender studies topics through readings, research, reports and/or conferences. Course may satisfy the distribution requirement for the humanities, social sciences or math/science depending on topic.

## GS 3376 Women \& Visual Arts (3)

Same as ST ART 3376. Prerequisite: ST ART 1100 or consent of instructor. Selected topics concerning women as creators, users, and subject matter of art. Great women artists in the Western world will be studied, as viell as women weavers, potters, and sculptors in non-western society.

## GS 3590 Women and Leadership World-Wide: Breaking the Glass Ceiling (3)

Same as POL SCI 3590. Prerequisite: POL SCI 1500 or consent of instructor. Compares women's day-to-day leadership and participation patterns across a wide variety of political-economic contexts, emphasizing theiperformance as elective and executive office holders. It examines the experiences of individual female leaders, the effect of country-specific nomination and recruitment strategies, party dynamics, and the larger political opportunity structure hindering or promoting the balanced participation of women and men in national leadership. Understanding how gender (the socially constructed meanings related to biological sex) operates within these specific contexts is a major concern.

## GS 3700 Diversity and Social Justice (3)

Same as SOC WK 3700 Prerequisite: SOC 1010 or equivalent. Analyzes the structure, dynamics, and consequences of social and economic injustice, and the impact on diverse groups in American society. Examines theoretical models and practice principles for work with diverse groups.

GS 4100 Power \& Practice: Introduction to Feminist \& Gender Theory (3)
Prerequisites GS 2102. This class serves as an initial intellectual investigation into gendered ideologies (such as the effects of race, ethnicity, nationality, socioeconomic class, sexuality, and religion) and functions as 3 bridge to later advanced gender theory and methods courses. Topics include interdisciplinary feminist theories (with a focus on gender equality), including masculinity theory, queer theory, muted group theory, and other evolving frameworks.

## GS 4150 Feminist Theory and Social Research (3)

Same as SOC 4150. Prerequisites: GS 2102 and Junior Standing or consent of instructor. This course provides an in-depth examination of feminist theoretical contributions to social science research. We begin by exarnining the 20th century roots of contemporary feminist theories. With these foundations in place, we then shift to an investigation of how feminist theory has informed sociological research by examining current feminist understandings of gender, race, class and sexual inequalities across a range of contemporary social problems. Fulfills GS feminist theory requirement.

## GS 4300 The Female Gaze: Women and the Media (3)

Prerequisite: Junior standing or consent of instructor. This course challenges how women's issues and performances of femininity are represented in global media, particularly popular Western media which perpetuate cultural stereotypes of gender norms. Specific topics will vary.

## GS 4325 Gender, Crime and Justice (3)

Same as CRIMIN 4325 and SOC 4325. Prerequisites: CRIMIN 1110, CRIMIN 1120, CRIMIN 1130, CRIMIN 2210, CRIMIN 2220, or consent of instructor. Analysis of the role of gender in crime and in the justice system. Emphasis on gender differences in crime commission, criminal processing, and the employment of women in criminal justice agencies. Fulfills criminology diversity requirement.

GS 4330 Violence Against Women (3)
Same as CRIMIN 4330. Prerequisites: Junior Standing, CRIMIN 1110, CRIMIN 1120, CRIMIN 1130, CRIMIN 2210, CRIMIN 2220, and ENGL 3100 or consent of instructor. This course examines the nature, extent, causes and consequences of various types of violence against women, including rape, sexual assault, stalking, and intimate partner violence. Criminal justice policy and practice regarding violence against women are also examined.

GS 4350 Special Topics in Gender Studies* (3)
Prerequisite: GS 2102 or consent of instructor. Special topics examined from a gender perspective in the
fields of anthropology, art history, criminology, economics, English, foreign language, history, philosophy, political science, psychology, social work, sociology, business, or others. Topics and departments vary by semester. Course may be repeated by permission of IWGS Director.
GS 4352 Independent Study in Gender Studies (1-3)
Prerequisite: GS 2102 or consent of instructor. Independent, directed readings and research in a women's and gender related topic, to be determined in consultation with instructor.

GS 4353 Internship in Gender Studies (3)
Prerequisites: 90 hours. 2.5 GPA, 12 WGS hrs. Internship would place the student in a profit or nonprofit setting for approximately ten hours a week in an internship structured and supervised by the Institute; consent of Director required; may include biweekly seminar. Student must present appropriate course background for either option, plus the above pre/co-requisites.

GS 4360 Sociology of Minority Groups (3)
Same as SOC 4360 . Prerequisites: SOC 1010 and junior standing or consent of instructor. The study of dominant-subordinate group relations. Religion, ethnicity, race, and gender as factors in the unequal distribution of power.

GS 4452 Feminism and Science (3)
Same as PHIL 4452. Prerequisites: Six hours of philosophy, graduate standing, or consent of instructor. This course will explore major themes and issues in feminist science scholarship, a body of research that focuses on the relationship between science and gender. Feminist research in the philosophy and history of science, and in the biological sciences, are emphasized. Issues include: the nature of objectivity, evidence, and truth; the factors that contribute to the acceptance or rejection of research hypothesis and theories; the nature and consequences of science's cognitive authority; and the relationship between science and values.

GS 4600 Masculinities (3)
Same as SOC 4600. Prerequisites: GS 2102 or consent of instructor. This course examines men and masculinities through a critical lens, looking carefully at an institutionalized system of gender relations and practices that is assumed to be a natural phenomenon that is culturally universal. The course explores various masculine behaviors, myths, ideologies, and experiences so that students can consider the relationship between masculine practice and social power and delineate choices for future directions. The course is necessarily interdisciplinary and may utilize tools and methods from the social sciences and the humanities. Satisfies GS gender theory requirement.

GS 4610 Domestic Violence: Theory, Problems, and Practice (3)
Same as SOC WK 4610. Prerequisite: SOC WK 3150. Focuses on theoretical and empirical understanding of domestic violence in U.S. society and social work practice with battered women and their families. This course addresses direct services, community organizing, and public policy changes to help end violence against women. Relationships between violence against women and other forms of oppression (e.g., racism, economic exploitation, heterosexism and social class) are explored.

GS 4630 Women's Social Issues (3)
Same as SOC WK 4630 . Prerequisite: SOC WK 3150 or equivalent. This course will help students become more sensitive to the social and welfare concerns of women. The topics include work, education, family responsibilities, violence against women, and special health and mental health service needs. Emphasis will be placed on understanding how social action can be used to bring about positive change.

## GS 4920 Women Writing Nature (3)

Prerequisite: GS 2102, or consent of instructor. We will read and analyze nature writings by 19th and 20th century women in America, as well as critical studies from various cultural perspectives and academic disciplines. The course will examine how women's observations about nature create, support, and/or dispute particular cultural and social attitudes toward the environment. Students will consider debates in feminist pedagogy, ecofeminism, and social constructivism about the relationship of gender to nature.

## GS 4925 Feminism and Witchcraft (3)

Prerequisite: GS 2102, or consent of instructor. This class will examine literary and historical treatments of witcheraft through a cross-cultural, feminist theoretical framework. Students will read primary historical documents as well as fictional, dramatic, and poetic representations of witches and witchcraft. The course will consider changing perspectives toward witches in contemporary gender theory, spiritualist discourse and popular media.

## GS 4930 Studies in Gender and Literature (3)

Same as ENGL 4930. Prerequisites: Students must satisfy English prerequisites for 4000-level courses or obtain permission of instructor. The course examines the role of gender in literature, including the transformation of literary genres by women writers, writings by women during a particular historical period, and gender relations in literature. Specific topics vary from semester to semester. The course may be repeated for credit with departmental approval.

GS 4931 English Women Writers, 1300-1750 (3)

Same as ENGL 4931. Prerequisites: Students must satisfy English prerequisites for 4000 -level courses or obtain permission of instructor. Texts covered will range in scope from closet drama and romance to lyrics to personal, political, and religious writing by women such as Margery Kempe, Mary Sidney, and Amelia Lanyer who wrote during a period when reading and writing were not the female norm.

GS 4932 Female Gothic (3)
Same as ENGL 4932. Prerequisites: Students must satisfy English prerequisites for 4000-level courses or obtain permission of instructor. The course examines the historical development of the female gothic, a gen e which employs narrative strategies for expressing fears and desires associated with female experience. Frorn the late 18th century to the present, we will trace the persistence of the Gothic vision in fiction and film.

## GS 4933 Female Novel of Development (3)

Same as ENGL 4933. Prerequisites: Students must satisfy English prerequisites for 4000-level courses or obtain permission of instructor. The course covers the development of the female bildungsroman from the late 18 th century to the present. We will consider how contemporary and current theories of female development help us read these novels within their particular cultural contexts.

## GS 4934 Austen and the Brontes (3)

Same as ENGL 4934. Prerequisites: Students must satisfy English prerequisites for 4000 -level courses or obtain permission of instructor. This course covers the novels of the major 19th century British writers JaneAusten and the three Bronte sisters, Anne, Emily, and Charlotte. The course will be devoted to Austen's romantic comedies and the historical/cultural contexts that inform the novels, as well as the darker romanticism of the Brontes, along with the biographical, cultural, philosophical, and religious contexts of their work.

## GS 4935 Women Heroes and Romantic Tales (3)

Same as ENGL 4935. Prerequisites: Students must satisfy English prerequisites for 4000 -level courses or obtain permission of instructor. Women as epic and romantic heroes in British and transatlantic writing 1790s-1850s: reformers and rulers in novels by Mary Wollstonecraft and Mary Shelley; a runaway slave and an epic poet in works by Mary Prince and Elizabeth Barrett Browning; erotic and political adventures in Robinson, Dacre, Hemans; American icons "Pocahontas" and "Evangeline" in Sigourney and Longfellow.

## GS 4936 Tales of the Islamic East (3)

Same as ENGL 4936. Prerequisites: Students must satisfy English prerequisites for 4000 -level courses or obtain permission of instructor. Adventure, gender, and power in British and post-colonial writing: Lady Montague on Turkey, Gibbon on Islam, Byron and Hemans on harems and heroes, Disraeli on the Jewish Caliph of Baghdad, T.E. Lawrence on Arabia, and el Saadawi and Rushdie on (post) modern gender and the Islamic East.

## GS 4937 Irish and Irish-American Women Writers (3)

Same as ENGL 4937. Prerequisites: Students must satisfy English prerequisites for 4000-level courses or obtain permission of instructor. This course traces the parallel arcs of feminism reflected in similarly-themed Irish and Irish-American women's novels from 1950 to present. Authors range from Edna O'Brien and Mary McCarthy, the first contemporary feminist novelists in Ireland and America, through Emma Donoghue and Eileen Myles, whose lesbian protagonists bring feminist perspectives into the 21 st century.

GS 4938 American Women Poets of the 20th/21st Centuries (3)
Same as ENGL 4938. Prerequisites: Students must satisfy English prerequisites for 4000 -level courses or obtain permission of instructor. Introduction to American women poets since 1900: anarchists, Imagists, Harlem formalists, white lyricists, modernists (Ridge, H.D., Dunbar-Nelson, Millay, Stein); mid-century giants (Rukeyser, Brooks) and Confessionals (Sexton, Plath); feminists and multiculturalists (Rich, Lorde, Giovanni, Hogan), poets of witness and the play of language and the mind (Klepfisz, Olds, Mullen, Perillo).

## GS 5031 Advanced History of Women in the United States (3)

Same as HIST 5031. Prerequisite: Graduate standing. Development of women's economic, political, and social roles in the United States with special emphasis on the nineteenth and twentieth centuries: women and viork; women and the family; women and reform movements; women and education; feminist theorists and activists; images of women.

## GS 5032 Advanced History of Women in Comparative Cultures (3)

Same as HIST 5032. Prerequisite: Graduate standing. An introduction to the historical development of women's status in a variety of cultures and periods within the areas of Africa, Europe, the Far East, Latin America, and the Middle East. The course analyzes women's political, economic, familial, and sexual role; and the economic, demographic, ideological, and political forces which promoted change and continuity in these roles.

## GS 5033 Sexuality and Gender Theory (3)

Same as HIST 5033. Prerequisite: Graduate standing. This course examines the ways in which contempcrary sexuality and gender theory have challenged and changed the study of culture and history. The course introduces students to sexuality and gender theory in late twentieth and early twenty-first century contexts. It

期細 then explores dynamic links between theory and the formal structures of political economy as well as the informal structures of everyday life.

GS 5034 History of Sexuality (3)
Same as HIST 5034. Prerequisite: Graduate standing. This course locates sexuality at the center of history and examines its impact over time on politics, society, culture and economics. In particular, the course focuses on changing definitions of sexual deviance, the historical evolution of formal and informal regulations of sexual practices and on the manner in which sex has been deployed in broader historical struggles involving gender, race, class, migration and state building.

GS 5040 Feminist Critical Theory (3)
Same as ENGL 5040. Prerequisites: Graduate standing and consent of instructor. A consideration of feminist critical theory as a means of reassessing literary texts and our cultural heritage. After exploring the roots of feminist criticism, the seminar will examine Anglo-American and continental debates on theories of language, writing and representation. In providing an interdisciplinary context the course will consider studies in psychology, anthropology, history, and philosophy/theology which have influenced and enriched feminist approaches to literature.

## GS 5053 Advanced Studies in African-American History (3)

Same as HIST 5053. Prerequisite: Graduate standing. This course introduces some of the themes of AfricanAmerican women's history. By examining the impact of region, gender, and class on African-American women's experiences across time, the course highlights black women's applied and theoretical contributions to feminist politics and activism as well as the black struggle for freedom and equality. Topics covered include: slavery and emancipation, institution and community building, the family and work, electoral politics and direct action protest, civil rights, and contemporary issues.

GS 5350 Topics in Women's and Gender Studies (3)
Prerequisites: Graduate standing and at least one Women's and Gender Studies course. This course will focus on a particular aspect of gender (to be announced prior to registration) and will draw upon recent theoretical and methodological work from a variety of disciplines.

GS 5450 Special Topics in Women's and Gender Studies (3)*
Prerequisite: Graduate standing or consent of instructor. Special topics at the Graduate level examined from a gender perspective in the field of anthropology, art history, criminology, economics, English, foreign language, history, philosophy, political science, psychology, social work, sociology, business, or others. Topics and departments vary by semester.

GS 5500 Foundations of Human Behavior in the Social Environment (3)
Same as SOC WK 5500. Prerequisite: SOC WK 3150 or equivalent or admission to the MSW program. Focuses on theoretical and empirical understanding of human behavior in the social environment using a life-span perspective. Introduces biological, behavioral, cognitive, and sociocultural theories of individuals, families, and small groups, and their implications for the professional social worker's understanding of socioeconomic status, gender, disability, ethnicity, race, and sexual orientation.

GS 5700 Diversity, Social Justice and Social Practice (3)
Same as SOC WK 5700 Prerequisite: Graduate standing. Analyzes the structure, dynamics, and consequences of social and economic injustice, and the impact on diverse groups in American society. Examines theoretical models and practice principles for work with diverse groups.

GS 5940 Seminar in Gender and Literature (3)
Same as ENGL 5940. Gender studies in literature of different periods, types, and genres; satisfies area requirement (1-6) appropriate to its period, national literature, and genre.

## GS 6350 Gender, Language 2. Identity (3)

Same as TCH ED 6350. Prerequisite: Graduate standing. An interdisciplinary look at the ways gendered and racial identities get developed and shaped through language and culture. Readings will address the complex, yet sometimes invisible, ways that identity, language and gender intersect, creating and assigning roles, responsibilities, and possible selves to individuals and groups in a global world.

GS 6353 Graduate Internship in Gender Studies (1-6)
Prerequisites: Graduate standing and consent of Director. Provides an opportunity for the Graduate Women's and Gender Studies student to acquire "real world" experience working in a non-profit, political, economic, or social service organization with a gender focus.

GS 6410 Women and Mental Health (3)
Same as PSYCH 7410. Prerequisite: Admission to the doctoral program in Clinical Psychology or consent of instructor. This course will focus on contemporary research on the psychology of women pertaining to mental health issues. Etiology and treatment of disorders disproportionately affecting women will be emphasized.

GS 6418 Seminar in Human Sexuality (3)
Prerequisite: Admission to the doctoral program in Clinical Psychology or consent of instructor. Review of
theory and research in human sexuality from physiological, psychological, and social perspectives. Implications for the assessment and treatment of sexual dysfunction are considered.

## GS 6435 Gender, Crime and Criminal Justice (3)

Same as CRIMIN 6435. Prerequisite: Graduate standing. This course provides an analysis of theories of crime, crime processing and gender. Topics examined include the role of gender in criminal offending and victimization. The impact of gender on criminal/juvenile justice system processing and treatment will be addressed.

## GS 6446 Sex Crime (3)

Same as CRIMIN 6446. Prerequisites: Graduate standing and consent of instructor. Examination of consensual and non-consensual sexual offending. Topics include historical development of laws regulating sexual conduat, controversies surrounding the application of these laws, and the nature and distribution of sexual offenses.

## GS 6450 Seminar in Gender Studies (3)*

Prerequisites: Graduate standing and consent of instructor. Critical examination of advanced topics in the humanities, social sciences, or natural sciences from women's and gender studies perspectives. May be taken more than once provided that the subject matter is different each time the seminar is taken.

## GS 6452 Special Readings in Gender Studies (3)

Prerequisites: Admission to Graduate Certificate program and consent of instructor. Directed independent work on a selected Women's and Gender Studies topic through readings, research, reports, and/or conferences.

* Each semester the Director of the Gender Studies identifies courses being offered by other departments; they are cross listed with Gender Studies courses under the special topic course title. Consult the course schedule each semester for a list of these courses.


## BULLETIN <br> 2111 <br> 2() 2

Department of History

## UMSL Home <br> Department of History Home Page Faculty

Andrew J. Hurley, Professor, Chairperson Ph.D., Northwestern University John R. Gillingham, Curators' Professor Ph.D., University of California, Berkeley Jay Rounds, E. Desmond Lee Professor of Museum Studies and Community History Ph.D., University of California, Los Angeles
Carlos A. Schwantes, Saint Louis Mercantile Library Professor of Transportation Studies
Ph.D., University of Michigan
Mark A. Burkholder, Professor
Ph.D., Duke University
Louis Gerteis, Professor
Ph.D., University of Wisconsin
Steven W. Rowan, Professor
Ph.D., Harvard University
Robert M. Bliss, Associate Professor, Dean of Pierre Laclede Honors College
Ph.D., University of Wisconsin
Priscilla Dowden-White, Associate Professor
Ph.D., University of Indiana-Bloomington
J. Frederick Fausz, Associate Professor

Ph.D., William and Mary
Kevin J. Fernlund, Professor, Executive Director of Western History Association
Ph.D., University of New Mexico
Winston Hisieh, Associate Professor
Ph.D., Harvard University
Adell Patton Jr., Associate Professor
Ph.D., University of Wisconsin
Gerda W. Ray, Associate Professor
Ph.D., University of California, Berkeley
Laura Westhoff, Associate Professor
Ph.D., Washington University
Deborah Cohen, Associate Professor
Ph.D., University of Chicago
Minsoo Kang, Associate Professor
Ph.D., University of California, Los Angeles
Peter Acsay, Associate Teaching Professor
Ph.D., Saint Louis University
Robert Archibald, Adjunct Professor President, Missouri Historical Society
Ph.D., University of New Mexico
John Hoover, Adjunct Professor Director of St. Louis Mercantile Library
M.A., University of Missouri-Columbia

Robert D. Ubriaco, Adjunct Assistant Professor
Ph.D., University of Illinois
Richard H. Mitchell, Curators' Professor Emeritus
Ph.D., University of Wisconsin
Jerry M. Cooper, Professor Emeritus
Ph.D., University of Wisconsin
Paul Corby Finney, Professor Emeritus
Ph.D., Harvard University
Steven C. Hause, Professor Emeritus
Ph.D., Washington University

Charles P. Korr, Professor Emeritus
Ph.D., University of California, Los Angeles
William S. Maltby, Professor Emeritus
Ph.D., Duke University
Blanche M. Touhill, Professor, Chancellor Emerita
Ph.D., Saint Louis University
John A. Works Jr., Associate Professor Emeritus
Ph.D., University of Wisconsin

## General Information

## Degrees and Areas of Concentration

The department offers work in Asian, African, and African American, European, Latin American, Mexican, World, and United States history from ancient to modern times. At the bachelor's level, the department offers the B.A. in history, and, in cooperation with the College of Education, the B.A. in history with teacher certification and the B.S. in education with an emphasis in social studies.

At the graduate level, the department offers an M.A. in history with work in Metropolitan, Regional, Nationa, and Transnational history. A collaborative program with Missouri Southern State University allows full-time K12 teachers in the state of Missouri to earn their MA degree online with minimal required visits to either campus. The department also offers the option of an M.A. in history with a concentration in museum studies.

## Departmental Honors

Students majoring in history may be awarded departmental honors upon graduation if they have achieved the following: a) at least a 3.2 overall GPA; b) at least a 3.5 GPA for all hours attempted in history courses; and c) an outstanding research paper in the Senior Seminar as certified by the faculty member responsible for directing it.

## Undergraduate Studies

## General Education Requirements

History majors must meet the university and college general education requirements. History courses that will satisfy the university's state requirement are:
HIST 1001, American Civilization
HIST 1002, American Civilization
HIST 1003, African-American History
HIST 1004, The History of Women in the United States
HIST 2007, The History of Missouri
HIST 2041, Topics in American Constitutional History
Students may take any language that fulfills the college's foreign language requirement. Majors may not take required history courses on a satisfactory/unsatisfactory basis. Students enrolled in variable credit reading courses for 5 credit hours must complete a seminar paper.

## Degree Requirements

## Bachelor of Arts in History

Students are encouraged to move from introductory courses at the 1000 to more advanced content-orien:ed courses at the 2000 level then to skill oriented courses at the 3000 and 4000 levels.

All the $\mathbf{1 0 0 0}$ level, majors must take one course in U.S. History:
HIST 1001, American Civilization to 1865
HIST 1002, American Civilization 1865 to present
HIST 1003, African-American History
HIST 1004, The History of Women in the United States

## Plus one course in European History:

HIST 1030, The Ancient World
HIST 1031, Topics in European Civilization: The Emergence of Western Europe to 1715
HIST 1032, Topics in European Civilization: 1715 to the Present
Plus One course in African, Asian, Latin American, or World History:
HIST 1041, East Asian Civilization
HIST 1042, East Asian civilization
HIST 1051, Latin American Civilization
HIST 1061, African Civilization to 1800
HIST 1062, African Civilization Since 1800
HIST 1064, The African Diaspora Since 1800

HIST 1075, World History to 1500
HIST 1076, World History Since 1500
Plus two additional courses at the 1000 level on any subject
2000 level courses offer in-depth historical content. At the 2000-level, students may count between one and three 3-credit courses toward their major. At least one of the courses at this level must be in the fields of African, Asian, or Latin American History

In addition, all students must take: 2999 Introduction to Historical Inquiry (4 credit hours)
3000 level courses are designed primarily for majors and focus on developing historical writing and thinking skills. At the 3000 level, students may count between two and four 3-credit courses toward their major,

4000 level courses allow history majors to demonstrate mastery over historical thinking, writing, and research skills. Courses at this level should be taken once students have completed all other requirements for the major. Students must take:

4004, Senior Seminar (five credit hours)
Majors must complete at least 39 , but not more than 45 , hours in history with no grade below C. Courses 4011 and 4012 do not count toward the major. After fulfilling the general education and specific major degree requirements, students take the remaining 30 hours required to complete the B.A. or B.S. degrees from courses, from one or more of the following or their-quality equivalents at other institutions, if the appropriate department has evaluated them as being of university-level quality: anthropology/archaeology, art (appreciation, history, studio), biology, chemistry, communication, criminology and criminal justice, economics, English, foreign languages/literatures, history, mathematics/computer science, music (appreciation, history, performance), philosophy, physics and astronomy/geology, political science, psychology, social work, sociology, business, education, engineering, and interdisciplinary. Undergraduate majors must complete a residency minimum of 15 hours of 2000/3000 level History courses including History 4004) (5 credit hours) at UMSL.

## Learning Outcomes

The following learning outcomes are anticipated in the successful completion of a Bachelor of Arts in History
Communication: Write clearly and coherently and listen to oral presentations, summarize the arguments made and discuss them in the context of other oral presentations or conversations.

Valuing/Ethics/Integrity: Understand and articulate the diversity of identities and political and social systems that have shaped human behavior over time. Understand and articulate one's own identity in terms of race, gender and class, and to locate that identity in the wider world, both past and present.

Critical Thinking: Listen to oral presentations, summarize the arguments made and discuss them in the context of other oral presentations or conversations. Accurately summarize an argument and discuss it in the context of other arguments.

Content Knowledge: Embedded in Other Outcomes

## Minor in History

Students may minor in history by taking 19 hours of history courses as follows:

1) One course numbered 1001-1099 in each of the following areas: United States history, European history, and either Asian, African, Latin American or World history (9 credits)
2) Two courses numbered 2000-2998 (6 credits)
3) History 2999 (4 credits)

No course in which a grade below a C is received shall count toward a minor.

## The Minor in History of Science and Technology

The Minor in History of Science and Technology (HST) is an interdisciplinary program requiring a minimum of 18 credits in HST.

All required courses must be completed with a "C" or higher. The satisfactory/unsatisfactory option may not be used. No transfer courses may be used towards the HST Minor. A minimum of 12 hours must be taken at 2000 and above with 9 of those hours being at 3000 or above. Courses in the upper division may satisfy requirements for the student's major, consistently with the major's requirements.

## Requirements

1. Logic or Methodology: Choose one of the following courses in either logic or methodology.

ANTHRO 4308, Practicum in Cultural Research Methods

ANTHRO 4310, Laboratory Methods in Archeology
HIST 2999, Introduction to Historical Inquiry
PHIL 3360, Formal Logic
PHIL 4460, Advanced Formal Logic
PSYCH 2219, Research Methods
SOC 3230, Research Methods
2. History: Choose two of the following courses in history of science and technology ( 6 credit hours).

ECON 3800, History of Economic Thought
HIST 2089, History of Ideas in the West
HIST 2770, Introduction to Transportation
HIST 2772, History of Aviation in American Life
HIST 2773, Urbanization and Transportation
HIST 3143, Inquiries in Transnational History: Introduction to the History of
Science (Note: History 3143 is offered under different topics; only the specific topic listed here counts as
HPST.)
PHIL 4483, Topics in History and Philosophy of Science
PHIL 4484, Topics in History and Philosophy of Medicine
PSYCH 3400, Conceptual and Historical Foundations of Psychology
3. Science: 9 credit hours in the mathematical, physical, life, behavioral, or social sciences. The science courses must be in addition to those satisfying the Gen Ed requirements and conditional upon their acceptance by the HST undergraduate advisor.

## Prerequisites:

Some courses required by the Minor in HST have prerequisites. (It should be particularly noted that all 300 ) level History courses require HIST 2999.) Some students may satisfy prerequisites by virtue of their prior curriculum. When this is not the case, students are responsible for either satisfying the prerequisites by adding courses to their curriculum or obtaining a waiver from the instructor.

## Alternative courses to satisfy the History requirements:

Some courses may satisfy the History requirement even though they are not listed as such, depending on what their content is. These include variable content courses, courses at the Honors College, and history of philosophy courses. If a course that deals with some aspect of HST and should satisfy a requirement is no: listed among those satisfying the requirements, you may do the following:

1. Obtain the description of what the course will cover.
2. Write a very short explanation of why the course ought to count toward satisfaction of the requirement, by showing how it deals with the relevant aspect of HST.
3. Submit both to the HST undergraduate advisor for approval.

## Bachelor of Liberal Studies Option:

A minor in HST may be combined with a minor in the Philosophy of Science and Technology and a capstone to form a Bachelor of Liberal Studies. The relevant capstones are either History 4004 or Philosophy 4491 . Since students taking History 4004 must have taken History 2999, it is suggest such students use History 2999 :0 satisfy the Logic and Methodology requirement. Students can use the same course to satisfy the Logic and Methodology requirement of both minors, but cannot use the same science courses. Also, a Bachelor of Liberal Studies program is easily combined, in turn, with a major in any science as a double major. This provides the student with a deeper historical and conceptual understanding of the science(s) he or she is studying.

## Related Areas

Since history is a broad discipline, it can be combined with serious work in any other discipline. Courses in the humanities, social sciences, languages, and the natural sciences may complement the history program.
Students should consult with faculty advisers to select courses suited to their individual interests.

## Bachelor of Arts in History with Teacher Certification

Students majoring in History may earn Social Studies Teacher Certification as follows:

## Social Studies

Teacher certification students must complete the major and meet these minimum social science requirerrents:

- American history, 12 hours including HIST/SEC ED 4013
- European or world history, 9 hours including HIST/SEC ED 4014
- United States and/or state government, 6 hours including POL SCI/SEC ED 4090
- behavioral science, 6 hours
- economics, 3 hours
- geography, 3 hours
- 2 hours of elective social studies credit.

For emphasis area advising, you must see a History/Social Studies advisor. You must also see an advisor in the College of Education regarding Education requirements.
For more information, refer to the Secondary Education in this Bulletin.
Bachelor of Science in Education: Emphasis in Social Studies The history requirements are the same as for the B.A. degree except students fulfill the College of Education general education requirements rather than those of the College of Arts and Sciences. For information, refer to the College of Education section in this Bulletin.

## Graduate Studies

The department offers the MA in History and a Graduate Certificate in Museum Studies. Qualified students may enter the MA through two different routes, either as graduates with a baccalaureate degree or as exceptional undergraduates via the $2+3$ program.

## The M.A. Degree

The Department of History offers two options for graduate study, the Master of Arts in History and the Master of Arts in History with Concentration in Museum Studies. These options are described below.

## Master of Arts in History

The Department of History offers students two ways of completing the Master of Arts degree: one path of study emphasizes depth of knowledge and research competence acquired through writing a substantial master's thesis; the second emphasizes breadth of historical knowledge acquired through graduate course work and the writing of research papers. Both paths include a core of substantive courses in history (see Core) to which the student adds either a thesis (see Thesis) or additional research papers and seminars (see Research Papers).

The M.A. program offers all students intermediate training preparatory to doctoral programs, advanced training leading to teaching and other careers, and disciplined advanced work.

The History M.A. program offers study in Metropolitan History, Regional History, National History and Transnational History. Students should consult with the Director of Graduate Studies to be sure that they have properly selected their fields of study.

## Admission Requirements

Applicants must meet several departmental admission requirements in addition to the general criteria of the Graduate School. The applicant's undergraduate studies need not have been in history, but they must demonstrate high academic potential. Normally, only students with a 3.2 grade point average ( 3.35 for the online degree) in their undergraduate major are admitted; most successful applicants have higher grades.

Applicants must submit three letters of recommendation, preferably from former teachers, and a sample of their written work. The History Department bases its admission decisions upon the undergraduate transcript, the letters of recommendation, and the sample of written work.

## Core

All candidates for the M.A. degree in history must complete a core of 26 hours of course work (excluding thesis credit), with no more than nine hours of history and related fields at the 5000 level. This 26 -hour core must include seven courses at 3 credit hours each ( 21 hours in all), and one 5 -credit-hour writing seminar consisting of a 2 -credit-hour research paper supplement to a 3 -credit-hour, 6000 -level history readings course.

To earn the 26 -hour core, candidates select three fields of study, the first with a minimum of four courses (each at 3 credit hours or more), the second and third with a minimum of two courses each (at 3 credit hours or more).
In addition to this core, each candidate must select one of the two following degree options:

1) Thesis Option--32 hours total

In addition to the core, the candidate choosing this option must enroll for 6 hours of thesis credit and submit an acceptable thesis. The thesis is based on original research in primary sources. Normally, theses do not exceed 100 pages of text. Candidates receive a grade for the thesis upon its approval by an advisory committee. The committee consists of professors selected by the candidate after consultation with the major professor. One member of the committee must be from the department but outside the candidate's general area of study, and one may be outside the history department.

The advisory committee conducts an oral examination on the thesis during the candidate's last semester of residence.

The committee decides whether the candidate shall pass, fall, or fail with the option to repeat the oral examination at a later date. Students may not take the oral examination more than twice. The second
examination must be held no less than one and no more than two semesters following the date of the first examination. Summer session may be counted as a semester under this procedure, but students should be aware of the difficulties involved in assembling faculty committees during the summer.

Thesis candidates must demonstrate competence in one foreign language or in quantitative methods as applied to historical study. Candidates shall demonstrate foreign language competence by translating, with the use of a dictionary, 500 words in one hour. A member of the history faculty will conduct this examination and choose the test for translation. Candidates shall demonstrate quantitative methods competence by satisfactory completion of either PSYCH 2201 Psychological Statistics or SOC 3220 Sociological Statistics, or their equivalent.
2) Research Paper Option-36 hours total

To complete this option, the candidate must complete two 5 -credit-hour seminars (each consisting of a $600 \mathrm{c}_{1}$ level reading seminar plus 2 credit hours of supplementary work on a substantial research paper), in additior to the core. The candidate may choose a fourth field in addition to the three already represented in the core to complete this option.

## Online Masters Program

In conjunction with Missouri Southern State University, the department of History at UMSL offers a route to the MA degree through online coursework. The requirements for the degree remain the same as in the conventional program. Students who wish to pursue the online Master's degree must apply specifically for this option by way of a note to that effect in the Comments section on the graduate application form. Students pursuing this path are expected to take one course per semester. Missouri K-12 teachers are given preference in the admission process. Some online courses may require students to visit either the UMSL or Missouri Southern State campus once per semester. At least one-third of total credit hours must be taken with instructors at each institution. Normally, only students with a 3.35 grade point average in their undergraduate major are admitted to this track. Deadlines for admission are June 1 for the fall semester and October 15 for the winter semester.

## The 2+3 B.A. and M.A. in History

The 2+3 B.A./B.S. - Ed and M.A. in History enables students of demonstrated academic ability and educational maturity to complete the requirements for both degrees in five years of full-time study. Because of its accelerated nature, the program requires the completion of lower-division requirements (15 hours) before entry into the three-year portion of the program. It also has prerequisites numbered 5000-5999 for graduate readings courses numbered $6000-6999$. When all the requirements of the B.A/B.S. - Ed. and M.A. program have been completed, students will be awarded both the baccalaureate and master's degrees. A carefully designed program can permit a student to earn both degrees within as few as ten semesters.

The combined program requires a minimum of 137 hours, at least 5 of which must be at the senior level (HIST 4004) and at least 32 of which must be at the graduate level (courses numbered in the 5000 and 6000 range). In qualifying for the B.A. or B.S. - Ed., students must meet all university and college requirements, including the requirements of the undergraduate major. In qualifying for the M.A., students must meet all university and Graduate School requirements, including satisfactory completion of at least 32 credit hours at the graduate level.

The semester they will complete 62 undergraduate credit hours, (including 15 credit hours of appropriate 1000-level coursework in the History Department and HIST 2999) interested students should apply to the Graduate Director of the Department of History for admission to the $2+3$ combined degree program in History. A cumulative grade point average of 3.1 or higher, a writing sample, and three letters of recommendation from faculty are required for consideration. Students will be admitted to the $2+3$ program under provisional status until they have completed 105 total credit hours toward their BA degree with a $g$ ade point average of 3.0 or higher. After completion of the provisional period, and with the recommendation of the graduate director, and approval of the graduate dean, students can be granted full admission into the program. Students will not be admitted to the program, if they have accumulated more than 105 credits. Students in the $2+3$ program begin to pay graduate credit hour fees once they exceed the 105 credit hour threshold. Students must maintain a grade point average of 3.0 or higher throughout the combined program. Students who officially withdraw from the $2+3$ combined degree program will be awarded the B.A. or B.S. Ed. Degree when they have successfully completed all the requirements for the degree.
Undergraduate History Requirements For Students in the $2+3$ Program
The following requirements must be completed prior to enrolling in the $2+3$ Program:
At the 1000 level, majors must take one course in U.S. History:
HIST 1001, American Civilization to 1865
HIST 1002, American Civilization 1865 to present
HIST 1003, African American History
HIST 1004, The History of Women in the United States
Plus one course in European History

HIST 1030, The Ancient World
HIST 1031, Topics in European Civilization: the Emergence of Western Europe to 1715 HIST 1032, Topics in European Civilization: 1715 to the Present

Plus: One course in African, Asian, Latin American, or World History
HIST 1041, East Asian Civilization
HIST 1042, East Asian Civilization
HIST 1051, Latin American Civilization
HIST 1061, African Civilization to 1800
HIST 1062, African Civilization Since 1800
HIST 1064, The African Diaspora Since 1800
HIST 1075, World History to 1500
HIST 1076, World History Since 1500
Plus two additional courses at the 1000 level on any subject.
The following UNDERGRADUATE courses are required for majors in the $2+3$ program
HIST 2999, Introduction to Historical Inquiry (4)
HIST 4004, Senior Seminar (5)
NOTE: B.S.-Ed. students must also take History 4012, 4013 and 4014.
Graduate History Requirements For Students in the $2+3$ Program
The following GRADUATE courses are required
Courses 5000 level
Three courses in three of the following fields: Metropolitan History; Regional History; National History, Transnational History (9 hours)

Courses 6000 level (selected from the Metropolitan History; Regional History; National History, Transnational History):

The prerequisite for each 6000 level course for $2+3$ program students is one or more 5000-5999 level courses in the field as part of the B.A. (or B.S. Ed.) program.

1) Three 6000 level courses (two of 3 credit hours, one of 5 credit hours) in the first field: total 11 hours.

Prerequisite: one 5000 level courses in the same field
2) One 6000 level course (one of 3 credit hours), in the second field: total 3 hours.

Prerequisite: one 5000 level course in the second field
3) One 6000 level course of 3 credit hours in the third field: total 3 hours

Prerequisite: one 5000 level course in the third field
In addition to this core, each candidate must select one of the two following degree options:

## 1. Thesis Option -32 hours total

In addition to the fulfilling the requirements listed above, the candidate choosing this option must enroll for 6 hours of thesis credit and submit an acceptable thesis. The thesis is based on original research in primary sources. Normally, theses do not exceed 100 pages of text. Candidates receive a grade for the thesis upon its approval by an advisory committee. The committee consists of professors selected by the candidate after consultation with the major professor. One member of the committee must be from the department but outside the candidate's general area of study, and one may be outside the history department.

The advisory committee conducts an oral examination on the thesis during the candidate's last semester of residence.

The committee decides whether the candidate shall pass, fail or fail with the option to repeat the oral examination at a later date. Students may not take the oral examination more than twice. The second examination must be held no less than one and no more than two semesters foilowing the date of the first examination. Summer session may be counted as a semester under this procedure, but students should be aware of the difficulties involved in assembling faculty committees during the summer.

Thesis candidates must demonstrate competence in one foreign language or in quantitative methods as applied to historical study. Candidates shall demonstrate foreign language competence by translating, with the use of a dictionary, 500 words in one hour. A member of the history faculty will conduct this examination and choose the test for translation. Candidates shall demonstrate quantitative methods competence by satisfactory completion of either PSYCH 2201, Psychological Statistics or SOC 3220, Sociological Statistics, or their equivalent.

## 2. Research Paper Option

To complete this option, the candidate must complete two additional 5 -credit hour seminars (each consisting of a 6000 -level reading seminar plus 2 credit hours of supplementary work on a substantial research paper.) The candidate may choose a fourth field in addition to the three already represented in the core to complete this option.

## Museum Studies

## Master of Arts in History (Museum Studies) and Graduate Certificate in Museum Studies

These options are intended for students planning to pursue professional careers in museums. In addition to the core requirement of substantive courses in history, the Museum Studies program includes intensive training in the theory and practice of museology. This innovative program is a collaboration between the Departments of History, Anthropology, and Art and Art History, the Missouri Historical Society and the St. Louis Mercantile Library. It is taught by a combination of professors and practicing professionals from St. Louis-area museums. Recognizing that the museums field is in a period of rapid change, the program is designed to train students for leadership in the emergence of a new paradigm of museology that focuses on relationships between museums and the people and communities that they serve.

For most students this will be a terminal master of arts degree, fully preparing graduates for immediate ent y into museum careers in a variety of positions. While the core requirement focuses on history studies, the museological training is applicable to employment in any type of museum.

## Admission Requirements

Applicants wishing to enter the Museum Studies concentration must apply specifically for that concentratior on the graduate application; successful application for the general M.A. program in history does not automatically provide access to the Museum Studies program. Applications for the Museum Studies concentration will be accepted only for the fall semester. Because of the prescribed sequence of course work, no midyear entry into the program will be allowed.

In addition to the general criteria of the Graduate School, applicants for the Museum Studies concentration must meet several additional criteria of the Department of History and the museum studies program. Applicants' undergraduate studies need not have been in history, but they must demonstrate high academi:potential. Normally, the history department admits only students with a 3.2 grade point average in their undergraduate major; most successful applicants have higher grades. Applicants must submit three letters of recommendation, preferably from former teachers and/or employers, and a sample of their written work. The sample may or may not be academic work, and length is not a consideration. Besides these departmental requirements, applicants must submit the Museum Studies Supplemental Application. The supplemental application includes a statement of intent for pursuit of a museum career.

The departmental Graduate Committee and the director of the museum studies program will base their admissions decisions upon the undergraduate transcript, the letters of recommendation and the sample of written work.

Applications for the museum studies program must be received by the university no later than March 1.

## Museum Studies Concentration--39 hours total

All candidates for the M. A. in History with a Concentration in Museum Studies must complete HIST 6134, 6135,6136 , and 6137 . These courses are cross listed under the same numbers in the Anthropology Department and the Art and Art History Department. Students may enroll through the department of thei choice. All candidates must also complete ART HIS 5588 Museum Education and Visitor Research and ANTHRO 6139 Practicum in Exhibit and Program Development. Together, these courses provide a solid foundation in the theory and history of museology and in practical skills for museum work. As a final requirement, candidates must complete HIST or ANTHRO or ART HIS 6138. This exit project will be the capstone demonstration of competence in museum studies. The specific nature of this demonstration will be customized to the interests and career aspirations of each student. It may take the form of a traditional thesis, an exhibit project, or some other appropriate form, as approved in advance by the candidate's advisory committee.

In addition to these requirements, all candidates must complete 15 hours of elective history course work with no more than 6 hours of history at the 3000 level. Museum Studies students will take courses distributed in any proportion between the fields of "United States to $1865^{\prime \prime}$ and "United States Since 1865." Both the director of the Museum Studies Program and the graduate director of the History Department must approve in advance any exceptions to this requirement (e.g., selections of courses from another field, such as Eurofean or African history).

## Graduate Certificate in Museum Studies (19 hours)

A very limited number of positions may be available for students who wish to pursue only the Graduate Certificate in Museum Studies without seeking the M.A. in History. In most cases, these will be students who already hold an advanced degree and are currently working or planning to work in a museum but who have had no formal training in museum studies. Candidates for the Graduate Certificate must complete HIST 6135, 6136, 6137, and 6138, ART HIS 5588, and ANTHRO 6139. Contact the director of the Museum Studies

Program for availability and special application procedures.

## Career Outlook for B. A. and M. A. graduates

An important rationale for the discipline of history is its centrality to the university curriculum and to the life experience. The ability to put events or developments into the context of the past is useful as well as pleasurable. Responses to a questionnaire sent to history graduates have indicated that alumni in a wide variety of fields are as conscious of and appreciative of their training in history as those who have chosen it as a profession. Men and women in business, lawyers, bankers, librarians, and foreign service officers have all found it relevant to their careers. Study and research in history sharpens organizational and writing skills important to success in business and the legal profession. A growing interest in local history has created employment opportunities in museum, archival, and preservation work.

## Career Outlook for M. A. with Concentration in Museum Studies

There are more than 8,000 museums in the United States. History museums constitute more than half of that total and employ approximately one-third of the 150,000 paid staff working in U. S. museums. While job requirements vary widely among individual museums and specific professional roles, the M.A. degree offered by this program qualifies graduates for a wide range of career opportunities, in history museums and in other types of museums as well. The Museum Studies Program provides students with placement assistance and counseling and with access to a wide range of information on career opportunities in the field, and program faculty use their extensive networks in the field to help identify opportunities and to place students.

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## Interdisdipliarystwes

Course Descriptions

## UMSL Home

The university offers a number of interdisciplinary programs and courses. These programs usually combine course offerings from several departments so the subject is examined from a multidisciplinary approach. While most persons who earn certificates do so in the process of completing their undergraduate degree, non-degree seeking students may complete a certificate. Below are descriptions of these interdisciplinary offerings:

- Bachelor of Liberal Studies degree;
- Bachelor of Interdisciplinary Studies degree;
- Interdisciplinary undergraduate certificates;
- Interdisciplinary minors;
- Interdisciplinary courses.

Interdisciplinary certificates for international or areas studies are housed in the Center for International Studies.

## Bachelor of Liberal Studies (BLS)

The Bachelor of Liberal Studies is a degree program that enables students to combine structured academic emphases in ways more relevant to their interests than the standard academic major.

Students who participate in this program must declare their areas of study (two minors or a minor and undergraduate certificate) at the time they declare that BLS is their intended degree. The plan of study should be approved at the beginning of the program.

To obtain a Bachelor of Liberal Studies (BLS), a student must complete:

- UMSL General Education Requirements General Education (consult General Education section of course listings)
- Communication Skills 6 credit hours
- Managing Information 3 credit hours
- Valuing Skills 3 credit hours
- Social and Behavioral Sciences 9 credit hours
- Humanities 9 credit hours
- Math/Science 12 credit hours
- (for a total of 42 credit hours )

In addition, students must complete the State Requirement (3) and Cultural Diversity Requirement (3) if not met in General Education course selection

- The university requirement of proficiency in English Composition

ENG 1100 - First Year Writing ENGL 3100 - Junior Level Writing

- The university requirement of proficiency in Mathematics (to be completed in first 24 hours at the university)
- A Liberal Studies Concentration (33-41 hours) to consist of designated BLS Minors in participating departments or other units (minimum of 15 hours each) or
- A designated minor and any undergraduate certificate (minimum of 15 hours in each). No course may be used more than once AND
- A capstone course (minimum of 3 hours) selected from one of the minors that make up the identi fed BLS core.

Note: (Not all minors have designated BLS capstone course so students must be careful to pair minors and certificates so that they have a capstone course.)

Also Required

- Minimum of 45 credit hours in upper level course work (2000 or higher)
- Electives 28-42
- A minimum of 120 credit hours
- Overall GPA of 2.0 with minimum GPA of 2.0 with a minimum grade of $\mathbf{C}$ in all courses used in BLS combination areas
- Residency requirement, in addition to campus residency, unless otherwise specified, 9 graded hours in each minor and certificate at 2000 level or above and one capstone course

The College of Arts and Sciences (CAS), Fine Arts and Communication (CoFAC), Business Administration (BA), and the Pierre Laclede Honors College (PLHC) have joined together to make available Liberal Studies combinations involving the following units:

Department of Anthropology, (CAS)
Department of Art and Art History, (CoFAC): Minor in Art History or Studio Art
Department of Blology, (CAS)
College of Business Administration, (BA)
Department of Chemistry and Biochemistry, (CAS)
Department of Communication, (CoFAC)
Department of Criminology and Criminal Justice, (CAS)
Department of Economics, (CAS)
Department of English, (CAS)
Department of Foreign Languages and Literature, (CAS)
Department of History, (CAS)
Pierre Laclede Honors College (PLHC) *
Department of Mathematics and Computer Science, (CAS)
Department of Music, (COFAC)
Department of Philosophy, (CAS)
Department of Physics and Astronomy, (CAS)
Department of Political Science, (CAS)
Department of Psychology, (CAS)
Department of Sociology, (CAS)
Department of Theatre, Dance and Media Studies, (COFAC)
Gender Studies Program, (CAS)
Any undergraduate certificate

## Bachelor of Liberal Studies: Capstone and Other Restrictions

A. Students who are planning to earn a Bachelor of Liberal Studies degree should declare the BLS as their major within the first 90 hours of the program. Declaration past this time may prevent timely graduation as all capstone courses are not available every semester.
B. The School of Social Work, as well as the Colleges of Education, Nursing, and the Joint Engineering Program are not participants in the BLS program.
C. The College of Business is participating, however, NO capstone course will be available for business minors. Students selecting the Business Minor as one of the components for the BLS must select the other minor from among those that do offer a capstone.
D. The Studio Arts minors in the Department of Art and Art History will not have a capstone. Students selecting a Studio Art Minor will have to pair it with a minor that does have a capstone.
E. Undergraduate certificates and Interdisciplinary Minors may be paired with a minor to form a BLS core; however, since certificates and interdisciplinary minors do not have normally capstone courses, they must be paired with a minor that does have a capstone. Students admitted to the Pierre Laclede Honors College who wish to present the Honors Certificate as a minor for the BLS must complete the Honors Capstone (Honors 4100, one or two credit hours) and also direct three to six hours of their Honors independent study requirement to work demonstrably relevant to their BLS program. Students should consult the BLS faculty advisor in the Honors College about this requirement.
F. Either the theatre minor or media studies minor may be used from the Department of Theatre, Dance and Media Studies; however the department offers no capstone at this time. These minors will need to be paired with a minor that does have a capstone.
G. There is no capstone course in Statistics. The student will have to choose a capstone course from either the other area of concentration in Mathematics and Computer Science or another minor.
$H$. The capstone is required in addition to the courses presented for the minor. A minimum grade of $C$ must be earned in the capstone course. The capstone course is not counted toward the minor residency requirement.
I. Students choosing to combine the minor in History of Science and Technology with a minor in the

Philosophy of Science and Technology may use the same course to satisfy the Logic and Methodology requirement for both minors and may select either PHIL 4491 or HIST 4004 as the capstone. However students selecting HIST 4004 must have also taken HIST 2999.
J. The following have identified a Capstone, so at least one of these minors must be included in the BLS program:
AnthropologyANTHRO 4301, Ideas and Explanations in Anthropology
Art \& Art History
One additional 4000 level topics course in Art History
Biology
BIOL 4889, Senior Seminar
Chemistry/Biochemistry
CHEM 3022, Introduction to Chemical Literature (1) and CHEM 3905-Chemical Research (1)and CHEM 4897-Seminar (1)
Communication
One additional 3000/4000 level Communication course.
Criminology \& Criminal Justice
An additional 4000 level course in Criminology and Criminal Justice, not used as part of theminor.
EconomicsECON 4100, Introduction to Econometrics [If this course is used to complete the minor, thestudents must take an additional 4000 level Economic course.]
English
Additional 4000 level English Literature course [Student must identify themselves as using theadditional 4000 level course as a Capstone so additional requirements can be assigned.]
Foreign Languages and Literatures
FRENCH 3211, Contemporary French Culture
GERMAN 3210, German Culture and Civilization
SPANISH 3210 Hispanic Culture and Civilization: Spain [or]
SPANISH 3211, Hispanic Culture and Civilization: Spanish America
History
HIST 4004, Senior Seminar (5 credits)
Honors College*
HONORS 4100, ( 1 or 2 credit hours) and three to six credit hours of HONORS 4900 or 4910 arerequired. *(must be admitted to Honors program)
Mathematics/Computer Science:Computer Science: 4000 Level Course in Computer Science not counted as elective in theminor.
Mathematics: 4000 Level Course in Mathematics not counted as elective toward the minor.
Music:
Select one of the following:
M H L T 4000, Directed Studies (3 credits)
THRY COM 4000, Directed Studies (3 credits)
PDGOGY 4000, Directed Studies ( 3 credits)
PRACTM 4000, Directed Studies (3 credits)
Philosophy
PHIL 4491, Senior Seminar
Physics
PHYSICS 4381, Directed Readings in Physics
Political Science
POL SCI 3950, Senior Seminar in Political Science
Psychology
An additional 4000 level Psychology course beyond Psychology courses presented for the Minor

## Bachelor of Interdisciplinary Studies

The Bachelor of Interdisciplinary Studies degree (B.I.S.) provides a flexible, individualized program of study for the self-directed adult learner. Each student develops the area of study with faculty advisement.

Oversight of the B.I.S. degree is the responsibility of the Interdisciplinary Studies committee, composed of faculty from Arts and Sciences (Humanities, Social Sciences, and Natural Sciences), Business, Education, Engineering, Fine Arts and Communication, and Nursing. The Interdisciplinary Studies Committee will be convened and supported by the Office of the Provost.

## Admission Requirements for the B.I.S. Program

Candidates for the B.I.S. degree must complete an application for admission to the program. The Interdisciplinary Studies Committee approves applications.

- Approved programs of study are well-designed, coherent, structured to meet the student's unique educational goals, and not readily available under any other UMSL degree program.
- Students must have demonstrated the equivalent of academic proficiency required for any other undergraduate degree at UMSL.


## Degree Requirements for the B.I.S. Program

## General Education Requirements

Students must complete the university's general education requirements. For details refer to the general education requirements section of this Bulletin.

## Area of Study

In consultation with faculty and staff advisers, students will carry out an area of study of at least 36 advanced semester hours of graded credit that meets their educational goals. Graded credit consists of degree credit courses in which the student received a letter grade of $A, A-, B+, B, B-C+, C, C-, D+, D, D-$.

Regardless of the focus, theme, or purpose, the area of study should contribute to an advanced level of academic competence and achievement.

## Hour and Grade Requirements

The degree requires completion of 120 semester hours with a 2.0 campus grade point average overall and in the area of study. No more than 15 hours may be taken in one department. At least 45 hours must be earned in courses beyond the introductory level. A minimum of 24 hours of graded credit must be completed in residence at UMSL, of which 18 hours must be in the area of study and completed after admission to the B.I.S. program. Each candidate must be in residence for 24 of the last 30 hours of graded credit (exclusive of courses taken on a satisfactory/unsatisfactory basis).

## Supervised Professional or Service Internship and Independent Research

Credit not exceeding 6 hours may be earned for department-approved professional internship, service internship, or independent research. The projects or activities must be formulated by the student and carried out under the supervision of a faculty member with the approval of the adviser. Students must submit a written report approved by the supervisor upon completion of the projects or activities.

## Interdisciplinary Certificates

## Minor in Environmental Studies

This is an interdisciplinary minor that integrates the natural and physical sciences with the social sciences and humanities to study current environmental problems resulting from human population growth, global climate change, over use of natural resources, pollution and biodiversity loss. A minimum 18 credit hours are required, 9 of which must be in the natural and physical sciences, including the listed Honors College courses, and 9 must be from the social sciences and humanities. A total of 12 credit hours must be taken at or above the 2000 level, and one course at or above the 3000 level. At least 9 credit hours must be take while in residence at UMSL. A minimum GPA of 2.0 is required.

Natural and Physical Sciences ( 9 credit hours):
BIOL 1202, Environmental Biology
BIOL 1821, Introductory Biology: Organisms and the Environment
BIOL 2102, General Ecology
B1OL 3103, General Ecology Laboratory
BIOL 2501, Biology of Plants
BIOL 3122, Tropical Resource Ecology

BIOL 3202, Conservation Biology
BIOL 3203, Conservation Biology Laboratory
BIOL 3302, Introduction to Evolution
BIOL 4102, Behavioral Ecology
BIOL 4192, Applications of Geographic Information Systems
BIOL 4222, Tropical Ecology and Conservation
BIOL 4245, Field Biology
BIOL 4270, Global Climate Change
BIOL 4402, Ornithology
BIOL 4422, Entomology
BIOL 4501, Plant Families
GEOL 1002, Historical Geology
HONORS 2050, Inquires in the Natural Sciences (when topic appropriate)
HONORS 2051, Inquires in the Sciences: Laboratory or Fieldwork (when topic appropriate)
Social Sciences and Humanities ( 9 credit hours):
ANTHRO 1005, Introduction to Biological Anthropology
ANTHRO 3270, Human Ecology: Cultural Collapse and Sustainability
ECON 4160, Geospatial Analysis in the Social Sciences
ECON 4170, Cost-Benefit Analysis
ECON 4550, Natural Resources Economics
INTBUS 4281/INTBUS 5198, Entrepreneurship in the Global Environment
PHIL 2255, Environmental Ethics
POL SCI 3480, Environmental Politics
POL SCI 3595, Studies in Comparative Politics (when topic appropriate)
POL SCI 3850, International Organizations \& Global Problem Solving (when topic appropriate)
POL SCI 3900, Special Readings (when topic appropriate)
POL SCI 4460, Urban Planning and Politics

## Disaster and Risk Management Certificate

The undergraduate certificate program on Disaster and Risk Management offers a multi-disciplinary course of study focusing on the key challenge of developing resilience against disaster-preventing, preparing for, and responding to disasters and catastrophes. It brings together a range of disciplines to provide students with theoretical and practical insights into managing risks posed by natural, accidental, and intentional threats confronting urban communities. The certificate program emphasizes social psychological, organizational, leyal, and political relationships brought to bear on the socio-technical systems designed to prevent, prepare for, or respond to disasters and catastrophes. It provides educational and practical opportunities for students planning careers in public safety, counterterrorism, community and research planning, public policy making, emergency management, leadership in the public sector, and the mass media. The certificate program aims to guide students in learning to manage efforts of public and private institutions to build resilience in their own socio-technical systems and in the community. Each discipline participating in the certificate program brings a distinct perspective to bear on the key issues involved in developing resilience in homeland securizy. Sociology offers a framework on the relationship of socio-technical systems and community organization that will prove conducive to students gaining both theoretical and practical insights into threats posed by disaster and catastrophe.
Undergraduate students earn a certificate on Disaster and Risk Management by completing 18 hours with $\mathfrak{z}$ GPA of 2.0 or better from the following courses:

COMM 3150, Crisis, Disaster, and Risk Communication (3 hrs)
ECON 4160, Geospatial Analysis in the Social Sciences (GIS) ( 3 hrs )
POL SCI 3200, Constitutional Law (3 hrs)
PSYCH/GS 2232, Psychology of Victims ( 3 hrs ) OR
SOC 3250 Sociology of Victimization ( 3 hrs )
SOC 4414, Social Perspectives on Catastrophes and Homeland Security Policies (3 hrs)
Special topic courses relevant to disaster and risk management may be included in the certificate progranı when approved in advance by the Coordinator of the Disaster and Risk Management Certificate.

## Labor Studies Certificate

The Labor Studies Certificate is designed for students who are interested in a focused specialty in labor studies. The 18 credit hour curriculum consists of six credit courses offered over a three-semester period

HIST 2219, U.S. Labor History
ECON 3900, Selected Topic in Economics
POL SCI 1450, Introduction to Labor Studies
POL SCI 3220, Labor Law
POL SCI 3430, Union Leadership and Administration

## Studies in Religions Certificate

A certificate in studies in religions requires the completion of 18 hours with a grade of $C$ or better.

Courses must be chosen from two or more departments (interdisciplinary offerings excluded), and the program must include two or more courses that focus on different major religious traditions. (Courses that fulfill this requirement are marked with an asterisk [*] in the list below.)
In addition, students are encouraged to broaden their understanding of religions and religious experience by enrolling in several courses in which these subjects are studied in philosophical or cultural contexts.
Students must obtain the approval of the coordinator of studies in religions before completing 12 hours toward this certificate.
Requirements
Students must take 18 hours chosen from the following list in accordance with the guidelines above:

```
Anthropology
ANTHRO 2173, Archaeology and Cultures of the Biblical World
ANTHRO 3244, Religion,Magic, and Science
Art
*ART HS 2214, Early Christian and Byzantine Art
ART HS 2225, Medieval Art
English
*ENGL 2240, Literature of the New Testament
*ENGL 2250, Literature of the Old Testament
*ENGL 4950, Special Topics in Literature
*Note: ENGL. }4950\mathrm{ should only be taken when Religious Literature is the topic.
Philosophy
PHIL 1120, Asian Philosophy
PHIL 1185, Philosophy of Religion
PHIL 3302, Medieval Philosophy
Political Science
POL SCI 2610, Ancient and Medieval Political Thought
POL SCI 2650, American Political Thought
```


## Trauma Studies Certificate

The trauma studies certificate is designed for students who are interested in a focused specialty in trauma studies or victim services in addition to their own major. It is appropriate for students in the College of Arts and Sciences or any of the schools of the university. It is particularly appropriate for students wishing to pursue careers in psychology, social work, sociology, criminology, law, public health, or nursing.

## Requirements

A student may earn a trauma studies certificate by completing 18 hours with a GPA of 2.0 or better from at least three departments from the following courses:

Students must complete at least 12 hours from the following group:
Criminology and Criminal Justice
CRIMIN 1120, Criminal Law
CRIMIN 4300, Communities and Crime
CRIMIN 4350, Victimology
Psychology
PSYCH 2232, Psychology of Victims
PSYCH 3295, Selected Projects in Field Placement: Helping Victims of Crime (for three credits only toward certificate).
PSYCH 3390, Directed Studies, if trauma-related topic (for three credits only toward certificate). Please seek approval of the Coordinator of the Trauma Studies Certificate in advance

Social Work
SOC WK 3100, Introduction to Interventive Strategies for Social Work Practice
SOC WK 4601, Abused and Neglected Children
SOC WK 4602, Child Welfare Practicum Seminar
Sociology
SOC 3250, Sociology of Victimization
Students may count up to 6 hours from the following group toward the trauma studies certificate:

```
Criminology and Criminal Justice
CRIMIN 2230, Crime Prevention
CRIMIN 2240, Policing
CRIMIN 4340, Race, Crime, and Justice (same as SOC 4340)
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## Political Science

POL SCI 2400, Public Administration
POL SCI 2420, Introduction to Public Policy
POL SCI 4940, Leadership and Management in Nonprofit Organizations (same as SOC WK 4940 and SOC 4940)

## Psychology

PSYCH 2160, Social Psychology (same as SOC 2160)
PSYCH 2230, Psychology of Women
PSYCH 2245, Abnormal Psychology
PSYCH 4235, Community Psychology

## Social Work

SOC WK 4630, Women's Social Issues
SOC WK 4940, Leadership and Management in Nonprofit Organizations (same as POL SCI 4940 and SOC 4940)

## Sociology

SOC 2102, Introduction to Women's and Gender Studies
SOC 2160, Social Psychology (same as PSYCH 2160)
SOC 3268, Sociology of Conflict
sOC 4340 Race, Crime, and Justice (same as CRIMIN 4340)
SOC 4940, Leadership and Management in Nonprofit Organizations (same as POL SCI 4940 and SOC WK 4940)

Special Topics courses relevant to trauma studies may be included in the certificate when approved in advanze by the coordinator of the trauma studies certificate.

## Interdisciplinary Minors

Minor in American Studies
American Studies is an internationally recognized academic field that involves an interdisciplinary approach to the study of the culture(s) of the United States, its colonial antecedents, and its indigenous peoples.

Students interested in this minor should contact the coordinator of American Studies for advice and information.

Candidates must have a cumulative grade point average of 2.0 or better in the 18 credit hours required for the minor. Three hours of the minor may be taken on a satisfactory/
unsatisfactory basis. Candidates wishing to take American Studies courses from the Honors College (see below) must be members of the Honors College or must have a 3.0 cumulative grade point average.

## Requirements for the Minor

Completion of the American Studies minor requires at least 18 semester credit hours, including at least two courses (six hours) from Section A and at least two courses (six hours) from Section B. The other six hours; may be chosen from Section A, B, and/or C. Please read the special requirements below.
A. Core courses in American Studies (all courses are three credits except where otherwise indicated). At least two of the following core courses are required to qualify for the minor. Of this minimal requirement, one course must be chosen from either American Studies or English and the other from either History or Political Science. Students may take up to two additional courses from this group, and these may be chosen from any department or discipline.

Anthropology<br>ANTHRO 2120, Native Peoples of North America<br>Art and Art History<br>ART HS 1104, Indigenous Arts of North America<br>ART HS 2270, American Art to 1876<br>ART HS 2279, American Architecture<br>English<br>ENGL 1170, American Literary Masterpieces<br>ENGL 1710, Native American Literature<br>ENGL 2710, American Literature I<br>ENGL 2720, American Literature II<br>History<br>HIST 1001, American Civilization to 1865<br>HIST 1002, American Civilization 1865 to Present<br>HIST 1003, African-American History

HIST 1004, The History of Women in the United States

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Honors
HONORS 1230, American Traditions: Social and Behavioral Sciences
HONORS 1310, Non-Western Traditions: Humanities
HONORS 1330, Non-Western Traditions: Social Sciences
Admission to these Honors Seminars requires consent of the dean of the Honors College: note
that depending on instructor and content, HONORS 1210 can fulfill the requirements from this
group in literature/American Studies and HONORS 1230 can fulfill the History/Political Science
requirement. HONORS 1310-1330 can qualify as additional Group A choices when their focus is
on Native American traditions.
Music
M H LT 1060, Introduction to African American Music
MHLT 1070, Introduction to Jazz
Philosophy
PHIL 3307, American Philosophy
Political Science
POL SCI 1100, Introduction to American Politics
POL SCI 2300, State Politics
POL SCI 2350, Introduction to Urban Politics
POL SCI 2650, American Political Thought
POL SCI 2900, Studies in Political Science (when appropriate).
```

B. Optional courses in American Studies (all courses are 3 credits except where otherwise indicated). To complete the American Studies minor, students must choose at least two courses from this group, from any department or discipline, and may choose up to four courses in this group. Courses chosen from this group must be chosen from at least two departments.

Anthropology<br>ANTHRO 3250, American Folklore<br>ANTHRO 3291, Current Issues in Anthropology (when appropriate).

Art and Art History
ART HS 3360, Photography and Society
ART HS 4475, Topics in American Art
ART HS 4481, Topics in Contemporary Art (when appropriate)
Communication
COMM 1050, Introduction to Mass Communication
COMM 2243, Communications in American Politics
COMM 3352, Mass Media in Society
Economics
ECON 2800, History of American Economic Development (same as HIST 2800)
English
ENGL 3800, Topics in Women and Literature (when appropriate)
ENGL 4610, Selected Major American Writers I
ENGL 4620, Selected Major American Writers II
ENGL 4640, American Fiction to World War I
ENGL 4650, Modern American Fiction
ENGL 4930, Studies in Gender and Literature (when appropriate) (same as GS 4930)
ENGL 4950, Special Topics in Literature (when appropriate)
History
HIST 2012, The Indian in American History, 1600-1900
HIST 2016, African-American History: From Slavery to Civil Rights
HIST 2017, African-American History: From Civil Rights to Black Power
HIST 2043, History of Crime and Justice (same as CCJ 3043)
HIST 2219, U.S. Labor History
HIST 2800, History of American Economic Development (Same as ECON 2800)
HIST 3000, Selected Topics in History (when appropriate)
HIST 3031, History of Women in the United States (same as GS 3031)
HIST 4004, Senior Seminar ( 5 credits: when appropriate)
HIST 4013, United States History for the Secondary Classroom

## Honors College

(When topics are appropriate, any of the seminars below can qualify as an "option" course for
the American Studies minor. Admission to these courses requires the consent of the dean of the Honors College.)

HONORS 2010, Inquiries in the Humanities
HONORS 2020, Inquiries in the Fine and Performing Arts
HONORS 2030, Inquiries in the Social Sciences
HONORS 2070, Inquiries in Education
HONORS 3010, Advanced Seminar in the Humanities
HONORS 3020, Advanced Seminar in the Fine and Performing Arts
HONORS 3030, Advanced Seminar in the Social Sciences
HONORS 3070, Advanced Seminar in Education
HONORS 3530, Research Seminar: Social and Behavioral Sciences
Philosophy
PHIL 4410, Significant Figures in Philosophy (when appropriate)
Political Science
POL SCI 2280, Judicial Politics and Policy
POL SCI 2320, African Americans and the Political System
POL SCI 2380, The Politics of Gender in the United States (same as GS 2380)
POL SCI 3200, Constitutional Law
POL SCI 3210, Civil Liberties
POL SCI 3300, The American Presidency
POL SCI 3331, Congressional Politics
POL SCI 3340, Politics and the Media
POL SCI 3350, Political Parties and Elections
POL SCI 3390, Studies in American Politics (when appropriate)

## Sociology

SOC 1040, Social Problems
SOC 3268, The Sociology of Conflict
SOC 4316, Power, Ideology and Social Movements
SOC 4360, Sociology of Minority Groups (same as GS 4360)
SOC 4380, Selected Topics in Social Policy (when appropriate)
C. American Studies elective courses (courses are three credit hours unless otherwise indicated). Up to two courses from this group may be used for the American Studies minor. When two courses are chosen form this group, they must be chosen from different departments.

Anthropology
ANTHRO 2126, Archaeology of Greater St. Louis
ANTHRO 2131, Archaeology of Missouri
ANTHRO 2132, Archaeology of North America
ANTHRO 2138, African-American Archaeology
Art and Art History
ART HS 2281, Art Since 1960
Communication
COMM 3332, Intercultural Communications
Criminology and Criminal Justice
CRIMIN 2240, Policing
CRIMIN 4340, Race, Crime and Justice (same as SOC 4340)
English
ENGL 4060, Adolescent Literature
ENGL 4740, Poetry since World War II
ENGL 4760, Modern Drama
ENGL 4770, Modern Poetry
History
HIST 2001, United States History: Colonial America to 1763
HIST 2003, United States History: Nationalism and Sectionalism, 1815 to 1860
HIST 2004, United States History: 1860-1900
HIST 2005, The Modernization of the United States
HIST 2006, Recent United States History
HIST 2014, American Foreign and Military Affairs, 1900-Present
HIST 2041, Topics in American Constitutional History
HIST 3031, History of Women in the United States

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Media Studies
MEDIA ST 2218, Public Policy in Telecommunication
MEDIA ST 3355, Media law and Regulation
Political Science
POL SCI 2290, Gender and the Law
POL SCI 2420, Introduction to Public Policy
POL SCI 2820, United States Foreign Policy
POL SCI 3330, Introduction to Political Behavior
POL SCI 3460, The Politics of Poverty and Welfare
Social Work
SOC WK 2200, Social Welfare as a Social Institution
SOC WK 3210, Social Issues and Social Policy Development
Sociology
SOC 1040, Social Problems
SOC 2180, Alcohol, Drugs and Society
SOC 3202, Urban Sociology
```

In addition, courses with variable topics such as Topics in..., Studies in..., and seminars may be taken when the topics are appropriate. When in doubt, see the coordinator of American Studles; such courses must be approved for inclusion in your American Studies minor before the semester registration deadline.

## Minor in Classical Studies

The minor in Classical Studies is an interdisciplinary course of studies intended to encourage undergraduates in various disciplines to come to a fuller awareness of the cultures of ancient Greece and Rome and of the classical tradition that underlies much of modern Western civilization. In addition to appealing to any student's curiosity about the early stages of society in the West, the minor provides an especially valuable supplement to those who are majoring in many liberal arts areas including history, literature, philosophy, foreign languages, and art.

Students pursuing the minor will acquire a foundation in either Greek or Latin. They may choose to use either sequence to fulfill the foreign language requirement in the College of Arts and Sciences.

## Requirements

Candidates for the minor must complete 19 credit hours of course work including:

```
LATIN 1001
LATIN 1002 OR GRK ANC 1001
GRK ANC }100
and three courses from the following list and any other course approved by the coordinator:
ART HS 2211, Art and Archaeology of the Ancient World
ART HS 2212,Greek Art and Archaeology
ART HS 2213, Roman Art and Archaeology
ART HS 4411, Topics in Ancient Art and Archaeology
ENGL 1200, Myth
GRK ANC 2001, Intermediate Ancient Greek Language and Culture
HIST 2081, Rome: The Republic and Empire
LATIN 2101, Intermediate Latin Language and Culture
PHIL 3301, Ancient Philosophy
PHIL 4401, Plato
PHIL 4402, Aristotle
```


## Minor in Legal Studies

The minor in Legal Studies is open to all undergraduate students at UMSL, whatever their major field. It offers a secondary field of concentration in one of the most important areas of social life. Students may use the minor as a complement to their major, as an additional qualification for career opportunities, or as general education.

This interdisciplinary minor coordinates liberal arts courses related to law. A faculty member in Legal Studies will advise students and will work with their major advisers in planning appropriate courses.

## Candidates must take:

INTDSC 1200, Foundations of Law: An introduction to Legal Studies (crosslisted as POL SCI 1200 and CRIMIN 1200), and five courses from the following list. At least three courses must be taken at the 3000 level and above. No more than two courses from a single discipline may be included in the minor.

BUS AD 1900, Introduction to Personal Law

BUS AD 2900, Legal Environment of Business
BUS AD 3900, Business Law: Contracts, Sales, Secured Transactions, Bankruptcy
BUS AD 3901, Business Law: Negotiable Instruments, Business Organizations
BUS AD 3980, The Law of International Business Transactions
CRIMIN 1100, Introduction to Criminology and Criminal Justice
CRIMIN 1120, Criminal Law
CRIMIN 1130, Criminal Justice Policy
CRIMIN 2250, The Courts
CRIMIN 3345, Rights of the Offender
CRIMIN 4300, Communities and Crime
ECON 2650, Law and Economics
HIST 2041, Topics in American Constitutional History
HIST 2085, Medieval England
MEDIA ST 3355, Media Law and Regulation
PHIL 4487, Philosophy of Law (same as CCJ 4487)
POL SCI 2260, Law, Politics and Society
POL SCI 2280, Judicial Politics and Policy
POL SCI 2290, Gender and the Law
POL SCI 3200, Constitutional Law
POL SCI 3210, Civil Liberties
POL SCI 3260, The Supreme Court
POL SCI 3290, Studies in Public Law
POL SCI 4850, International Law

## Minor in Public Affairs Journalism

The minor in Public Affairs Journalism provides students with an overview of media operations, including basic writing and reporting skills, as well as a specialty area of advanced study. Ordinarily the specialty or cognate area focuses on a particular field, such as consumer affairs, economics, or political science -- areas in which a journalist would specialize. Cognate areas are proposed by students seeking the minor and approved by a faculty committee.

A minimum grade point average of 2.0 is required in the minor. No more than 3 hours credit may be taken on a satisfactory/unsatisfactory basis. A total of 18 hours is required for the minor. At least 12 of the 18 required hours must be taken at UMSL.

## Requirements

## A. Nine hours in communication/English professional training:

ENGL 3140 or MEDIA ST 3214, News Writing
ENGL 3180, Reporting or MEDIA ST 2212, Broadcast Writing and Reporting
ENGL 4890, Writing Internship, or MEDIA ST 3394, 3396 or 3397, Internship

## B. Nine hours in public affairs at the $\mathbf{3 0 0 0}$ level or above

1.Students earning a writing certificate or majoring in communication with a mass communication emphasis must take 15 hours (at least 9 of these at the 3000 level or above) in economics, political science, or sociology.
2. Students majoring in economics, political science, or sociology must take nine hours (in addition to the required English/communication courses) at the 3000 level or above in addition to English/communication courses chosen from those listed above and/or in the two cognate areas outside their major (i.e., economics, political science, or sociology).

A list of courses applicable to the minor is available from the coordinator.

## Minor in Urban Studies

A minor in urban studies includes 18 hours of course work. Candidates must have a cumulative grade point: average of 2.0 or better in the minor. Courses taken on a satisfactory/ unsatisfactory basis may not be applied to the minor. Special topics courses relevant to urban studies may be included in the minor when approved in advance by the coordinator of the urban studies minor.

## Requirements

Students must take:
Six courses selected from the following list, at least three courses at the $\mathbf{3 0 0 0}$ level or above. No mort: than two courses from a single discipline may be included in the minor.

Courses Applicable to the Minor
ANTHRO 3250, American Folklore
ART HS 2279, American Architecture
ART HS 3365, The Artist and the City


[^0]:    1. "Education Records" are those records, files, documents, and other materials that contain information directly related to a student and are maintained by the university. Those records, made available under The Family Educational Rights and Privacy Act of 1974, are student financial aid, the student's cumulative advisement file, student health records, disciplinary records, admissions file, and academic record. Confidential letters and statements of recommendation that were placed in student credential folders at the Office of Career Placement Services after January 1, 1975, are also made available, If the student has not waived the right to view these recommendations.
    The University of Missouri St. Louis "Education Records" do not include:
[^1]:    5) Biochemistry and Biotechnology Elective Courses- 6 credit hours chosen from the following courses:
    BIOL 4550, Bacteria Pathogenesis
    BIOL 4602, Molecular Biology
    BIOL 4612, Molecular Genetics of Bacteria
    BIOL 4614, Biotechnology Laboratory I
    BIOL 4615, Biotechnology Laboratory II
