University of Maryland University College

2010–2011 Catalog

School of Undergraduate Studies

www.umuc.edu

UMUC in Maryland and Around the World

At University of Maryland University College (UMUC), a high-quality education is always within reach. UMUC is dedicated to offering on-site and online courses and resources to adult students in Maryland and around the world. Under contract to the U.S. Department of Defense, UMUC is one of the largest providers of education to the U.S. military worldwide and serves 36,000 active-duty military servicemembers. With more than 150 worldwide locations in 27 countries and more than 100 undergraduate and graduate degree and certificate programs offered entirely online, UMUC makes it possible to earn a widely respected degree from just about anywhere.

UMUC's commitment to students around the globe extends far beyond providing access to excellent degree programs. An online academic and administrative services portal, MyUMUC, makes it simple for students to register for courses, pay tuition, and order textbooks and other supplies when it's convenient for them. Students can also access academic and career advising, financial aid counseling, library services, and much more online via the university's Web site or by phone or e-mail. All over the world, UMUC gives its students what they need to succeed, putting goals within their reach.

This catalog provides the degree requirements and recommended curriculum for students who begin continuous study on or after August 1, 2010. (Details are listed on p. 7.) Students should keep their catalog available for easy reference throughout their degree program.

From the Dean

Whether this is your first time at UMUC or you are returning to advance toward your degree, you will find the School of Undergraduate Studies is committed to supporting you as a lifelong learner. In today's fast-paced world, the demands on you are greater than ever. To help you gain the education you aspire to, we offer high-quality academic programs in innovative delivery formats and educational programs that are relevant to your needs in the workplace and in life.

I urge you to use this catalog as your reference throughout your progress toward your degree, as it contains information and requirements essential to your success. But don't forget that we continue to develop new programs and support services, and I hope you will keep up with new opportunities through your academic department and your online portal (MyUMUC).

I wish you the very best in your educational and career goals. Please stay in touch and let me know how we are doing in our educational partnership with you. I welcome your e-mail comments at *deanundergrad@umuc.edu.*

Sincerely,

Marie A. Cini

Marie A. Cini, PhD
Vice Provost and Dean,
School of Undergraduate Studies

POLICY STATEMENT

This publication and its provisions do not constitute, and should not be regarded as, a contract between UMUC and any party or parties. At the time of publication, reasonable effort was made to ensure the factual accuracy of the information. However, this publication is not a complete statement of all policies, procedures, rules, regulations, academic requirements, and tuition and fees applicable to UMUC, its students, or its programs. In addition, changes or additions may be made to the policies, procedures, rules, regulations, and academic requirements set out in this publication. UMUC reserves the right to make these changes and additions to the information in this publication without prior notice. When a curriculum or graduation requirement is changed, it is not made retroactive unless the change is to the student's advantage and can be accommodated within the span of years normally required for graduation. *See additional policies on inside back cover.*

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Welcome to UMUC

A UNIQUE INSTITUTION

University of Maryland University College (UMUC) is unique among institutions of higher education. From its founding in 1947, UMUC was designed to meet the educational needs of adult students—students who must balance study with the demands of work and family life.

Today UMUC has grown to be the largest public university in the nation, serving students throughout the state, the country, and the world. Yet its focus on providing open access to high-quality educational programs and services—eliminating the barriers that can keep students from achieving their educational goals—remains unchanged.

CARRYING OUT THE MISSION

Students First
At UMUC, student success is of paramount importance. The university seeks not only to help students fulfill their current education goals but also to create an educational partnership that will last throughout their lives.

To that end, the university looks first for ways to ensure that students can easily access programs and services. Admission policies are designed to simplify the process (standardized tests are not required), making it possible for students to apply and register at the same time.

As a global university, UMUC makes it possible for students to take classes any time, any place, by offering the largest selection of online programs available—in addition to classes at sites throughout Maryland and the metropolitan Washington area and at military sites all over the world. Student services can also be accessed online and by phone, as well as on-site.

Convenience and flexibility are not the only concern, however. UMUC seeks to create a learning environment that students will find respectful of their diverse backgrounds, inclusive, responsive, and relevant.

Recognizing that financial concerns are often the biggest obstacle to higher education, UMUC also strives to keep tuition costs low and provides numerous financial aid opportunities, including scholarships for military or community college students.

Excellence
An accredited university, UMUC is dedicated to providing the highest quality programs and services to its students and ensuring excellence in its online and on-site courses.

In providing these programs, UMUC relies on a renowned faculty of scholar-practitioners—teachers who bring real-world experience to courses—and the use of the latest technologies. UMUC also is able to provide a wealth of resources to its students because of its place within the University System of Maryland.

The success of UMUC's efforts is evident. Year after year, UMUC continues to garner awards from such notable organizations as the University Continuing Education Association, the Sloan Consortium, and the Maryland Distance Learning Association.

Innovation
UMUC has always looked for new and better ways to serve students. Long before the online revolution, UMUC was delivering courses to students at distant locations, using any and all available technologies—from interactive television to voice mail. Today, students access both courses and services online, using WebTycho, UMUC's proprietary course-delivery system, and MyUMUC, the university's online gateway to services and information. UMUC's faculty also strive to find new ways to best use these technologies to assist their students' learning.

FACILITIES AND PROGRAMS

UMUC offers degree programs from the associate's level to the doctorate. Most undergraduate and graduate programs are available online. These academic programs are administered by the School of Undergraduate Studies and the Graduate School of Management and Technology, which includes the Institute for Global Management. UMUC also provides noncredit leadership development programs through its National Leadership Institute (NLI).

The university's headquarters are located in Adelphi, Maryland, and also serve as home to a prestigious art collection and a conference facility, the Inn and Conference Center, operated by Marriott. Most classes and services, however, are provided at more than 150 sites worldwide, as well as through cutting-edge technology—online via the university's proprietary course delivery system, WebTycho.

FOR ASSISTANCE

Assistance is available by e-mail at *info@umuc.edu* or by phone at 800-888-UMUC (8682).

School of Undergraduate Studies

The mission of the School of Undergraduate Studies at University of Maryland University College is to provide open access to quality undergraduate educational opportunities to women and men around the world, including residents of the state of Maryland, members of the U.S. Armed Services, and national and international students pursuing a university education on-site and online. It seeks to produce graduates who are well prepared to be responsible citizens in a global society, as well as effective participants in the complex, fast-changing world of work.

The School of Undergraduate Studies is committed to meeting undergraduate students' needs for lifelong learning by providing innovative delivery of high-quality educational programs, ensuring substantive and relevant curricula, and recognizing the value of experiential learning. At the undergraduate level, UMUC offers the Associate of Arts (available only to active-duty military personnel and other special populations), the Bachelor of Arts, the Bachelor of Science, and the Bachelor of Technical and Professional Studies degrees, as well as a wide range of undergraduate certificates.

PREPARING CITIZENS FOR THE 21ST CENTURY

UMUC prepares graduates to be effective professionals and citizens in their organizations, communities, and families. The university values the contributions of both a broad-based education and specific disciplines to the undergraduate experience and thus incorporates cross-curricular context and analytical approaches in all programs to complement practice.

Instruction and curricula at UMUC are based on the belief that certain abilities are the hallmarks of successful learning. UMUC expects students to demonstrate knowledge and skills not only in the major areas of study, but also in critical analysis, reasoning, and problem solving; diverse cultures and historical periods; the use of technology; key concepts and principles of the natural, social, and behavioral sciences; information literacy; effective writing and communication; mathematical and quantitative reasoning; and the application of frameworks for ethical decision making. These hallmarks of a UMUC undergraduate education are instilled through a broad foundation in general education in combination with a strong and focused major area of study. Students' mastery of these abilities is planned and assessed throughout their program of study.

For their core studies, students may choose one of 33 majors from a wide variety of academic fields, including business, cybersecurity, humanities, communications, biotechnology, social sciences, legal studies, environmental management, gerontology, and fire science. (A chart of available programs is on pp. 10–11.) Academic minors are available in 38 different areas. The majors and minors provide focused courses of study that are developed and kept current through consultation with faculty, employers, professional and educational organizations, and other experts in the field. These academic programs prepare students for the modern workplace and also help working students put their current knowledge into a broader context.

Recognizing the importance of lifelong learning, UMUC also offers 31 undergraduate certificates covering specific content areas in business and management, communications, computing and technology, gerontology, paralegal studies, and science and security. Certificates are especially valuable for students who wish to refresh their skills and knowledge, advance to a higher level or different specialty in the workplace, or earn a credential for career advancement while progressing toward the bachelor's degree. (Full descriptions of certificates begin on p. 88.) Courses toward these certificates may also be applied toward the bachelor's degree.

SERVING ADULT STUDENTS

UMUC welcomes all students and helps them achieve their educational goals but has a special focus on the needs of adult students in the workforce. In 2009, 75 percent of UMUC undergraduates worked full-time, and nearly half were working parents. Currently, the median age for stateside undergraduate students is 34 years old.

In recognition of the diverse educational goals and aspirations of its students, the university uses a variety of strategies to ensure access and facilitate degree completion. Knowing that adult students bring experience as well as a willingness to learn, UMUC acknowledges the value of that experience by incorporating the assessment of nontraditional learning in the evaluation of students. Since adult students may have gained college-level learning from multiple sources, UMUC offers a number of innovative credit options that recognize the learning achieved through work and life experience and accelerate progress toward the degree. These options (described on pp. 232–34) include Cooperative Education, which offers credit for new learning in the workplace, and Prior Learning, which offers credit for college-level learning acquired through previous work or life experience. UMUC also accepts credit from community college coursework and a variety of other sources, including military service credit and credit by examination (described on pp. 235–37).

UMUC understands the demands of balancing work, family, and study and responds by offering undergraduate classes at convenient locations and times, including evenings and weekends. Courses are also provided in innovative formats, including accelerated sessions, online delivery, and hybrid courses that combine on-site and online delivery. The rapid growth in undergraduate enrollments at UMUC testifies to the convenience, flexibility, and substantive content of its academic offerings in all formats.

EDUCATIONAL PARTNERSHIPS

UMUC is dedicated to collaboration and cooperation with other Maryland educational institutions, both public and private, and actively seeks partnerships with those institutions to benefit Maryland citizens. For 60 years, UMUC has proudly served the U.S. military through its educational partnerships in Europe and Asia. The university also reaches out through educational collaborations around the world.

In support of the university's mission to extend access to educational opportunities to Maryland's adult students, UMUC has formed alliances with all 16 Maryland community colleges (listed at right), enabling students to earn an associate's degree at an allied community college and finish a bachelor's degree by completing required coursework at UMUC. These alliances offer students a seamless transition between curricula through linked degree programs. Numerous locations in Maryland and the Washington, D.C., area and online courses enable students to complete associate's and bachelor's degrees conveniently close to home.

UMUC's partnerships with Maryland community colleges have expanded further with the creation of several specialized programs. The Bachelor of Technical and Professional Studies programs in biotechnology (described on p. 18) and laboratory management (described on p. 63) are joint initiatives with several community colleges in Maryland. Special UMUC scholarships are also available for graduates from Maryland community colleges.

UMUC is a charter member of MarylandOnline, a consortium of Maryland community colleges and universities formed to encourage collaboration among institutions across Maryland and to extend resources for the development and delivery of online courses.

UMUC also works to develop strong strategic partnerships with local and national leaders in business and industry, government, and nonprofit organizations and is an important partner in the region's economic development.

UMUC values employers' viewpoints. In 2010, the School of Undergraduate Studies convened advisory councils made up of corporate, governmental, and nonprofit leaders to review every one of its degree programs and identify the most current and workplace-relevant learning outcomes. Consistent with its mission of bringing convenient and relevant learning opportunities to the workforce, UMUC has developed strong relationships with many prominent employers in the area and around the country, including the American Bankers Association, the Federal Bureau of Investigation, Northrop Grumman IT, and Geico. UMUC has developed other customized programs for employers and organizations across the country. The university has developed articulated programs with other educational institutions nationwide—including community colleges across the United States—and internationally, including Far East National University and Irkutsk State University in Russia, and the Higher School of Insurance and Finance in Bulgaria.

FOR MORE INFORMATION

For more information about UMUC and the School of Undergraduate Studies, students should contact the university by phone at 800-888-UMUC or by e-mail at *umucinfo@umuc.edu.*

ALLIANCE PARTNERS INCLUDE

- Allegany College of Maryland
- Anne Arundel Community College
- Baltimore City Community College
- Carroll Community College
- Cecil Community College
- Chesapeake College
- College of Southern Maryland
- Community College of Baltimore County
- Frederick Community College
- Garrett College
- Hagerstown Community College
- Harford Community College
- Howard Community College
- Montgomery College
- Prince George's Community College
- Wor-Wic Community College

BACHELOR'S DEGREE REQUIREMENTS

At the undergraduate level, UMUC offers the Bachelor of Arts (BA), Bachelor of Science (BS), and Bachelor of Technical and Professional Studies (BTPS) degrees, as well as 31 certificates. The Associate of Arts degree, the Bachelor of Science in general studies, and several other certificates are available only to active-duty military personnel and others who conform to special stipulations. The Bachelor of Technical and Professional Studies degree programs are available only to students who have earned the Associate of Applied Science degree from a community college with which UMUC has an appropriate articulation agreement.

Except for those restricted programs, current UMUC degree programs are open to UMUC students anywhere in the world. However, offerings sufficient to complete every program may not be available at every location or in every format. Students should consult advisors, current schedules, and site-specific materials to determine which programs they may normally expect to complete from their geographic location.

Requirements for degrees vary according to the major and minor. The requirements that all candidates for the bachelor's degree must meet are summarized in the following sections.

EXPECTATIONS

UMUC aims to produce graduates who are well prepared to be responsible citizens of a global society as well as effective participants in the complex, fast-changing world of work. A bachelor's degree from UMUC offers a multidimensional experience, combining a solid educational foundation with cross-curricular breadth and focused study in an academic discipline. Through that experience, UMUC graduates develop and demonstrate the hallmarks of the educated person: intellectual ability, curiosity, and flexibility; fundamental skills in reasoning, analysis, investigation, and expression; understanding of the principles of scientific and intellectual inquiry; awareness of global and historical context; and civic and ethical responsibility.

The UMUC degree begins with basic intellectual tools, ensuring through the general education and other degree requirements that students are able to demonstrate

- Effective writing and oral communication skills
- Competence in the use of information technology
- Competence in information literacy skills
- Competence in mathematical and quantitative reasoning skills
- Competence in critical analysis, critical reasoning, and problem solving
- Understanding of key concepts and principles of the natural, social, and behavioral sciences
- Knowledge of diverse cultures and historical periods
- Understanding of frameworks for ethical decision making and the ability to apply them

UMUC conducts learning outcomes assessments to measure and improve student learning in these areas as well as in specific disciplinary knowledge and skills.

In pursuit of an academic major (and minor), the UMUC student acquires mastery of a considerable body of knowledge in a specific academic subject area or group of related subjects. Each major provides clearly articulated learning outcomes for the knowledge, skills, and abilities a student is expected to acquire in completing the major.

REQUIREMENTS

In general, the UMUC degree requirements that apply to a student are those that were in effect when the student began continuous enrollment in any public institution of higher education in Maryland (including UMUC). If the student has not been continuously enrolled, the requirements that apply are those in effect at UMUC when the student resumes continuous enrollment. To be considered continuously enrolled, degree-seeking students must be or have been enrolled at UMUC or another Maryland public institution of higher education and have had no more than two sequential years of nonenrollment. When a continuously enrolled student chooses to change his or her degree program, the student may be subject to all degree requirements in effect at the time of the change.

The following requirements for the BA, BS, and BTPS are applicable to students who enroll on or after August 1, 2010.

BACHELOR'S DEGREE REQUIREMENTS

GENERAL EDUCATION REQUIREMENTS — CREDITS

Note: Courses applied to general education requirements may not be applied toward major, minor, or elective requirements and may not be taken pass/fail.

A. Communications — 12

WRTG 101/101X (3 credits)
Must be completed within the first 18 credits. Placement test required. May not be earned through credit by examination.

Another writing course (3 credits)
All 3-credit WRTG courses (except WRTG 288, 388, 486A, or 486B); ENGL 102, 294, 303, and 485; and JOUR 201 apply.

A third course in writing or a course in speech communication (3 credits)
All 3-credit COMM, SPCH, and WRTG courses (except 486A and 486B); ENGL 102, 294, 303, and 485; and JOUR 201 apply.

An upper-level advanced writing course (3 credits)
WRTG 391/391X, 393/393X, and 394/394X apply.
May not be earned through credit by examination.

No more than 3 credits in writing may be earned by examination.

B. Arts and Humanities — 6

One course that offers a historical perspective (any 3-credit ARTH or HIST course except ARTH 100).

One 3-credit course chosen from the following disciplines: ARTH, ARTT, ASTD (depending on course content), HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language.

The two courses must be in different disciplines.

C. Behavioral and Social Sciences — 6

One 3-credit course each in two of the following disciplines: AASP (AASP 201 only), ANTH, ASTD (depending on course content), BEHS, CCJS (CCJS 100, 105, 350, 360, 432, 453, 454, and 461 only), ECON, GEOG, GERO (except GERO 341, 342, 351, and 353), GVPT, PSYC, SOCY, or WMST (WMST 200 only).

D. Biological and Physical Sciences — 7

A science lecture course (3 credits) with related laboratory course (1 credit) or a science course combining lecture and laboratory (4 credits).

Any other science course (3 credits).

Courses from the following disciplines satisfy both requirements: ASTR, BIOL, CHEM, GEOL, NSCI, PHYS, biotechnology, botany, entomology, general science, and zoology.

E. Mathematics — 3

MATH 106, MATH 107, or a course at or above the level of college algebra.

Must be completed within the first 18 credits. Placement test required.

Note: MATH 115 (or MATH 107–108) is required for the majors in computer science and environmental management.

F. Interdisciplinary or Emerging Issues — 7

One course (LIBS 150) in information literacy and research methods (1 credit), which must be completed within the first 18 credits.

A total of 6 credits in computing courses as follows:

- IFSM 201 or CMST 303 (3 credits)
- An additional computing course appropriate to the academic major (3 credits)

Students should refer to the specific major for requirements or recommendations. Unless otherwise specified, upper- or lower-level courses in CMIS, CMIT, CMSC, CMST, CSIA, and IFSM; ACCT 326; and LGST 360 and 363A apply. **Note:** Either IFSM 300 or ACCT 326 is required for majors in emergency management, homeland security, and all business-related fields.

Total General Education Requirements — 41

MAJOR, MINOR, AND ELECTIVE REQUIREMENTS — CREDITS

A. Academic Major — 30–38

The number of credits required to complete an academic major varies according to academic program. At least half the credits earned within the major must be upper level (i.e., earned in courses numbered 300 and higher) and must be earned through UMUC. No grade may be lower than C. Specific coursework is prescribed for each major and is described in the following chapter.

Students may receive a dual major upon completion of all requirements for both majors, including the required minimum number of credits for each major and all related requirements for both majors; however, the same course may not be used to fulfill requirements for more than one major. Certain restrictions (including use of credit and acceptable combinations of majors) apply for double majors. Students may not major in two programs with excessive overlap of required coursework. Students should consult an advisor before selecting a double major.

B. Academic Minor — 15–17

Choosing a minor is strongly encouraged even though it is optional for all but accounting majors. Students may not take a major and minor in the same area and may not receive a dual minor. The number of credits required to complete an academic minor varies according to academic program. At least half the credits earned within the minor must be upper level (unless otherwise specified) and must be earned through UMUC. No grade may be lower than C. Specific coursework is prescribed for each minor and is described in the following chapter.

C. Electives	24–34

Electives may be taken in any academic discipline. No more than 21 credits may consist of vocational or technical credit (described on p. 236). Pass/fail credit, up to a maximum of 18 credits, may be applied toward electives only.

Total Major, Minor, and Elective Requirements	**79**

Overall Bachelor's Degree Requirements

In addition to the general education requirements and the major, minor, and elective requirements listed on p. 8, the overall requirements listed below pertain to all bachelor's degrees.

1. Students must complete a minimum of 120 credits.
2. Students must maintain a minimum grade point average of 2.0 (C) overall and a minimum grade of C (2.0) for any course applied to the academic major or minor.
3. Within the 120 credits required, the following coursework must be taken through UMUC:
   - 30 credits (normally the final 30)
   - Half of the required number of credits within both the major and the minor
   - 15 credits at the upper level (i.e., earned in courses numbered 300 to 499), preferably within the major or minor
4. At least 45 credits must be upper level and include
   - At least one-half of the credits required for the major
   - 3 credits in advanced writing

   The remaining upper-level credits may be earned in any part of the curriculum.
5. At least half the required number of credits for any academic major or minor must be earned through graded coursework. Credit earned by examination, portfolio assessment, internships/Cooperative Education, or non-collegiate training does not count as graded coursework.

Total Degree Requirements	**120 Credits**

Second Bachelor's Degree

At UMUC, students who have already received a bachelor's degree from UMUC or from another regionally accredited institution can broaden their education by earning a second bachelor's degree with a different major. However, students may not earn a second bachelor's degree with a double major. Students may not earn a second degree in general studies and, except for the accounting degree which has a mandatory minor, may not obtain an academic minor or a second associate's degree within the second bachelor's degree.

A student must have received the first bachelor's degree to be eligible to begin a second. For a second bachelor's degree, the student needs to complete at least 30 credits through UMUC after completing the first degree. The combined credit in both degrees must add up to at least 150 credits.

To qualify for academic honors in a second bachelor's degree, the student must complete at least 45 new credits through UMUC with the requisite grade point average.

Students must complete all requirements for the major. All course prerequisites apply. If any of these requirements were satisfied in the previous degree, the remainder necessary to complete the minimum 30 credits of new courses should be satisfied with courses related to the major. For purposes of determining what major requirements apply to a given student, the applicable date is the date the student started coursework at UMUC after being admitted into the second undergraduate degree program. As with other degrees, continuous enrollment at UMUC is required. A minimum grade point average of 2.0 in all courses taken through UMUC is required for graduation.

All students need to be aware of what is entailed in a second bachelor's degree. Before beginning work or considering non-traditional options toward a second degree, each student should consult an academic advisor. Advisors will be glad to explain the requirements for a second bachelor's degree and clarify its limitations.

BACHELOR'S DEGREE REQUIREMENTS

PROGRAM CHOICES

DISCIPLINE	MAJOR	MINOR	CERTIFICATE(S)
Accounting	p. 13	p. 14	Introductory accounting, p. 89 Advanced accounting, p. 89 Fraud investigation, p. 95
African American studies		p. 15	
Art		p. 15	Computer graphics and design, p. 91
Art history		p. 15	
Asian studies	p. 16	p. 17	
Biology		p. 17	
Biotechnology	p. 18		
Business administration	p. 19	p. 21	Business project management, p. 90 Management foundations, p. 99
Business law and public policy		p. 21	
Business supply chain management		p. 22	
Communication studies	p. 22	p. 24	Web design, p. 102 Workplace communications, p. 103
Computer and information science	p. 24		Database design and implementation, p. 92 Object-oriented design and programming, p. 99 UNIX system administration, p. 101
Computer information technology	p. 26		Computer networking, p. 92
Computer science	p. 27		Game development, p. 95
Computer studies	p. 29		Desktop publishing, p. 93 Internet technologies, p. 98 Visual Basic programming, p. 102
Computing		p. 31	
Criminal justice	p. 31	p. 32	Criminal justice intelligence, p. 92
Customer service management		p. 33	
Cybersecurity	p. 33		Information assurance, p. 97
Economics		p. 35	
Emergency management	p. 35	p. 37	
English	p. 37	p. 39	
Environmental management	p. 39	p. 40	
Finance	p. 41	p. 42	Financial management, p. 94
Fire science	p. 43	p. 44	
Forensics		p. 45	
General studies	p. 45		

PROGRAM CHOICES (continued)

DISCIPLINE	MAJOR	MINOR	CERTIFICATE(S)
Gerontology	p. 46	p. 47	Health issues for the aging adult, p. 96
Global business and public policy	p. 47		
Graphic communication	p. 49		Web design, p. 102
History	p. 51	p. 52	
Homeland security	p. 53	p. 54	
Humanities	p. 55	p. 56	
Human resource management	p. 56	p. 58	Human resource management, p. 97
Information systems management	p. 59		Database management, p. 93 Information management, p. 98 Project management for IT professionals, p. 100 Visual Basic programming, p. 102
International business management		p. 60	
Investigative forensics	p. 61		
Journalism		p. 62	
Laboratory management	p. 63		
Legal studies	p. 64		Paralegal studies, p. 100
Management studies	p. 66		Management foundations, p. 99
Marketing	p. 67	p. 69	
Mathematical sciences		p. 69	
Microbiology		p. 70	
Natural science		p. 70	
Philosophy		p. 70	
Political science	p. 71	p. 72	Terrorism and institutions: Prevention and response, p. 101
Psychology	p. 72	p. 74	Clinical mental health care, p. 91 Human development, p. 96
Social science	p. 74		Applied behavioral and social sciences, p. 90 Diversity awareness, p. 94
Sociology		p. 76	
Spanish			Workplace Spanish, p. 103
Speech communication		p. 76	
Strategic and entrepreneurial management		p. 77	
Women's studies		p. 77	

BACHELOR'S DEGREE CURRICULA

MAJORS AND MINORS

The academic major requires 30 to 38 credits, while the minor (optional) requires 15 to 17 credits. Students must maintain a minimum grade point average of 2.0 (C) and earn a minimum grade of C (2.0) for any course applied to the major or minor.

Half of the credit applied toward any major must be upper level, and at least half of the credit for any major or minor must be taken through UMUC. At least half of the credit applied toward a major or minor must be earned through graded coursework. A maximum of six 1-credit courses may be applied to a major or minor. Students must also fulfill all overall requirements for the bachelor's degree (listed on p. 9).

Majors and minors are described in the following section.

Majors

Each major is available only for the Bachelor of Arts (BA), the Bachelor of Science (BS), or the Bachelor of Technical and Professional Studies (BTPS) degree. Dual majors are available only for the Bachelor of Science degree.

Available for the BA

Asian studies
Communication studies
English
Graphic communication
History
Humanities

Available for the BS

Accounting
Business administration
Computer and information science
Computer information technology
Computer science
Computer studies
Criminal justice
Cybersecurity
Emergency management
Environmental management
Finance
Fire science
General studies*
Gerontology
Global business and public policy
Homeland security
Human resource management
Information systems management
Investigative forensics
Legal studies
Management studies
Marketing
Political science
Psychology
Social science

Available for the BTPS**

Biotechnology
Laboratory management

Minors

Academic minors are strongly recommended but optional. They are available in the following areas:

Accounting
African American studies
Art
Art history
Asian studies
Biology
Business administration
Business law and public policy
Business supply chain management
Communication studies
Computing
Criminal justice
Customer service management
Economics
Emergency management
English
Environmental management
Finance
Fire science
Forensics
Gerontology
History
Homeland security
Humanities
Human resource management
International business management
Journalism

* *Available only to active-duty military personnel in UMUC Europe and UMUC Asia and certain others who conform to special stipulations. General studies is not available for a double major.*

** *Available only to students who have completed an Associate of Applied Science degree in an appropriate field from a community college with which UMUC has an articulation agreement. Students should consult an advisor before selecting these majors.*

Marketing
Mathematical sciences
Microbiology
Natural science
Philosophy
Political science
Psychology
Sociology
Speech communication
Strategic and entrepreneurial management
Women's studies

Accounting

Students may seek either an academic major or minor in accounting.

Major in Accounting

The accounting major combines theory and practice to prepare students for analysis of and reporting on the economic activities of organizations and communication of that information to decision makers. Students develop skills in managerial accounting, budgeting, accounting systems, internal controls, financial analysis, financial reporting, internal and external auditing, taxation, and international accounting. The major prepares students for a range of accounting careers in profit, not-for-profit, and government organizations.

Intended Program Outcomes

The student who graduates with a major in accounting will be able to

- Work effectively with interdisciplinary professionals and diverse stakeholders.
- Communicate with financial and nonfinancial audiences in a clear and concise manner, by making appropriate decisions about relevancy, reliability, and medium.
- Research, prepare, analyze, and review financial and business data by applying accounting and business management principles and standards to produce financial and business reports.
- Proficiently use current technology and analytical tools to perform business functions, work collaboratively, and facilitate decision making.
- Employ analysis, critical thinking, and problem solving to identify, test, and validate processes, systems, and financial data to advise stakeholders.
- Define, develop, and demonstrate ethical business practices and accountability by identifying and addressing current and emerging ethical and regulatory issues.
- Develop professionally by collaborating, training, mentoring, negotiating, solving problems creatively, and participating in networking activities to demonstrate and develop leadership skills.

Degree Requirements

A degree with a major in accounting requires the successful completion of 120 credits of coursework, including 54 credits for the major and mandatory minor in business administration, 41 credits in general education requirements, and 25 credits in electives and other requirements. At least 18 credits in the major and 9 credits in the minor must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE ACCOUNTING MAJOR

Coursework for a major in accounting, with a mandatory minor in business administration, includes the following:

- Required core courses (21 credits): ACCT 220, 221, 310, 311, 321, 323, and 422
- Supplemental major courses (12 credits): Any upper-level ACCT courses
- Required capstone course (3 credits): ACCT 495
- Required minor courses (18 credits): STAT 230 (or 200); BMGT 364, 380, and 496; FINC 330; and MRKT 310
- Required related courses (9 credits), which may be applied anywhere in the degree: ACCT 326 (or IFSM 300) and ECON 201 and 203

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in accounting. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

BACHELOR'S DEGREE CURRICULA

Accounting Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
BMGT 110	Introduction to Business and Management *(strongly recommended elective for students with no prior business experience)*	3
◆ ACCT 220	Principles of Accounting I	3
Introductory Courses *(to be taken within the first 30 credits)*		
◆ ACCT 221	Principles of Accounting II	3
ECON 201	Principles of Macroeconomics *(related requirement for the major; also fulfills the first behavioral and social sciences requirement)*	3
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
Foundation Courses *(to be taken within the first 60 credits)*		
PHIL 140 *or* a foreign language course	Contemporary Moral Issues *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	3
◆ STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics	
ECON 203	Principles of Microeconomics *(related requirement for the major)*	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ ACCT 310	Intermediate Accounting I	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
◆ ACCT 321	Cost Accounting	3
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
ACCT 326	Accounting Information Systems	3
or IFSM 300	Information Systems in Organizations *(fulfills the interdisciplinary issues/computing requirement; students should note prerequisites)*	
Additional Required Courses *(to be taken after introductory and foundation courses)*		
◆ BMGT 364	Management and Organization Theory	3
◆ ACCT 311	Intermediate Accounting II	3
◆ ACCT 323	Federal Income Tax I	3
◆ BMGT 496	Business Ethics	3
◆ ACCT 422	Auditing Theory and Practice	3
WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
◆ ACCT 424	Advanced Accounting *or other upper-level ACCT course (supplemental major course)*	3
◆ ACCT 425	International Accounting *or other supplemental major course*	3
◆ FINC 330	Business Finance	3
◆ ACCT 436	Internal Auditing *or other supplemental major course*	3
◆ BMGT 380	Business Law I	3
◆ ACCT 427	Advanced Auditing *or other supplemental major course*	3
◆ MRKT 310	Marketing Principles	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ ACCT 495	Contemporary Issues in Accounting Practice	3
Additional Elective Courses *(to be taken in the last 60 credits along with required major courses)*		16
Recommended Elective		
ACCT 426	Advanced Cost Accounting *(may meet requirements for certain graduate degree programs at UMUC)*	
Total credits for BS in accounting		**120**

Minor in Accounting

The accounting minor complements the skills the student gains in his or her major discipline by providing a study of how the accounting environment measures and communicates the economic activities of organizations to enable stakeholders to make informed decisions regarding the allocation of limited resources.

Requirements for the Minor

A minor in accounting requires the completion of 15 credits of coursework in accounting. Any ACCT courses apply.

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

African American Studies

Students may seek an academic minor in African American studies.

Minor in African American Studies

The African American studies minor complements the skills the student gains in his or her major discipline by offering an interdisciplinary approach to study of the contemporary life, history, and culture of African Americans.

Requirements for the Minor

A minor in African American studies requires the completion of 15 credits of coursework focusing on African American issues, chosen from the following courses:

AASP	Any course
CCJS 370	Race, Crime, and Criminal Justice
ENGL 363	African American Authors to 1900
ENGL 364	African American Authors Since 1900
GVPT 434	Race Relations and Public Law
HIST 255	African American History
HIST 372	Legacy of the Civil Rights Movement
HIST 460	African American Life: 1500 to 1865
HIST 461	African American Life Since 1865
MUSC 436	Jazz: Then and Now
SOCY 423	Ethnic Minorities
SOCY 424	Sociology of Race Relations

It is recommended that students take AASP 201 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Art

Students may seek an academic minor in art.

Minor in Art

The art minor complements the skills the student gains in his or her major discipline by offering an aesthetic and personal exploration of imagery, media, and composition through a balance of art theory and practice.

Requirements for the Minor

A minor in art requires the completion of 15 credits of art coursework. All ARTT courses apply. It is recommended that students take ARTT 110 and 210 (or ARTT 320) as the first courses in the minor (if they have not already applied the courses toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Art History

Students may seek an academic minor in art history.

Minor in Art History

The art history minor complements the skills the student gains in his or her major discipline by developing skills in historical and cultural interpretation and critical analysis of works of architecture, sculpture, painting, and the allied arts.

Requirements for the Minor

A minor in art history requires the completion of 15 credits in art history. All ARTH courses apply.

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Asian Studies

Students may seek either an academic major or minor in Asian studies.

Major in Asian Studies

The Asian Studies major provides an interdisciplinary overview of the history, economics, politics, culture, and languages of the Asian continent, including India, Southeast Asia, China, Korea, and Japan. It examines the region's rich past and continuing contributions to the global community. The curriculum emphasizes an understanding of Asia based on both expanded cultural awareness and scholarly analysis in multiple disciplines. Students are provided with background knowledge that both enriches their appreciation of the area and prepares them for a range of careers that require a broad knowledge of the region and accurate understanding of the culture.

Intended Program Outcomes

The student who graduates with a major in Asian studies will be able to

- Interpret, communicate, educate, and advise others based on understanding, research, and analysis of the social, historical, and cultural contexts of Asia.
- Use knowledge of Asia to identify, create, facilitate, and promote opportunities for interaction and cooperation between Asia and the global community, as well as to mediate and negotiate between Asians and others.
- Apply knowledge of Asian diversity, values, and expectations to perform in a culturally appropriate way in personal and professional settings.
- Communicate in both written and spoken form in an Asian language, integrating interpersonal skills and cultural knowledge.

Degree Requirements

A degree with a major in Asian studies requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE ASIAN STUDIES MAJOR

Coursework for a major in Asian studies includes the following:

- Required foundation courses (9 credits): ASTD 150 and 160 and PHIL 307
- Required Asian language sequence (9 credits): Either JAPN 111, 112, and 114; KORN 111, 112, and 114; or CHIN 111, 112, and 114
- Supplemental major courses (9 credits): Chosen from any upper-level ASTD, JAPN, KORN, Asian HIST, and Asian GVPT courses; ANTH 417; ECON 380; and PHIL 348
- Required capstone course (3 credits): ASTD 485

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BA in Asian studies. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Asian Studies Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	

◆ ASTD 150	Introduction to Asian Studies I	3
◆ JAPN 111	Elementary Japanese I	3
or CHIN 111	Elementary Chinese I *or other first Asian language course for the major*	
Foundation Courses *(to be taken within the first 60 credits)*		
◆ ASTD 160	Introduction to Asian Studies II	3
ANTH 102	Introduction to Anthropology: Cultural Anthropology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 141	Western Civilization I	3
or HIST 142	Western Civilization II *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/writing or speech requirement*	
◆ JAPN 112	Elementary Japanese II	3
or CHIN 112	Elementary Chinese II *or other second Asian language course for the major*	
◆ PHIL 307	Asian Philosophy	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ ASTD 309	Business in Asia	3
or HIST 483	History of Japan Since 1800 *or other supplemental major course*	
◆ JAPN 114	Elementary Japanese III	3
or CHIN 114	Elementary Chinese III *or other third Asian language course for the major*	
◆ PHIL 348	Religions of the East *or other supplemental major course*	3
◆ HIST 481	History of Modern China *or other supplemental major course*	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ ASTD 485	Great Issues in Asian Studies	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		46
Total credits for BA in Asian studies		**120**

Minor in Asian Studies

The Asian studies minor complements the skills the student gains in his or her major discipline by providing an interdisciplinary study of the cultural, historical, political, and contemporary business reality of the Asian/Pacific world.

Requirements for the Minor

A minor in Asian studies requires the completion of 15 credits of coursework in Asian studies, which must include ASTD 150 and 160. Courses allowable for the major in Asian studies apply.

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Biology

Students may seek an academic minor in biology.

Minor in Biology

The biology minor complements the skills the student gains in his or her major discipline by providing an underlying scientific base upon which to build a career in the life sciences, allied health fields, bioinformatics, environmental management, science journalism, or science education.

Requirements for the Minor

A minor in biology requires the completion of 15 credits of coursework in biology. Any BIOL courses apply.

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Biotechnology

Students who have completed an Associate of Applied Science degree in biotechnology or a related field from a community college with which UMUC has an articulation agreement for this major may seek an academic major in biotechnology. Students should consult an advisor before selecting this major.

The major in biotechnology is based on a collaborative arrangement between UMUC and specific Maryland community colleges. Students with a similar degree from another institution may be considered for this program based on an institutional articulation agreement with UMUC.

Major in Biotechnology

The biotechnology major prepares students for the biotechnology industry by building on the technical and scientific knowledge gained through the associate's degree program and direct experience in the field. It combines laboratory skills and applied coursework with a biotechnology internship experience and upper-level study. The biotechnology curriculum covers general biological and chemical sciences, biotechniques, bioinstrumentation, bioinformatics, microbiology, molecular biology, and cell biology. Students are prepared to enter pharmaceutical, agricultural, and biomedical research industries and organizations as laboratory technicians, quality control technicians, assay analysts, chemical technicians, or bioinformaticists.

Intended Program Outcomes

The student who graduates with a major in biotechnology will be able to

- Practice ethical standards of integrity, honesty, and fairness in scientific practices and professional conduct.
- Communicate orally and in writing in a clear, well-organized manner that effectively informs and clarifies scientific principles and lab techniques to staff and stakeholders.
- Offer technical support, customer assistance, and cost-benefit analyses in the application of biotechnical approaches to the development of products and services.
- Use scientific procedures and current and emerging technologies to conduct safe and hygienic laboratory experiments and to collect data that are appropriately validated and documented.
- Comply with and adhere to national, state, and local standards, policies, protocols, and regulations for laboratory and manufacturing activity.
- Develop an action plan that includes the continuous pursuit of education, training, and research to keep current on biotechnology practices and trends for personal and professional development.
- Apply scientific knowledge and principles, quantitative methods, and technology tools to think critically and solve complex problems in biotechnology.

Degree Requirements

A degree with a major in biotechnology requires the successful completion of 120 credits of coursework from UMUC and the collaborating community college, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE BIOTECHNOLOGY MAJOR

Coursework for a major in biotechnology includes the following lower-level coursework taken as part of an appropriate Associate of Applied Science degree program at a collaborating community college:

- Foundation courses (15 credits): General microbiology (with laboratory), general genetics (with laboratory), and biotechnology techniques
- Required related courses (17 credits), which may be applied anywhere in the bachelor's degree: Chosen from biotechnology, biochemistry, cell biology, chemistry, genetics, immunology, microbiology, molecular biology, physics, and virology courses

Coursework for a major in biotechnology also includes the following:

- Required core courses (12 credits): BIOL 350 and 400 and 6 credits in Co-op internship courses (numbered 486A or 486B) in any discipline related to biotechnology
- Supplemental major courses (9 credits): Chosen from BIOL 320, 330–339, 350–359, 362, 422, and 430–439; NSCI 301; and an additional Co-op internship

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BTPS in biotechnology (if the student selects appropriate courses as part of the articulated degree program from the community college). Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Biotechnology Degree Courses		Credits
Required Courses from Community College		
◆ Lower-level coursework in the following areas:		15
General microbiology with lab		
General genetics with lab		
Biotechnology techniques		
Additional coursework related to biotechnology		17
Selected from biotechnology, biochemistry, cell biology, chemistry, genetics, immunology, microbiology, molecular biology, physics, or virology, as specified by the articulated associate's degree program (should also fulfill general education requirements in biological and physical sciences)		
First Courses *(to be taken within the first 18 credits at UMUC if not brought in transfer)*		
Note: Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory and General Education Courses *(to be taken within the first 30 credits)*		
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
ANTH 344	Cultural Anthropology and Linguistics	3
or SPCH 482	Intercultural Communication *(recommended elective)*	
Required Upper-Level Courses for Major *(to be taken after introductory and general education courses)*		
WRTG 393/393X	Advanced Technical Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ BIOL 350	Molecular and Cellular Biology	3
◆ BIOL 400	Life Science Seminar	3
◆ BIOL 362	Neurobiology *or other supplemental major course*	3
◆ BIOL 320	Forensic Biology *or other supplemental major course*	3
◆ BIOL 422	Epidemiology of Emerging Infections *or other supplemental major course*	3
Internship for Major *(to be taken in the last 30 credits)*		
◆ Internship through Cooperative Education		6
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		30
Total credits for BTPS in biotechnology		**120**

Business Administration

Students may seek either an academic major or minor in business administration.

Major in Business Administration

The business administration curriculum provides the skills and knowledge necessary for a successful career in business and management. It includes studies in accounting, business law and public policy, business supply chain management, customer service and operations management, ethics and social responsibility, finance, human resource management and labor relations, international business, strategic and entrepreneurial management, organizational behavior, marketing and sales, and statistical analysis. A major in business administration prepares graduates for careers in for-profit and not-for-profit organizations and the public sector.

BACHELOR'S DEGREE CURRICULA

Intended Program Outcomes

The student who graduates with a major in business administration will be able to

- Plan and communicate a shared vision for the organization that will drive strategy, assist with decision making, and position the organization in the business environment.
- Employ critical thinking to evaluate qualitative and quantitative data and effectively communicate across all layers of the organization.
- Develop, communicate, implement, and follow policies and procedures that inform and guide operations to reduce cost and organizational risk and promote ethical practices.
- Manage people, time, and resources by utilizing effective employment practices, encouraging team building, and mentoring junior members of the staff.
- Design and execute personal and employee development systems to enhance job performance and leadership skills.

Degree Requirements

A degree with a major in business administration requires the successful completion of 120 credits of coursework, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE BUSINESS ADMINISTRATION MAJOR

Coursework for a major in business administration includes the following:

- Required foundation courses (12 credits): BMGT 110 (or prior business experience and an additional supplemental course), ACCT 220 and 221, and STAT 230 (or 200)
- Required core courses (18 credits): BMGT 364, 380, and 496; FINC 330; HRMN 300; and MRKT 310
- Supplemental major course or courses (3 credits): Any ACCT, BMGT, ENMT, FINC, HRMN, MRKT, or MGST course
- Required capstone course (3 credits): BMGT 495
- Required related courses (9 credits), which may be applied anywhere in the degree: ACCT 326 (or IFSM 300) and ECON 201 and 203

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in business administration. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Business Administration Degree Courses		**Credits**
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ BMGT 110	Introduction to Business and Management *(students with business experience should substitute a supplemental major course in the last 60 credits of study)*	3
Introductory Courses *(to be taken within the first 30 credits)*		
ECON 201	Principles of Macroeconomics *(related requirement for the major; also fulfills the first behavioral and social sciences requirement)*	3
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ ACCT 220	Principles of Accounting I	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Foundation Courses *(to be taken within the first 60 credits)*		
◆ STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
◆ ACCT 221	Principles of Accounting II	3
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
ECON 203	Principles of Microeconomics *(related requirement for the major)*	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	

IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems *(related requirement for the major; also fulfills the interdisciplinary issues/computing requirement)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
Additional Required Courses *(to be taken after introductory and foundation courses)*		
◆ BMGT 364	Management and Organization Theory	3
WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
◆ MRKT 310	Marketing Principles	3
◆ BMGT 380	Business Law I	3
◆ HRMN 300	Human Resource Management	3
◆ FINC 330	Business Finance	3
◆ BMGT 392	Global Business Management *or other supplemental major course*	3
◆ BMGT 496	Business Ethics	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ BMGT 495	Strategic Management	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		37
Recommended Minors		
Human resource management, marketing, finance, or other business-related minor		
Recommended Electives		
MATH 140	Calculus I *(for students who plan to go on to graduate school; students should note prerequisites)*	
BMGT 510	The Manager in Organizations and Society *(for qualified students who plan to enter the MBA program at UMUC; students should note prerequisites and consult an advisor)*	
Total credits for BS in business administration		**120**

Minor in Business Administration

The business administration minor complements the skills the student gains in his or her major discipline by providing a study of principles and techniques used in organizing, planning, managing, and leading within various organizations.

Requirements for the Minor

A minor in business administration requires the completion of 15 credits of coursework in business administration. Any ACCT, BMGT, ENMT, FINC, HRMN, MGST, and MRKT courses apply. It is recommended that students take BMGT 364 as the first course in the minor (if they have not already applied the course to other requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Business Law and Public Policy

Students may seek an academic minor in business law and public policy.

Minor in Business Law and Public Policy

The business law and public policy minor complements the skills the student gains in his or her major discipline by exploring and analyzing legal, social, environmental, technological, and ethical issues affecting business, industry, and government.

Requirements for the Minor

A minor in business law and public policy requires the completion of 15 credits of coursework in business law and public policy, chosen from the following courses:

BMGT 378	Legal Environment of Business
BMGT 380	Business Law I
BMGT 381	Business Law II
BMGT 405	Environmental Management and Business
BMGT 428	Legal Aspects of Technology Management
BMGT 437	International Business Law
BMGT 454	Global Business and Public-Policy Regimes
BMGT 482	Business and Government
BMGT 496	Business Ethics
HRMN 408	Employment Law for Business
HRMN 462	Labor Relations Law

Students are recommended to take BMGT 380 and 496 as the first courses in the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Business Supply Chain Management

Students may seek an academic minor in business supply chain management.

Minor in Business Supply Chain Management

The business supply chain management minor complements the skills the student gains in his or her major discipline by increasing the student's capabilities as a manager to analyze operational performance within supply chains, to design and manage processes for competitive advantage, and to manage systems acquisition and development in technical enterprises.

Requirements for the Minor

The minor in business supply chain management requires the completion of 15 credits of coursework in business supply chain management, chosen from the following courses:

BMGT 304	Managing E-Commerce in Organizations
BMGT 305	Knowledge Management
BMGT 317	Problem Solving for Managers
BMGT 372	Supply Chain Management
BMGT 375	Purchasing Management
BMGT 487	Project Management I
BMGT 488	Project Management II
BMGT 491	Exploring the Future
MRKT 457	E-Marketing

Students are recommended to take BMGT 304, 317, and 372 as the first courses in the minor (if they have not already applied the courses toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Communication Studies

Students may seek either an academic major or minor in communication studies.

Major in Communication Studies

The major in communication studies provides students with an appropriate balance of theoretical knowledge and sophisticated, practical communication skills. Students learn how people create and use messages to generate meaning within and across various contexts, cultures, channels, and media. The multidisciplinary curriculum covers speech communication, mass communication and new media, journalism, public relations, business writing, and technical writing. It encourages students to develop written, oral, and visual communication skills; to apply communication theories to both personal and professional situations; and to increase their understanding of human interaction. Students with a major in communication studies are prepared for a wide variety of careers in areas such as journalism, public relations, marketing, communication, and professional writing.

Intended Program Outcomes

The student who graduates with a major in communication studies will be able to

- Apply analytical skills in interpreting, using, and delivering information, particularly as it applies to mass media.
- Create professional written, oral, and visual communication for specific purposes and diverse audiences, applying structural and stylistic conventions.
- Design, create, and/or select multimedia components and integrate them into print, broadcast, and online media-rich resources.
- Manage successful communication activities within the ethical, legal, and financial parameters of the project and of the profession.
- Work with individuals and groups in ways that reflect both an understanding of communication theory and professional expectations.
- Use an understanding of diverse and intercultural perspectives as they affect communication practices.
- Design and/or employ specific research methodologies and tools to gather information for specific purposes.

Degree Requirements

A degree with a major in communication studies requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree

requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE COMMUNICATION STUDIES MAJOR

Coursework for a major in communication studies includes the following:

- Required foundation courses (6 credits): COMM 300 and 302
- Writing and language arts course (3 credits): Chosen from COMM 380 and WRTG 288/288X, 289, 388, 390, 391/391X, 393/393X, 394/394X, and 489
- Mass communication course (3 credits): Chosen from COMM 400 and any JOUR courses
- Speech communication course (3 credits): Any SPCH course
- Supplemental major courses (12 credits): Chosen from PSYC 334 and 424; HRMN 302 and 367; MRKT 310; and any COMM, JOUR, SPCH, or WRTG courses
- Capstone course (3 credits): Chosen from COMM 495, SPCH 397, and WRTG 493

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BA in communication studies. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Communication Studies Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
SOCY 100	Introduction to Sociology	
or GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
Foundation Courses *(to be taken within the first 60 credits)*		
PSYC 100	Introduction to Psychology	3
or BEHS 210	Introduction to Social and Behavioral Science *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or JOUR 201	Writing for the Mass Media *or other course to fulfill the communications/writing or speech requirement*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
◆ COMM 300	Communication Theory	3
◆ COMM 302	Critical Perspectives in Mass Communication	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393/393X	Advanced Technical Writing	3
or WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	
◆ COMM 380	Language in Social Contexts *or other writing or language arts course for the major*	3
◆ COMM 400	Communication and the Law	3
or JOUR 330	Public Relations Theory *or other mass communication course for the major*	
◆ SPCH 470	Listening *or other speech communication course for the major*	3
◆ COMM 493	Strategies for Visual Communications *or other supplemental major course*	3
◆ SPCH 482	Intercultural Communication *or other supplemental major course*	3
◆ SPCH 324	Communication and Gender *or other supplemental major course*	3
◆ SPCH 426	Negotiation and Conflict Management	3
or HRMN 302	Organizational Communication *or other supplemental major course*	

Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ COMM 495	Seminar in Workplace Communication	3
or SPCH 397	Organizational Presentations	
or WRTG 493	Seminar in Advanced Technical Writing	
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		46
Total credits for BA in communication studies		**120**

Minor in Communication Studies

The communication studies minor complements the skills the student gains in his or her major discipline by providing specialized skills in workplace communication, including the development of written and oral communication skills and a greater understanding of human interaction.

Requirements for the Minor

A minor in communication studies requires the completion of 15 credits of coursework in communication studies. All COMM, JOUR, SPCH, and WRTG courses apply. It is recommended that students take COMM 300 early in the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Computer and Information Science

Students may seek an academic major in computer and information science.

Major in Computer and Information Science

The computer and information science major provides an in-depth study of computer and information science through a hands-on approach that enables students to explore computer-based solutions to challenging problems. The curriculum focuses on problem-solving skills and techniques that can be applied to many disciplines and covers software and Web engineering, relational databases, programming languages, operating systems, computer networks, and distributed systems. Students are prepared for careers in various computing areas, including applications in programming, databases, software engineering, and networking.

Intended Program Outcomes

The student who graduates with a major in computer and information science will be able to

- Design, implement, secure, and maintain databases that meet user requirements for both transaction processing and data warehouses.
- Design, develop, implement, secure, and maintain software applications that meet user requirements, using current best practices and tools for all application interfaces and domains.
- Design, implement, and maintain a reliable and secure network and services infrastructure.
- Plan, manage, and provide appropriate documentation and communication through all phases of the software development life cycle to ensure successful implementation of an information technology (IT) project that is on time and within budget.
- Identify, learn, and adapt to local and global IT trends, technologies, legalities, and policies, as well as appropriately communicate their impact to key stakeholders.
- Work independently or as an effective member of an application development team to determine and implement systems that meet customer requirements.

Degree Requirements

A degree with a major in computer and information science requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE COMPUTER AND INFORMATION SCIENCE MAJOR

Coursework for a major in computer and information science includes the following:

- Required core courses (12 credits): CMIS 141, 170, 242, and 310
- Supplemental major courses (18 credits, 6 of which must be 400-level): Chosen from CMIS 102 (for students with no prior programming experience) and any upper-level CMIS courses except CMIS 486A and 486B (**Note:** Students should take CMIS 102 before core courses and may apply it toward the interdisciplinary issues/computing requirement rather than toward the major.)

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in computer and information science. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Computer and Information Science Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
CMIS 102	Introduction to Problem Solving and Algorithm Design *(fulfills the interdisciplinary issues/computing requirement and prerequisite for later courses)*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	
◆ CMIS 141	Introductory Programming	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
◆ CMIS 170	Introduction to XML	3
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Foundation Courses *(to be taken within the first 60 credits)*		
◆ CMIS 242	Intermediate Programming	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
ANTH 344	Cultural Anthropology and Linguistics	3
or a foreign language course	*(recommended elective)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
◆ CMIS 310	Computer Systems and Architecture	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393/393X	Advanced Technical Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ CMIS 325	UNIX with Shell Programming *or other supplemental major course*	3
◆ CMIS 330	Software Engineering Principles and Techniques *or other supplemental major course*	3
◆ CMIS 320	Relational Databases	3
or CMIS 370	Data Communications *or other supplemental major course*	
◆ CMIS 485	Web Database Development *or other supplemental major course*	3
◆ CMIS 415	Advanced UNIX and C	3
or CMIS 460	Software Design and Development *or other 400-level supplemental major course*	
◆ CMIS 420	Advanced Relational Databases	3
or CMIS 435	Computer Networking *or other 400-level supplemental major course*	
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		43
Recommended Minor		
Computing		
Total credits for BS in computer and information science		**120**

Computer Information Technology

Students may seek an academic major in computer information technology.

Major in Computer Information Technology

The computer information technology major prepares students to enter or advance in information technology fields where certification of knowledge level is commonly considered in hiring and promotion decisions. It is designed to combine the benefits of a traditional college education with the benefits of hands-on training in state-of-the-art computer technology. Students become technically competent but also learn to write well-organized and clear documents. The computer information technology curriculum integrates technical skill with communication skills, superior general education knowledge, and breadth of knowledge in the computer information technology field, particularly networking.

Intended Program Outcomes

The student who graduates with a major in computer information technology will be able to

- Design, implement, and administer local-area and wide-area networks to satisfy organizational goals.
- Resolve information technology (IT) system problems and meet the needs of end-users by applying troubleshooting methodologies.
- Apply relevant policies and procedures to effectively secure and monitor IT systems.
- Meet organizational goals in completing individual and team assignments using effective workforce skills, best practices, and ethical principles.
- Effectively communicate IT knowledge to diverse audiences using a wide range of presentation modalities.

Degree Requirements

A degree with a major in computer information technology requires the successful completion of 120 credits of coursework, including 33 credits for the major, 41 credits in general education requirements, and 46 credits in the minor, electives, and other degree requirements. At least 17 credits in the major must be earned in upper-level courses (numbered 300 or above), and 18 credits in courses designated CMIT.

REQUIREMENTS FOR THE COMPUTER INFORMATION TECHNOLOGY MAJOR

Coursework for a major in computer information technology includes the following:

- Required foundation courses (6 credits): CMIS 310 and CMIT 265
- Core courses (15 credits): Any upper-level CMIT courses
- Supplemental major courses (12 credits): Any CMIS, CMIT, CMSC, CMST, CSIA, and IFSM courses (**Note:** Students without prior programming experience should take CMIS 102 before core courses and may apply it toward the interdisciplinary issues/computing requirement rather than toward the major.)

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in computer information technology. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Computer Information Technology Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
CMIS 102	Introduction to Problem Solving and Algorithm Design *(fulfills the interdisciplinary issues/computing requirement and prerequisite for later courses)*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	

WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3

Foundation Courses *(to be taken within the first 60 credits)*

◆ CMIT 265	Networking Essentials	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
IFSM 304	Ethics in the Information Age *(recommended elective)*	3
ANTH 344	Cultural Anthropology and Linguistics	3
or a foreign language course *(recommended elective)*		
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
◆ CMIS 310	Computer Systems and Architecture	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 393/393X	Advanced Technical Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ CMIT 368	Windows Server *or other core course for the major*	3
◆ CMIT 376	Windows Network Infrastructure *or other core course for the major*	3
◆ CMIT 377	Windows Directory Services Infrastructure *or other core course for the major*	3
◆ CMIT 320	Network Security *or other core course for the major*	3
◆ CMIT 425	Advanced Network Security *or other supplemental major course*	3
◆ CMIT 374	Exchange Server *or other core course for the major*	3
◆ CMIT 350	Interconnecting Cisco Devices *or other supplemental major course*	3
◆ CMIT 450	Designing Cisco Networks *or other supplemental major course*	3
◆ CMIT 486A	Internship in Computer Information Technology Through Co-op *or other supplemental major course*	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 37

Recommended Minors

Computing, English, or mathematics

Recommended Elective

MATH 140	Calculus I *or other calculus course (for students planning to go on to graduate school: students should note prerequisites)*	

Total credits for BS in computer information technology **120**

Computer Science

Students may seek an academic major in computer science.

Major in Computer Science

The computer science major prepares students to plan, design, and optimize scalable computer software and hardware systems for use in commercial and government environments. It is designed for students who have a good background in mathematics and an interest in the theory, practice, art, and science of computer programming. The major provides graduates with an educational foundation appropriate for careers as software architects and engineers, application software designers, system analysts and programmers, and system engineers.

Intended Program Outcomes

The student who graduates with a major in computer science will be able to

- Apply logic and mathematical principles to the design, development, and verification of secure, high-performance, and reliable computing systems.
- Analyze, design, develop, and document secure technical solutions for computing systems and networking infrastructure.
- Plan, design, and optimize computing architecture, software applications, data, and systems that securely support enterprise needs.
- Contribute and adhere to local, national, and international technical standards, ethics, and intellectual property regulations when developing computer applications and systems.

- Analyze, compare, and contrast algorithms, programming languages, compilers, and operating systems to select or develop the most appropriate solution to the problem.
- Identify and respond to emerging technology, models, methodologies, systems, and trends in human/computer interaction, including social networking, gaming, and modeling and simulation.

Degree Requirements

A degree with a major in computer science requires the successful completion of 120 credits of coursework, including 38 credits for the major; 41 credits in general education requirements; and 41 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE COMPUTER SCIENCE MAJOR

Coursework for a major in computer science includes the following:

- Required mathematics courses (8 credits): MATH 140 and 141
- Required foundation courses (9 credits): CMSC 130, 150, and 230
- Required core courses (9 credits): CMSC 330 and 335 and any 300-level CMSC course
- Supplemental major courses (9 credits): Chosen from CMSC 101 (for students without prior programming experience) and any 400-level CMSC courses except CMSC 486A and 486B (**Note:** Students should take CMSC 101 before core courses and may apply it toward the interdisciplinary issues/computing requirement rather than toward the major.)
- Required capstone course (3 credits): CMSC 495

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in computer science. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Computer Science Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 115	Pre-Calculus	3
or both MATH 107	College Algebra	
and MATH 108	Trigonometry and Analytical Geometry *(prerequisite for later courses)*	
Introductory Courses *(to be taken within the first 30 credits)*		
◆ MATH 140	Calculus I	4
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
CMSC 101	Introductory Computer Science *(fulfills the interdisciplinary issues/computing requirement and prerequisite for later courses)*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
◆ CMSC 150	Introduction to Discrete Structures	3
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	
Foundation Courses *(to be taken within the first 60 credits)*		
◆ CMSC 130	Computer Science I	3
◆ MATH 141	Calculus II	4
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ CMSC 230	Computer Science II	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
IFSM 304	Ethics in the Information Age *(recommended elective)*	3
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	

ANTH 344	Cultural Anthropology and Linguistics	3
or a foreign language course	*(recommended elective)*	
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393/393X	Advanced Technical Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
◆ CMSC 311	Computer Organization *or any 300-level CMSC course*	3
◆ CMSC 330	Advanced Programming Languages	3
◆ CMSC 335	Object-Oriented and Concurrent Programming	3
◆ CMSC 415	UML and Design Patterns *or other supplemental major course*	3
◆ CMSC 480	Advanced Programming in Java *or other supplemental major course*	3
◆ CMSC 425	Building Applications for Mobile Devices *or other supplemental major course*	3
Capstone Course for Major *(to be taken in the last 9 credits)*		
◆ CMSC 495	Current Trends and Projects in Computer Science	3
Minor and/or Elective Courses (*to be taken in the last 60 credits along with required major courses)*		32
Recommended Minors		
Computing or mathematics		
Recommended Elective		
EDTP 500	Professional Fundamentals of Teaching and Learning *(for qualified students who plan to enter the MAT program at UMUC; students should note prerequisites and consult an advisor)*	
Total credits for BS in computer science		**120**

Computer Studies

Students may seek an academic major in computer studies.

Major in Computer Studies

The computer studies major provides in-depth knowledge in practical applications of computing. The coherent and flexible program of study includes areas such as digital media, gaming, and Web-based technologies. The interdisciplinary approach allows students to integrate courses from several specialized areas in computing. Graduates are prepared for a variety of entry- and midlevel technical and management positions within the digital media, Web technology, gaming, and computing industries.

Intended Program Outcomes

The student who graduates with a major in computer studies will be able to

- Design, develop, and manage Web applications using current and emerging technologies that adhere to industry standards.
- Analyze needs and effectively manage projects and resources, applying sound business principles and technology.
- Configure, optimize, and administer computer systems to support Web technologies.
- Design and develop digital, interactive, and Web-based media to meet customer requirements and usability standards.
- Develop, test, and implement Web and multimedia applications using sound techniques for scripting and programming.
- Effectively apply relevant theories, practices, and principles when designing and developing works of digital media.

Degree Requirements

A degree with a major in computer studies requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE COMPUTER STUDIES MAJOR

Coursework for a major in computer studies includes the following:

- Introductory course (3 credits): Chosen from CMIS 141 and 170, CMSC 130, and CMST 306
- Foundation courses (6 credits): Chosen from CMIS 242 (or CMSC 230), IFSM 300 and 310, and CMST 340
- Supplemental major courses (21 credits, at least 15 of which must be upper level): Chosen from any CMST, CMIS, CMIT, CMSC, CSIA, and IFSM courses (**Note:** Students without prior programming experience should take CMIS 102 before core courses and may apply it toward the interdisciplinary issues/computing requirement rather than toward the major.)

BACHELOR'S DEGREE CURRICULA

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in computer studies. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Computer Studies Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
CMIS 102	Introduction to Problem Solving and Algorithm Design *(fulfills the interdisciplinary issues/computing requirement and prerequisite for later courses)*	3
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
◆ CMST 306	Introduction to Visual Basic Programming *or other introductory course for the major*	3
Foundation Courses *(to be taken within the first 60 credits)*		
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
◆ CMST 340	Computer Applications in Management *or other foundation course for the major*	3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
◆ IFSM 300	Information Systems in Organizations *or other foundation course for the major*	3
ANTH 344	Cultural Anthropology and Linguistics	3
or a foreign language course	*(recommended elective)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
IFSM 304	Ethics in the Information Age *(recommended elective)*	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393/393X	Advanced Technical Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
◆ CMST 310	Electronic Publishing *or other supplemental major course*	3
◆ CMST 416	Advanced Visual Basic Programming *or other supplemental major course*	3
◆ CMST 385	Internet and Web Design *or other supplemental major course*	3
◆ CMST 386	Advanced Internet and Web Design *or other supplemental major course*	3
◆ CMST 430	Web Site Management *or other supplemental major course*	3
◆ CMST 450	Web Design with XML *or other supplemental major course*	3
◆ CMST 460	Web Application Development Using ColdFusion *or other supplemental major course*	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		40
Recommended Minor		
Business administration		
Total credits for BS in computer studies		**120**

Computing

Students may seek an academic minor in computing.

Minor in Computing

The computing minor complements the skills the student gains in his or her major discipline by providing a study of the principles and techniques used in developing computer-related solutions to practical problems.

Requirements for the Minor

A minor in computing requires the completion of 15 credits of coursework chosen from any courses in computer and information science, computer information technology, computer science, computer studies, cybersecurity, and information systems management.

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Criminal Justice

Students may seek either an academic major or minor in criminal justice.

Major in Criminal Justice

The criminal justice program provides students with an understanding of the nature of crime and the personnel, institutions, and processes that prevent or respond to crime. Students learn both the theory and practice of the criminal justice system. The curriculum covers crime and criminal behavior, law enforcement, courts, corrections, security, and investigation. It provides a solid foundation for further study or entry into a variety of criminal justice professions.

Intended Program Outcomes

The student who graduates with a major in criminal justice will be able to

- Accurately communicate orally and in writing to complete organizational missions to ensure public safety.
- Apply critical thinking skills and logic to analyze and solve a variety of complex problems in the criminal justice environment.
- Manage and evaluate organizational efforts to ensure effective cooperation with stakeholders to prevent, control, and manage crime to ensure public safety.
- Utilize an ethical framework and an understanding of legal constraints to make decisions as a criminal justice professional.
- Develop specialized technical knowledge and skills relevant to subspecialties in the field of criminal justice to ensure public safety.
- Use interpersonal and leadership skills to work both independently and cooperatively as a member of a criminal justice team.

Degree Requirements

A degree with a major in criminal justice requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE CRIMINAL JUSTICE MAJOR

Coursework for a major in criminal justice includes the following:

- Required foundation course (3 credits): CCJS 100 or 105
- Required statistics course (3 credits): STAT 200
- Core courses (15 credits): CCJS 230 (or 234), 340 (or 320), 350 (or 461), 345 (or 430), and 497 (or 432)
- Supplemental major courses (9 credits, 3 of which must be upper level): Any CCJS courses or HMLS 495

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in criminal justice. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Criminal Justice Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1

WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ CCJS 100	Introduction to Criminal Justice	3
or CCJS 105	Introduction to Criminology	

Introductory Courses *(to be taken within the first 30 credits)*

GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ CCJS 230	Criminal Law in Action	3
or CCJS 234	Criminal Procedure and Evidence	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	

Foundation Courses *(to be taken within the first 60 credits)*

◆ STAT 200	Introduction to Statistics	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
ANTH 344	Cultural Anthropology and Linguistics *(recommended elective)*	3
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/writing or speech requirement*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

◆ CCJS 340	Law-Enforcement Administration	3
or CCJS 320	Introduction to Criminalistics	
◆ CCJS 350	Juvenile Delinquency	3
or CCJS 461	Psychology of Criminal Behavior	
◆ CCJS 497	Correctional Administration	3
or CCJS 432	Law of Corrections	
WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ CCJS 345	Introduction to Security Management	3
or CCJS 430	Legal and Ethical Issues in Security Management	
◆ CCJS 341	Criminal Investigation *or other supplemental major course*	3
◆ CCJS 486A	Internship in Criminal Justice Through Co-op *or other supplemental major course*	3
◆ HMLS 495	Public Safety Policies and Leadership *or other supplemental major course*	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 43

Recommended Electives

CAPL 398A	Career Planning Management *(for students not taking EDCP 100)*	
CCJS 360	Victimology	
CCJS 352	Drugs and Crime	

Total credits for BS in criminal justice **120**

Minor in Criminal Justice

The criminal justice minor complements the skills the student gains in his or her major discipline by providing a study of crime, law enforcement, courts, corrections, security, and investigative forensics.

Requirements for the Minor

A minor in criminal justice requires the completion of 15 credits of coursework in criminal justice. Any CCJS courses apply. It is recommended that students take CCJS 100, CCJS 105, or CCJS 230 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Customer Service Management

Students may seek an academic minor in customer service management.

Minor in Customer Service Management

The customer service management minor complements the skills the student gains in his or her major discipline by providing a study of how customer service managers make informed decisions regarding organization, planning, operating procedures, management, and allocation of limited resources.

Requirements for the Minor

A minor in customer service management requires the completion of 15 credits in customer service management coursework, chosen from the following courses:

ACCT 301	Accounting for Nonaccounting Managers
BMGT 317	Problem Solving for Managers
BMGT 364	Management and Organization Theory
BMGT 375	Purchasing Management
BMGT 378	Legal Environment of Business
BMGT 487	Project Management I
HRMN 302	Organizational Communication
HRMN 406	Employee Training and Development
MRKT 395	Managing Customer Relationships

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Cybersecurity

Students may seek an academic major in cybersecurity.

Major in Cybersecurity

The major in cybersecurity prepares graduates to be leaders in the protection of data assets. The curriculum focuses on the techniques, policies, operational procedures, and technologies that secure and defend the availability, integrity, authentication, confidentiality, and nonrepudiation of information and information systems, in local as well as more broadly based domains. The major prepares students for careers as information systems security professionals, senior system managers, and system administrators responsible for information systems and security of those systems.

Intended Program Outcomes

The student who graduates with a major in cybersecurity will be able to

- Protect an organization's critical information and assets by ethically integrating cybersecurity best practices and risk management throughout an enterprise.
- Implement continuous network monitoring and provide real-time security solutions.
- Analyze advanced persistent threats and deploy counter measures.
- Conduct risk and vulnerability assessments of planned and installed information systems.
- Investigate cyber crimes and assist in recovery of operations.
- Formulate, update, and communicate short- and long-term organizational cybersecurity strategies and policies.

Degree Requirements

A degree with a major in cybersecurity requires the successful completion of 120 credits of coursework, including 33 credits for the major; 41 credits in general education requirements; and 46 credits in the minor, electives, and other degree requirements. At least 17 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE CYBERSECURITY MAJOR

Coursework for a major in cybersecurity includes the following:

- Required foundation courses (9 credits): CSIA 301 and 302 (or CMIT 265) and IFSM 304
- Required core courses (12 credits): CSIA 303, 412, and 413 and CMIT 320

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- Supplemental major courses (9 credits): Chosen from CCJS 421; CMIT 321 and 425; CSIA 454, 457, and 459; and IFSM 432 and 433
- Required capstone course (3 credits): CSIA 485

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in cybersecurity. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Cybersecurity Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
IFSM 201	Introduction to Computer-Based Systems *(prerequisite to later courses)*	3
CMIS 102	Introduction to Problem Solving and Algorithm Design *(fulfills the interdisciplinary issues/computing requirement; prerequisite to later courses)*	3
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	
Both NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Foundation Courses *(to be taken within the first 60 credits)*		
CCJS 100	Introduction to Criminal Justice	3
or CCJS 105	Introduction to Criminology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
◆ CSIA 301	Information Systems Architecture	3
◆ IFSM 304	Ethics in the Information Age	3
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
IFSM 300	Information Systems in Organizations *(prerequisite to later courses)*	3
ANTH 344	Cultural Anthropology and Linguistics	3
or a foreign language course	*(recommended elective)*	
◆ CSIA 302	Telecommunications in Information Systems	3
or CMIT 265	Networking Essentials	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393/393X	Advanced Technical Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
◆ CSIA 303	Foundations of Information System Security	3
◆ CSIA 412	Senior System Managers and Security	3
◆ CSIA 413	System Administrators and Information Security	3
◆ CMIT 320	Network Security	3
◆ CCJS 421	Computer Forensics *or other supplemental major course*	3
◆ CSIA 457	Cyber Crime and Cyber Terrorism *or other supplemental major course*	3
◆ IFSM 433	Information Security Needs Assessment and Planning *or other supplemental major course*	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ CSIA 485	Trends and Projects in Cybersecurity and Information Assurance	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		37
Recommended Electives *(students should note prerequisites)*		
Courses related to security and cyber crime:		
BMGT 366	Global Public Management	
CCJS 462	Protection of Business Assets	

CCJS 496	Cyber Crime and Security
GVPT 409	Terrorism, Antiterrorism, and Homeland Security
HMLS 408	Infrastructure Security Issues
HMLS 414	International Security Issues
Courses related to psychological and sociological concerns:	
CCJS 461	Psychology of Criminal Behavior
PSYC 370	Foundations of Forensics Psychology
SOCY 313	The Individual and Society
SOCY 427	Deviant Behavior
Courses related to computing:	
CMIS 141	Introductory Programming
CMIS 330	Software Engineering Principles and Techniques
Course for qualified students planning graduate study in cybersecurity at UMUC:	
CSIA 510	Cyberspace and Cybersecurity
Course for qualified students planning graduate study in teaching at UMUC:	
EDTP 500	Professional Fundamentals of Teaching and Learning
Total credits for BS in cybersecurity	**120**

Economics

Students may seek an academic minor in economics.

Minor in Economics

The economics minor complements the skills the student gains in his or her major discipline by providing a study of the forces that determine production and distribution, price levels, and income distribution, as well as other economic factors that influence the quality of life.

Requirements for the Minor

A minor in economics requires the completion of 15 credits in economics. All ECON courses apply. Students should take ECON 201 and 203 as the first courses in the minor (if they have not already applied the courses toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Emergency Management

Students may seek either an academic major or minor in emergency management.

Major in Emergency Management

The emergency management major develops the knowledge, skills and abilities needed for leadership in emergency management, with a focus on disaster prevention, planning, preparedness, response, mitigation, and recovery. The curriculum covers needs and issues, operations management, planning and response, and terrorism and is designed to provide students with a global outlook, interpersonal skills, and emergency management knowledge and skills. Students are prepared for management positions in emergency management in government and industry or for graduate study in emergency management, homeland security, or management and leadership. Coursework may also fill requirements related to the National Fire Protection Association Standard on Disaster/Emergency Management and Business Continuity Programs (1600), qualification as a Certified Emergency Manager, and other professional association certifications.

Intended Program Outcomes

The student who graduates with a major in emergency management will be able to

- Facilitate and support leadership and vision in emergency management to administer successful programs, including intergovernmental, interagency, and interdisciplinary outreach.
- Utilize informed decision making, calmness under stress, goal orientation, teamwork, ethical behavior, professional development, the integration of assets and resources, enhanced technology, and communication to ensure effective administration of emergency management related programs.
- Use clear and effective oral and written communication strategies in concert with strong interpersonal, technology, and social media skills to facilitate building collaborative partnerships in emergency management.
- Identify risks and design responses, plans, training, and exercises that coordinate public and private resources to effectively encourage disaster prevention, improve emergency response, enhance recovery, and effectively mitigate disasters.

Degree Requirements

A degree with a major in emergency management requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education require-

ments; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE EMERGENCY MANAGEMENT MAJOR

Coursework for a major in emergency management includes the following:

- Required core courses (15 credits): EMGT 302, 304, 306, 312, and 486A
- Supplemental major course in needs and issues (3 credits): Chosen from EMGT 308, CSIA 457 and 459, and IFSM 432 or 433
- Supplemental major course in operations management (3 credits): Chosen from EMGT 310; BMGT 366 and 405; and ENMT 310
- Supplemental major course in planning and response (3 credits): HMLS 302 or EMGT 404
- Supplemental major course in terrorism (3 credits): GVPT 406 or 407
- Required capstone course (3 credits): HMLS 495
- Required related course (3 credits), which may be applied anywhere in the degree: ACCT 326 or IFSM 300

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in emergency management. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Emergency Management Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature, course to fulfill the arts and humanities requirement*	
Foundation Courses *(to be taken within the first 60 credits)*		
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
◆ EMGT 302	Concepts of Emergency Management	3
ANTH 344	Cultural Anthropology and Linguistics	3
or SPCH 482	Intercultural Communication *(recommended elective)*	
WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	3
IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems *(fulfills the interdisciplinary issues/computing requirement; students should note prerequisites)*	
◆ EMGT 304	Emergency Response Preparedness and Planning	3
IFSM 304	Ethics in the Information Age *(recommended elective)*	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
◆ EMGT 306	Political and Policy Issues in Emergency Management	3
◆ EMGT 312	Social Dimensions of Disaster	3
◆ EMGT 486A	Internship in Emergency Management Through Co-op	3
◆ IFSM 432	Disaster Recovery Planning *or other supplemental major course in needs and issues*	3

◆ BMGT 366	Global Public Management *or other supplemental major course in operations management*	3
◆ HMLS 302	Introduction to Homeland Security *or other supplemental major course in planning and response*	3
◆ GVPT 406	Global Terrorism *or other supplemental major course in terrorism*	3
Capstone Course for Major *(to be taken after all other courses for the major)*		
◆ HMLS 495	Public Safety Policies and Leadership	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		40
Recommended Electives		
STAT 200	Introduction to Statistics *(students should note prerequisite)*	
EMGT 310	Continuity of Operations Planning and Implementation *(may meet requirements for certain graduate degree programs at UMUC)*	
HMLS 302	Introduction to Homeland Security *(may meet requirements for certain graduate degree programs at UMUC)*	
Total credits for BS in emergency management		**120**

Minor in Emergency Management

The emergency management curriculum complements the skills the student gains in his or her major discipline by providing knowledge of emergency management, including disaster planning and operations and allocation of limited resources.

Requirements for the Minor

A minor in emergency management requires the completion of 15 credits of coursework in emergency management. All EMGT courses apply. It is recommended that students take EMGT 302 or 304 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

English

Students may seek either an academic major or minor in English.

Major in English

The English major provides students with broad cultural literacy, as well as the analytical, writing, and critical thinking skills for successful professional work and graduate study. Graduates with an English degree may pursue careers in business, education, law, the military, creative and professional writing, journalism, marketing, public relations, administration, and management, as well as advanced degrees in secondary teaching, literature, or related fields.

Intended Program Outcomes

The student who graduates with a major in English will be able to

- Interpret literature and apply language in a thoughtful and articulate way to reflect on the human condition in today's world.
- Apply models from literature that reflect diversity and cultural competence to promote fair and inclusive interactions in the workplace and the larger society.
- Apply models from literature to ethical leadership and strategic management in for-profit and not-for-profit organizations.
- Access, research, and analyze information using current technologies and library resources to accomplish professional objectives.
- Create professional written and oral communications for specific purposes and provide feedback on grammatical and stylistic conventions.

Degree Requirements

A degree with a major in English requires the successful completion of 120 credits of coursework, including 33 credits for the major; 41 credits in general education requirements; and 46 credits in the minor, electives, and other degree requirements. At least 17 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE ENGLISH MAJOR

Coursework for a major in English includes the following:

- Required foundation course (3 credits): ENGL 303
- Fiction genre course (3 credits): ENGL 240, 246, 441, or 457
- Poetry genre course (3 credits): ENGL 240, 345, or 446
- Drama genre course (3 credits): ENGL 240, 434, or 454
- Pre-1800 historical period course (3 credits): ENGL 201, 211, 221, 310, or 311
- Historical period course (3 credits): ENGL 201, 211, 221, 222, 310, 311, 312, 425, 433, or 437
- American author course (3 credits): ENGL 354, 363, 364, or 439
- British author course (3 credits): ENGL 205, 304, 358, 406, 418, or 419

- British author course (3 credits): ENGL 205, 304, 358, 406, 418, or 419
- Supplemental major courses (9 credits): Chosen from any ENGL courses and WRTG 288, 289, 387, 388, 393, or 394

Note: No course may be applied to more than one of the above categories.

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BA in English. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

English Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
Foundation Courses *(to be taken within the first 60 credits)*		
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/writing or speech requirement*	
◆ ENGL 240	Introduction to Fiction, Poetry, and Drama *or other supplemental major course*	3
◆ ENGL 303	Critical Approaches to Literature	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ ENGL 345	Modern Poetry *or other poetry genre course for the major*	3
◆ ENGL 441	The Novel in America Since 1914 *or other fiction genre course for the major*	3
◆ ENGL 311	17th- and 18th-Century British Literature *or other pre-1800 period course for the major*	3
◆ ENGL 433	American Literature: 1914 to the Present	3
or ENGL 425	Modern British Literature *or other historical period course for the major*	
◆ ENGL 364	African American Authors Since 1900	3
or ENGL 354	American Women Writers Since 1900 *or other American author course for the major*	
◆ ENGL 406	Shakespeare: Power and Justice *or other British author course for the major*	3
◆ ENGL 454	Modern World Drama *or other drama genre course for the major*	3
◆ WRTG 388	Advanced Grammar	3
or WRTG 387	Issues and Methods in Tutoring Writing *or other supplemental major course*	
◆ ENGL 481	The Art of Narration	3
or ENGL 485	Creative Writing: Poetry *or other supplemental major course*	
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		43
Recommended Elective		
EDTP 500	Professional Fundamentals of Teaching and Learning *(for qualified students who plan to enter the MAT program at UMUC; students should note prerequisites and consult an advisor)*	
Total credits for BA in English		**120**

Minor in English

The English minor complements the skills the student gains in his or her major discipline by providing exposure to literary analysis, critical thinking and reading, and the study of the relationship of literature to contemporary intellectual issues.

Requirements for the Minor

A minor in English requires the completion of 15 credits of English coursework. All ENGL courses apply. It is recommended that students take ENGL 240 and 303 as the first courses in the minor (if they have not already applied the courses toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Environmental Management

Students may seek either an academic major or minor in environmental management.

Major in Environmental Management

The major in environmental management prepares students to plan, implement and control all facets of environmental management. Focus is on the knowledge and skills students need to be effective environmental managers. The curriculum provides an interdisciplinary approach to environmental management that includes management of air, land, and water; pollution control; policies; regulations; and environmental health and safety. Students are prepared for careers in the fields of public safety, occupational health, pollution remediation, hazard control, risk management, risk assessment, and environmental health policy and regulation.

Intended Program Outcomes

The student who graduates with a major in environmental management will be able to

- Identify and evaluate current and future air, water, land, and energy resource needs to make appropriate recommendations and advocate regarding environmentally sustainable solutions and practices.
- Ensure compliance with safety, health, and environmental laws, regulations, and policies for the protection of humans and the environment in every activity and aspect of an environmental management plan, procedure, and operation.
- Apply scientific knowledge and principles, quantitative methods, and technology tools to think critically and solve complex environmental management problems in a variety of settings.
- Communicate orally and in writing on environmental issues, principles, and practices in a clear, well-organized manner that effectively persuades, informs, and clarifies ideas, information, plans, and procedures to stakeholders and other interested parties.
- Develop and implement management plans that incorporate scientific principles and comply with environmental laws and ethical principles.
- Evaluate and use information obtained through field inspections, monitoring, and sampling to assess the safety of environments.

Degree Requirements

A degree with a major in environmental management requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE ENVIRONMENTAL MANAGEMENT MAJOR

Coursework for a major in environmental management includes the following:

- Required core courses (15 credits): ENMT 301, 303, 321, 322 (or 405), and 340
- Supplemental major courses (12 credits): Chosen from any ENMT courses and BEHS 365
- Required capstone course (3 credits): ENMT 495
- Required related courses (12 credits), which may be applied anywhere in the degree: BIOL 101, MATH 115 (or MATH 107–108), NSCI 100, and STAT 230

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in environmental management. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Environmental Management Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 115	Pre-Calculus	3
or both MATH 107	College Algebra	
and MATH 108	Trigonometry and Analytical Geometry *(related requirement for the major)*	
Introductory Courses *(to be taken within the first 30 credits)*		
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *(related requirement for the major; also fulfills the biological and physical sciences lecture and laboratory requirement)*	1
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
BIOL 101	Concepts of Biology *(related requirement for the major; also fulfills the biological and physical sciences lecture requirement)*	3
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics *(related requirement for the major)*	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Foundation Courses *(to be taken within the first 60 credits)*		
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	3
IFSM 300	Information Systems in Organizations *or other course to fulfill the interdisciplinary issues/computing requirement*	3
ANTH 344	Cultural Anthropology and Linguistics *(recommended elective)*	3
IFSM 304	Ethics in the Information Age *(recommended elective)*	3
◆ ENMT 301	Environment and Ecosystems Management	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ ENMT 303	Environmental Regulations and Policy	3
◆ ENMT 321	Environmental Health	3
◆ ENMT 322	Occupational Health and Safety	3
or ENMT 405	Pollution Prevention Strategies	
◆ ENMT 340	Environmental Technology	3
◆ ENMT 405	Pollution Prevention Strategies	3
or ENMT 322	Occupational Health and Safety *or other supplemental major course*	
◆ ENMT 305	Hazardous Materials Toxicology *or other supplemental major course*	3
◆ ENMT 380	Air Quality Management *or other supplemental major course*	3
◆ ENMT 315	Environmental Audits and Permits *or other supplemental major course*	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ ENMT 495	Global Environmental Management Issues	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		37
Total credits for BS in environmental management		**120**

Minor in Environmental Management

The environmental management minor complements the skills the student gains in his or her major discipline by providing a study of interdisciplinary and multimedia (air, water, land) environmental management and related issues on a fundamental, practical, and global level.

Requirements for the Minor

A minor in environmental management requires the completion of 15 credits of coursework in environmental management. All courses allowable for the major apply. It is recommended that students take ENMT 301 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the

minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Finance

Students may seek either an academic major or minor in finance.

Major in Finance

The finance major provides the knowledge of financial concepts and analytical skills needed to balance finance theory and practical application. It combines a foundation in the principles of business, economics, and accounting with an in-depth focus on issues and knowledge in finance and financial management. The curriculum covers business finance, financial management, investments, and security analysis and valuation. Students are prepared to pursue a variety of careers in corporate and government financial management, investments, portfolio analysis and management, financial analysis, financial planning, banking, risk management, and insurance.

Intended Program Outcomes

The student who graduates with a major in finance will be able to

- Prepare, analyze, and interpret financial information and apply financial and economic theories to make sound business decisions.
- Apply basic principles of security markets to effectively create, evaluate, and manage security portfolios.
- Describe and analyze the impact of legal, regulatory, and environmental factors on planning, forecasting, and making financial decisions.
- Describe and analyze the impact of monetary systems and legal, regulatory, and environmental factors on planning, forecasting, and making financial decisions.
- Communicate, collaborate, lead, and influence across the organization to achieve organizational goals effectively and ethically.
- Identify required information and research, collect, synthesize, and interpret data by applying appropriate technology tools to solve business problems.
- Use market principles and entrepreneurial skills to identify, develop, and implement business opportunities and relationships for financial products and services.

Degree Requirements

A degree with a major in finance requires the successful completion of 120 credits of coursework, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE FINANCE MAJOR

Coursework for a major in finance includes the following:

- Required foundation courses (15 credits): ACCT 220 and 221, STAT 230 (or 200), BMGT 364, and MRKT 310
- Required core courses (12 credits): FINC 330, 340, 430, and 440
- Supplemental major courses (6 credits): Chosen from any FINC courses and ECON 305, 306, and 430
- Required capstone course (3 credits): FINC 495
- Required related courses (9 credits), which may be applied anywhere in the degree: ACCT 326 (or IFSM 300) and ECON 201 and 203

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in finance. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Finance Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
BMGT 110	Introduction to Business and Management *(strongly recommended elective for students with no prior business experience)*	3
Introductory Courses *(to be taken within the first 30 credits)*		
◆ ACCT 220	Principles of Accounting I	3
ECON 201	Principles of Macroeconomics *(related requirement for the major; also fulfills the first behavioral and social sciences requirement)*	3

NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	

Foundation Courses *(to be taken within the first 60 credits)*

◆ STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
◆ ACCT 221	Principles of Accounting II	3
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
ECON 203	Principles of Microeconomics *(related requirement for the major)*	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems *(related requirement for the major; also fulfills the interdisciplinary issues/computing requirement)*	
◆ BMGT 364	Management and Organization Theory	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

◆ FINC 330	Business Finance	3
◆ MRKT 310	Marketing Principles	3
◆ FINC 340	Investments	3
WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
◆ ECON 430	Money and Banking *or other supplemental major course*	3
◆ FINC 430	Financial Management	3
◆ FINC 440	Security Analysis and Valuation	3
◆ FINC 460	International Finance *or other supplemental major course*	3
BMGT 392	Global Business Management *(recommended elective)*	3
BMGT 496	Business Ethics *(recommended elective)*	3

Capstone Course for Major *(to be taken in the last 15 credits)*

◆ FINC 495	Contemporary Issues in Finance Practice	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 28

Recommended Minors

Human resource management, marketing, or other business-related minor

Total credits for BS in finance **120**

Minor in Finance

The finance minor complements the skills the student gains in his or her major discipline by providing a study of the institutions, theory, and practice associated with the allocation of financial resources within the private sector.

Requirements for the Minor

A minor in finance requires the completion of 15 credits of coursework in finance. All FINC courses apply. It is recommended that students take FINC 330 and 340 as the first courses in the minor (if they have not already applied the courses toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Fire Science

Students may seek either an academic major or minor in fire science.

Major in Fire Science

The major in fire science develops the knowledge, skills, and abilities needed for leadership in fire protection. It covers disaster planning and the administration of fire-protection services, encompassing all areas of incendiary-fire management. It provides an understanding of the interagency coordination necessary for fire prevention, emergency management, safe and successful fire-incident command, and arson investigation. The curriculum includes analytical approaches to fire protection and investigation, personnel management, disaster and fire-defense planning, hazardous materials management, fire-protection structure and system design, the role of the fire service within the community and political structure, and the phenomena of fire propagation. Developed in conjunction with the National Fire Academy of the Federal Emergency Management Agency, the major serves fire-service professionals seeking state-of-the-art knowledge to support advancement to chief executive management and senior leadership positions. It also serves professionals in related fields such as public safety, law enforcement, government, health services, insurance, and private-industry emergency response, as well as those in military fire departments in the United States and abroad.

Intended Program Outcomes

The student who graduates with a major in fire science will be able to

- Apply principles of transformational leadership to negotiate, mentor, motivate, and lead others toward a shared and ethical organizational vision or goal.
- Apply knowledge of leadership, change, business models, organizational issues, and regulations when working with staff and federal officials to ensure organizational effectiveness, resulting in the improvement of emergency services.
- Utilize the methods and resources of research, science, and technology to effectively manage emergency services.
- Use appropriate communication strategies and methods to accomplish organizational goals and objectives.
- Utilize appropriate assessment and planning skills to improve organization and community risk management for emergency services.

Degree Requirements

A degree with a major in fire science requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE FIRE SCIENCE MAJOR

Coursework for a major in fire science includes the following:

- Required core courses (15 credits): FSCN 302, 304, 305, 412, and 416
- Supplemental major courses (12 credits): Any upper-level FSCN courses
- Required capstone course (3 credits): HMLS 495
- Required related course (3 credits), which may be applied anywhere in the degree: ACCT 326 or IFSM 300

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in fire science. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Fire Science Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3

IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	

Foundation Courses *(to be taken within the first 60 credits)*

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
◆ FSCN 302	Fire and Emergency Services Administration	3
ANTH 344	Cultural Anthropology and Linguistics	3
or SPCH 482	Intercultural Communication *(recommended elective)*	
WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	3
IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems *(fulfills the interdisciplinary issues/computing requirement; students should note prerequisites)*	
◆ FSCN 304	Personnel Management for Fire and Emergency Services	3
IFSM 304	Ethics in the Information Age *(recommended elective)*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
◆ FSCN 305	Fire-Prevention Organization and Management	3
◆ FSCN 412	Political and Legal Foundations of Fire Protection	3
◆ FSCN 416	Emergency Services Training and Education	3
◆ FSCN 306	Fire Investigation and Analysis	3
or FSCN 303	Analytic Approaches to Public Fire Protection *or other supplemental major course*	
◆ FSCN 402	Fire-Related Human Behavior	3
or FSCN 401	Disaster Planning and Control *or other supplemental major course*	
◆ FSCN 411	Fire Protection and Structure	3
or FSCN 413	Community Risk Reduction for the Fire and Emergency Services *or other supplemental major course*	
◆ FSCN 414	Fire Dynamics	3
or FSCN 415	Application of Fire Research *or other supplemental major course*	

Capstone Course for Major *(to be taken after all other courses for the major)*

◆ HMLS 495	Public Safety Policies and Leadership	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 40

Recommended Elective

STAT 200	Introduction to Statistics	

Total credits for BS in fire science **120**

Minor in Fire Science

The fire science minor complements the skills the student gains in his or her major discipline by providing knowledge of disaster planning and the administration of fire-protection services, including organization, planning, operating procedures, management, and allocation of limited resources.

Requirements for the Minor

A minor in fire science requires the completion of 15 credits of coursework in fire science. All FSCN courses apply. It is recommended that students take FSCN 302 or 304 as the first course for the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Forensics

Students may seek an academic minor in forensics. A related academic major is available in investigative forensics (p. 61).

Minor in Forensics

The minor in forensics complements the skills the student gains in his or her major discipline by providing interdisciplinary study in selected areas of criminal justice, natural science, social science, investigation and security, information and computer systems, psychology, and sociology. It combines laboratory and field skills in the collection and analysis of physical evidence with further study in the various subfields of forensics.

Requirements for the Minor

A minor in forensics requires the completion of 15 credits of coursework in forensics, chosen from those listed in the requirements for the major in investigative forensics. It is recommended that students take CCJS 100, 234, or 320 as the first course for the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

General Studies

The general studies major is available only to active-duty military personnel and certain others who conform to specific stipulations. Students outside UMUC Europe and UMUC Asia should not select this major.

Major in General Studies

The general studies major allows students to draw from various disciplines that provide a body of knowledge appropriate to an identified area of interest (for example, an aspect of culture, a historical period, or a geographical location). The interdisciplinary approach emphasizes analysis and synthesis of diverse theory and practice.

Intended Program Outcomes

The student who graduates with a major in general studies will be able to

- Understand and apply key concepts from chosen disciplines.
- Develop effective written and oral communication skills consistent with the chosen areas of study.
- Apply skills and concepts to problems of modern life.
- Define an approach grounded in the chosen disciplines and appropriate to the study of a specific topic, area, or theme.
- Develop effective skills in cross-disciplinary comparison, historical and critical analysis, research, and evaluation.
- Use computers for communication and research.
- Demonstrate information literacy through research and resource evaluation appropriate to the chosen area of study.

Degree Requirements

A degree with a major in general studies requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE GENERAL STUDIES MAJOR

Coursework for the major in general studies includes either 15 credits in each of two different disciplines or specific coursework for a particular curriculum as defined by UMUC. The general studies major requires prior approval. Unless the curriculum has already been defined by UMUC, students must submit a formal proposal explaining the focus and intended learning outcomes of the proposed course of study and identifying specific courses to fulfill those learning outcomes. Students should consult an advisor about eligibility for the major and about the requirements and procedure for submitting a proposal.

Gerontology

Students may seek an academic major or minor in gerontology.

Major in Gerontology

The major in gerontology prepares students to implement and manage health and human service programs in gerontology. It combines a foundation in the psychosocial and physiological aspects of aging with an understanding of programs, services, and policies related to aging and older adults. Graduates are prepared for careers such as gerontological services or program manager, program and policy analyst, services developer, and housing or facilities manager.

Intended Program Outcomes

The student who graduates with a major in gerontology will be able to

- Access, interpret, and apply gerontological research findings related to biopsychosocial processes in the context of aging.
- Analyze the impact of sociological and cultural factors, such as race, ethnicity, gender, and social class, on the aging process.
- Analyze the development of policies related to aging and their impact on services and organizations for older adults, both locally and nationally.
- Apply interdisciplinary gerontological knowledge to work with older adults in a chosen area of practice.
- Practice within the legal and ethical standards of the aging services field.

Degree Requirements

A degree with a major in gerontology requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE GERONTOLOGY MAJOR

Coursework for a major in gerontology includes the following:

- Required foundation courses (9 credits): GERO 100, 220 (or PSYC 357), and 302 (or BIOL 307)
- Required management courses (9 credits): STAT 225 (or 200 or 230) and GERO 301 (or BMGT 361) and 306
- Health-related course (3 credits): GERO 338, 355, 380, or 460
- Supplemental major courses (6 credits): Any GERO courses
- Required internship (3 credits): GERO 486A

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in gerontology. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Gerontology Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
◆ GERO 100	Introduction to Gerontology	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Foundation Courses *(to be taken within the first 60 credits)*		
◆ GERO 220	Psychological Aspects of Aging	3
or PSYC 357	Psychology of Adulthood and Aging	
◆ STAT 225	Introduction to Statistical Methods in Psychology	3
or STAT 200	Introduction to Statistics	
or STAT 230	Business Statistics	

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/writing or speech requirement*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
◆ GERO 302	Health and Aging	3
or BIOL 307	The Biology of Aging	
Additional Required Courses *(to be taken after introductory and foundation courses)*		
ANTH 344	Cultural Anthropology and Linguistics	3
or SPCH 482	Intercultural Communications *(recommended elective)*	
◆ GERO 301	Service/Program Management	3
or BMGT 361	Health Management	
◆ GERO 306	Programs, Services, and Policies	3
WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ GERO 338	Health Promotion in Older Adults *or other health-related course for the major*	3
◆ GERO 311	Women and Aging	3
or GERO 410	Cross-Cultural Perspectives of Aging *or other supplemental major course*	
◆ GERO 327	Ethnicity and Aging *or other supplemental major course*	3
Internship for Major *(to be taken within the last 30 credits)*		
◆ GERO 486A	Internship in Gerontology Through Co-op	3
Minor and/or Elective Courses *(to be taken within the last 60 credits along with required major courses)*		43
Total credits for BS in gerontology		**120**

Minor in Gerontology

The gerontology minor complements the skills the student gains in his or her major discipline by examining aging from a multidisciplinary perspective that integrates biological, sociological, psychological, and historical perspectives. It provides the student with the opportunity to study complex processes and aspects of aging and the field of gerontology.

Requirements for the Minor

A minor in gerontology requires the completion of 15 credits of coursework in gerontology. Courses appropriate for the major in gerontology apply. It is recommended that students take GERO 100 and 220 (or PSYC 357) as the first courses in the minor (if they have not already applied the courses toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Global Business and Public Policy

Students may seek an academic major in global business and public policy.

Major in Global Business and Public Policy

The major in global business and public policy prepares students with the requisite knowledge and skills for professional success in the global business environment. It provides a foundation in the principles of business, marketing, and accounting with an in-depth focus on global business and public policy. The curriculum covers international and multinational management; public policy and management; and issues related to international law, marketing, finance, and development. Students are prepared for career opportunities in both private and public economic sectors, including domestic and global corporations; federal, state and local governments; and not-for profit, nongovernmental, and intergovernmental domestic and international organizations and institutions.

BACHELOR'S DEGREE CURRICULA

Intended Program Outcomes

The student who graduates with a major in global business and public policy will be able to

- Participate in, manage, and lead global teams to achieve institutional goals and objectives.
- Apply the fundamentals of international finance, marketing, sales, supply chain management, asset management, production, and human capital management to provide added value and reduce risk.
- Employ knowledge of different environments, cultural settings, ethics, and values to negotiate contracts and implement programs.
- Research, analyze, and assess systems, markets, and policies to guide decision making to structure and advance global opportunities.
- Apply an understanding of the global challenge, opportunities, and best practices used by global institutions to maximize stakeholder value.
- Influence or execute institutional programs and practices that comply with local, national, and international laws, policies, and regulations and implement global strategies that will ensure a positive regulatory environment.
- Use critical and creative thinking and communication and team-building skills in business and policy decisions to solve global business issues.

Degree Requirements

A degree with a major in global business and public policy requires the successful completion of 120 credits of coursework, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE GLOBAL BUSINESS AND PUBLIC POLICY MAJOR

Coursework for a major in global business and public policy includes the following:

- Required foundation courses (15 credits): ACCT 220 and 221, BMGT 364, FINC 330, and MRKT 310
- Required core courses (12 credits): BMGT 392, 454, 456, and 482
- Supplemental major courses (9 credits): Chosen from ACCT 425; BMGT 366, 407, and 437; FINC 460; and MRKT 454
- Required related courses (15 credits), which may be applied anywhere in the degree: IFSM 300 (or ACCT 326), BMGT 380, ECON 201 and 203, and STAT 230

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in global business and public policy. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Global Business and Public Policy Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
BMGT 110	Introduction to Business and Management *(strongly recommended elective for students with no prior business experience)*	3
Introductory Courses *(to be taken within the first 30 credits)*		
◆ ACCT 220	Principles of Accounting I	3
ECON 201	Principles of Macroeconomics *(related requirement for the major; also fulfills first behavioral and social sciences requirement)*	3
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Foundation Courses *(to be taken within the first 60 credits)*		
STAT 230	Business Statistics *(related requirement for the major)*	3
◆ ACCT 221	Principles of Accounting II	3
ECON 203	Principles of Microeconomics *(related requirement for the major)*	3

HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ BMGT 364	Management and Organization Theory	3
◆ MRKT 310	Marketing Principles	3
IFSM 300	Information Systems in Organizations *(related requirement for the major; also fulfills the interdisciplinary issues/computing requirement)*	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
BMGT 380	Business Law I *(related requirement for the major)*	3
◆ FINC 330	Business Finance	3
◆ BMGT 392	Global Business Management	3
◆ MRKT 454	Global Marketing *or other supplemental major course*	3
◆ FINC 460	International Finance *or other supplemental major course*	3
BMGT 496	Business Ethics *(recommended elective)*	3
◆ BMGT 366	Global Public Management *or other supplemental major course*	3
◆ BMGT 456	Multinational Management	3
◆ BMGT 482	Business and Government	3
◆ BMGT 454	Global Business and Public Policy Regimes	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		25
Total credits for BS in global business and public policy		**120**

Graphic Communication

Students may seek an academic major in graphic communication.

Major in Graphic Communication

The major in graphic communication provides students with a multidisciplinary study of the skills and technology needed to compete in today's rapidly changing visual arts and communication environments. The curriculum combines training in graphic art and design and computer graphics with studies in communication, including business-oriented writing and publication. Graduates are prepared for careers as graphic designers and related positions that require creative skills as well as an understanding of business communication.

Intended Program Outcomes

The student who graduates with a major in graphic communication will be able to

- Respond to stakeholder needs with appropriate design solutions that effectively convey a coherent, consistent message for targeted purposes and audiences.
- Use appropriate technologies and sound design principles to create effective solutions for communication needs.
- Synthesize effective visual communication from various oral, written, and visual elements.
- Work within the ethical and legal parameters of the communications professions.
- Manage projects by identifying the steps, roles, responsibilities, and resources to complete a project on time and on budget through effective teamwork.

Degree Requirements

A degree with a major in graphic communication requires the successful completion of 120 credits of coursework, including 33 credits for the major; 41 credits in general education requirements; and 46 credits in the minor, electives, and other degree requirements. At least 16 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE GRAPHIC COMMUNICATION MAJOR

Coursework for a major in graphic communication includes the following:

- Required design courses (6 credits): ARTT 110 and 250,
- Required graphic design courses (12 credits); ARTT 354, 458, and 479 and CMIST 310
- Required marketing and communication courses (12 credits): COMM 300 and 493 and MRKT 310 and 354
- Required capstone course (3 credits): ARTT 495

BACHELOR'S DEGREE CURRICULA

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BA in graphic communication. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Graphic Communication Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
PHIL 140 *or* a foreign language course	Contemporary Moral Issues *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ ARTT 110	Elements of Drawing I	3
◆ COMM 300	Communication Theory	3
Foundation Courses *(to be taken within the first 60 credits)*		
◆ ARTT 250	Elements of Commercial Design	3
PSYC 100	Introduction to Psychology	3
or BEHS 210	Introduction to Social and Behavioral Science *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
◆ MRKT 310	Marketing Principles	3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ MRKT 354	Integrated Marketing Communications	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
CMST 385	Internet and Web Design *Fulfills the interdisciplinary issues/computing requirement; prerequisite for later courses*	3
◆ CMST 310	Electronic Publishing	3
SPCH 100	Foundations of Speech Communication	3
or WRTG 288/288X	Standard English Grammar, Usage, and Diction *or other course to fulfill the communications/writing or speech requirement*	
◆ ARTT 354	Elements of Computer Graphics	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
◆ ARTT 479	Advanced Computer Graphics *or other writing or language arts course for the major*	3
WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ ARTT 458	Graphic Design and Communication	3
◆ COMM 493	Strategies for Visual Communications *or other supplemental major course*	3
Capstone Course for Major *(to be taken after all other courses for the major)*		
◆ ARTT 495	Graphic Communication Portfolio	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		43
Total credits for BA in graphic communication		**120**

History

Students may seek either an academic major or minor in history.

Major in History

The history major prepares students to read and analyze historical works with critical insight and appreciate the range and variety of resources, as well as demonstrate knowledge of the development and cultural diversity of their respective areas of study. Students develop their research skills using libraries, archives, and online sources to acquire a sense of intellectual property and the responsibility of presenting and interpreting historical issues. They also develop writing skills to clearly express their findings using the language of the discipline. The history major prepares students for graduate study in history and for careers in education, writing and publishing, journalism, law, public relations, business, government, and management.

Intended Program Outcomes

The student who graduates with a major in history will be able to

- Organize and use primary and secondary sources for research, interpretation, and presentation of historical knowledge.
- Convey historical information by writing and speaking clearly and appropriately for different audiences and with an appreciation of diverse viewpoints.
- Engage in history as a moral and ethical practice, recognizing a diversity of backgrounds and perspectives.
- Cultivate historical habits of mind, apply historical precedents to contemporary developments, remain open to historical interpretation as an incomplete process, and develop self-reflection to mitigate bias.
- Demonstrate a chronological understanding of the different peoples, events, and cultures that have shaped human civilization.

Degree Requirements

A degree with a major in history requires the successful completion of 120 credits of coursework, including 33 credits for the major; 41 credits in general education requirements; and 46 credits in the minor, electives, and other degree requirements. At least 17 credits in the major must be earned in upper-level courses (numbered 300 or above).

Requirements for the History Major

Coursework for a major in history includes the following:

- Required U.S. history sequence (6 credits): HIST 156 and 157
- Required methodology course (3 credits): HIST 309
- World history sequence (6 credits): HIST 115–116, 141–142, or 284–285
- U.S. distribution course (3 credits): HIST 255, 266, 360, 361, 362, 364, 365, 372, 376, 377, 381, 453, 460, 461, 462, 463, or 467
- European distribution course (3 credits): HIST 324, 325, 326, 327, 332, 333, 334, 335, 336, 337, 358, 375, 430, 431, 432, 433, 434, 437, 438, 439, 440, 441, 443, or 448
- World regions distribution course (3 credits): HIST 284, 285, 341, 342, 353, 354, 382, 383, 389, 391, 392, 464, 465, 466, 480, 481, 482, or 483
- Supplemental major courses (9 credits): Any HIST courses

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BA in history. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

History Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
◆ HIST 115	World History I	3
or HIST 141	Western Civilization I *or other first course in required world history sequence for the major*	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3

GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ HIST 116	World History II	3
or HIST 142	Western Civilization II *or other second course in required world history sequence for the major*	

Foundation Courses *(to be taken within the first 60 credits)*

◆ HIST 156	History of the United States to 1865	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ HIST 157	History of the United States Since 1865	3
ARTH 370	History of World Art I *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	3
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/writing or speech requirement*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
HUMN 351	Myth and Culture *(recommended elective)*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ HIST 309	Introduction to Historical Writing	3
◆ HIST 364	Emergence of Modern America: 1900 to 1945 *or other U.S. distribution course for the major*	3
◆ HIST 336	Europe in the 19th Century: 1815 to 1919 *or other European distribution course for the major*	3
◆ HIST 481	History of Modern China	3
or HIST 483	History of Japan Since 1800 *or other world regions distribution course for the major*	
◆ HIST 365	Recent America: 1945 to the Present *or other supplemental major course*	3
◆ HIST 337	Europe's Bloodiest Century *or other supplemental major course*	3
◆ HIST 465	World War II *or other supplemental major course*	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 40

Recommended Elective

EDTP 500	Professional Fundamentals of Teaching and Learning *(for qualified students who plan to enter the MAT program at UMUC; students should note prerequisites and consult an advisor)*	

Total credits for BA in history **120**

Minor in History

The history minor complements the skills the student gains in his or her major discipline by offering a historical perspective and by developing critical thinking and an appreciation of the major contributions of various events and individuals to human civilization.

Requirements for the Minor

A minor in history requires the completion of 15 credits of coursework in history. All HIST courses apply. Students are recommended to take HIST 309 after all other courses in the minor.

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Homeland Security

Students may seek either an academic major or minor in homeland security.

Major in Homeland Security

The major in homeland security develops the knowledge, skills, and abilities needed for leadership in homeland security, with a focus on the domestic and international security issues of homeland security, including international and domestic terrorism, infrastructure protection, strategic planning for security, international relations, intelligence operations and evaluation, and program management. The curriculum is designed to provide students with a global outlook, interpersonal skills, and awareness of current issues in homeland security. Graduates of the program will have the knowledge and skills to serve as leaders in government and industry security.

Intended Program Outcomes

The student who graduates with a major in homeland security will be able to

- Lead, manage, motivate, and develop others to establish and achieve strategic and operational homeland security goals and interface with internal and external audiences.
- Manage technology and information for the protection, response, and recovery of critical infrastructure/information in a hostile or emergency environment.
- Navigate public or private organizations' financial, personnel, legal, and political information to identify, evaluate, and address the organizational needs, requirements, and resources.
- Thoroughly research, critically analyze, and synthesize complex intelligence information using various methods to formulate risk assessments and responses to emerging threats.
- Communicate, negotiate, and educate strategically and tactically across cultural boundaries with diverse audiences within homeland security.
- Write concise and succinct policy, planning, and procedure documents for a variety of audiences to support homeland security operations.

Degree Requirements

A degree with a major in homeland security requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE HOMELAND SECURITY MAJOR

Coursework for a major in homeland security includes the following:

- Required core courses (15 credits): HMLS 302, 304, 406, 408, and 414
- Supplemental major course in technology (3 credits): Chosen from BIOL 422, CCJS 462, CSIA 302 and 303, ENMT 321, and FSCN 303
- Supplemental major course in operations (3 credits): Chosen from BMGT 366; EMGT 302, 308, 310, and 404; and IFSM 432
- Supplemental major course in intelligence (3 credits): Chosen from CCJS 491 and 496, CSIA 459, and GVPT 408 and 409
- Supplemental major course in applied concepts (3 credits): Chosen from ECON 440; EMGT 312; GVPT 200, 306, and 405; HMLS 486A; or SOCY 473
- Required capstone course (3 credits): HMLS 495
- Required related course (3 credits), which may be applied anywhere in the degree: IFSM 300 (or ACCT 326)

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in homeland security. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Homeland Security Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3

IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	

Foundation Courses *(to be taken within the first 60 credits)*

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
◆ HMLS 302	Introduction to Homeland Security	3
ANTH 344	Cultural Anthropology and Linguistics	3
or SPCH 482	Intercultural Communication *(recommended elective)*	
WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	3
IFSM 300	Information Systems in Organizations *(related requirement for the major; also fulfills the interdisciplinary issues/computing requirement and is prerequisite to recommended major course)*	3
◆ HMLS 304	Strategic Planning in Homeland Security	3
IFSM 304	Ethics in the Information Age *(recommended elective)*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
◆ HMLS 406	Legal and Political Issues of Homeland Security	3
◆ HMLS 408	Infrastructure Security Issues	3
◆ HMLS 414	International Security Issues	3
◆ CSIA 303	Foundations of Information System Security *or other supplemental major course in technology*	3
◆ BMGT 366	Global Public Management *or other supplemental major course in operations*	3
◆ GVPT 409	Terrorism, Antiterrorism, and Homeland Security *or other supplemental major course in intelligence*	3
◆ HMLS 486A	Internship in Homeland Security Through Co-op *or other supplemental major course in applied concepts*	3

Capstone Course for Major *(to be taken in the last 15 credits)*

◆ HMLS 495	Public Safety Policies and Leadership	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 40

Recommended Electives

STAT 200	Introduction to Statistics
EMGT 310	Continuity of Operations Planning and Implementation *(may meet requirements for certain graduate degree programs at UMUC)*

Total credits for BS in homeland security **120**

Minor in Homeland Security

The homeland security minor complements the skills the student gains in his or her major discipline by providing knowledge of the concepts of domestic and international security.

Requirements for the Minor

A minor in homeland security requires the completion of 15 credits of coursework in homeland security. All HMLS courses apply. It is recommended that students take HMLS 302 or 304 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Humanities

Students may seek either an academic major or minor in humanities.

Major in Humanities

The interdisciplinary major in the humanities enables students to broaden their understanding of themselves and their interaction with the world, providing an understanding of their cultural and intellectual heritage while giving them the tools to use that knowledge as lifelong learners. Students explore how individuals and groups understand their existence, their place within their cultures, and their responsibility to others and the physical world. They learn how to express this understanding—by studies in literature, language, history and through creative and expressive art—and define their own meaning of humanness within an increasingly technological and diverse world. The interdisciplinary curriculum draws on art, art history, cultural history, literature, language, music, philosophy and religious studies, and theater.

Intended Program Outcomes

The student who graduates with a major in the humanities will be able to

- Use the knowledge, experiences, and skills gained from the study of the humanities to develop one's identity as a lifelong learner and contributing member of one's community and society.
- Plan, communicate, and implement coherent and justifiable practices that improve human conditions.
- Critically analyze ideas and defend recommendations for improving the conditions of all members of society.
- Act in a personally and socially responsible manner, recognizing the complexity and diversity of the human experience.

Degree Requirements

A degree with a major in humanities requires the successful completion of 120 credits of coursework, including 33 credits for the major; 41 credits in general education requirements; and 46 credits in the minor, electives, and other degree requirements. At least 17 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE HUMANITIES MAJOR

Coursework for a major in humanities includes the following:

- Required foundation courses (12 credits): HUMN 100, PHIL 100, HIST 115 (or HIST 116), and ARTT 205 (or MUSC 210 or THET 110)
- Arts breadth course (3 credits): ARTH 370 or ARTH 371
- Literature breadth courses (6 credits): Chosen from COMM 380 and any upper-level English or foreign-language literature courses
- Philosophy and religion breadth courses (6 credits): Chosen from any 3-credit PHIL courses
- Supplemental major course (3 credits): Any upper-level ARTT, ARTH, ENGL, HIST, HUMN, or PHIL course
- Required capstone course (3 credits): HUMN 495

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BA in humanities. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Humanities Degree Courses		**Credits**
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ HUMN 100	Introduction to the Humanities	3

Foundation Courses *(to be taken within the first 60 credits)*		
◆ PHIL 100	Introduction to Philosophy	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
◆ HIST 115	World History I	3
or HIST 116	World History II	
SPCH 100	Foundations of Speech Communication	3
or WRTG 288/288X	Standard English Grammar, Usage, and Diction *or other course to fulfill the communications/writing or speech requirement*	
◆ ARTT 205	Art Appreciation	3
or MUSC 210	The Impact of Music on Life	
or THET 110	Introduction to the Theatre	
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ ARTH 370	History of World Art I	3
or ARTH 371	History of World Art II *(arts breadth course for the major)*	
◆ PHIL 110	Practical Reasoning *or other philosophy and religion breadth course for the major*	3
◆ COMM 380	Language in Social Contexts *or other literature breadth course for the major*	3
◆ ENGL 433	American Literature: 1914 to the Present *or other literature breadth course for the major*	3
◆ PHIL 336	Ideas Shaping the 21st Century *or other philosophy and religion breadth course for the major*	3
◆ PHIL 348	Religions of the East *or other supplemental major course*	3
Capstone Course *(to be taken in the last 15 credits)*		
◆ HUMN 495	Humanities Seminar	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		43
Total credits for BA in humanities		**120**

Minor in Humanities

The humanities minor complements the skills the student gains in his or her major discipline by providing an integrated curriculum for enrichment and exploration of culture and ideas, as well as a broad perspective on human behavior, thought, and values across traditional disciplines.

Requirements for the Minor

A minor in humanities requires the completion of 15 credits of coursework in humanities. Courses allowable for the major apply.

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level HUMN courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Human Resource Management

Students may seek either an academic major or minor in human resource management.

Major in Human Resource Management

The human resource major provides 21st-century skills, knowledge, and understanding of human resource functions in private- and public-sector organizational settings. These functions include human resource planning; recruitment, selection, placement, and orientation of employees; training and career development; labor relations; management of performance appraisal, compensation, and benefit programs; and development of personnel policies and procedures. The curriculum also covers management and organization theory, organizational behavior and development approaches, labor relations theory and practice, interpersonal skill development, and special perspectives such as women in management. Students are prepared for work in business administration and human resources in the for-profit, non-profit, or public sector. Through the proper selection of courses, the student can prepare for the certification examinations for Professional in Human Resources, Senior Professional in Human Resources, and Global Professional in Human Resources, which are offered by the Society for Human Resource Management.

Intended Program Outcomes

The student who graduates with a major in human resource management will be able to

- Apply business knowledge, change management, and ethical leadership skills to effectively guide the organization, serve internal and external customers, and leverage and develop strategic competencies.
- Apply knowledge of human behavior, labor relations, and current laws and regulations to produce a working environment that is safe, fair, and compliant with all applicable regulations and where all employees are motivated and valued.
- Identify learning needs and develop, implement, and assess programs and/or alternative strategies for employee and organizational learning and development.
- Create rewards that provide the needed knowledge, skills, and attitudes through selection, engagement, and retention of employees for organizational success by using knowledge of monetary, nonmonetary, and environmental elements.
- Recognize the different cultures and world views that inform human thinking and action and respond constructively to human and global differences in workplaces, communities, and organizations.
- Identify and use technology to research, collect, analyze, interpret, and communicate information to sustain the organization and position it competitively.
- Listen, speak, and write in an effective, professional manner that educates, inspires, and influences others.
- Use reflective practice to drive learning and improvement of self and work practice.

Degree Requirements

A degree with a major in human resource management requires the successful completion of 120 credits of coursework, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE HUMAN RESOURCE MANAGEMENT MAJOR

Coursework for a major in human resource management includes the following:

- Required foundation courses (9 credits): BMGT 110 (or prior business experience and an additional supplemental course), ACCT 221 (or ACCT 301), and STAT 230
- Required core courses (15 credits): BMGT 364 and HRMN 300, 362 (or 395 or 406), 400, and 408
- Supplemental major courses (9 credits): Chosen from BMGT 380, 381, 391, 464, 465, and 484; FINC 330; MRKT 310; and any HRMN courses
- Required capstone course (3 credits): HRMN 495
- Required related courses (9 credits), which may be applied anywhere in the degree: ACCT 326 (or IFSM 300) and ECON 201 and 203

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in human resource management. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Human Resource Management Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ BMGT 110	Introduction to Business and Management *(students with business experience should substitute a supplemental major course in the last 60 credits of study)*	3
Introductory Courses *(to be taken within the first 30 credits)*		
ECON 201	Principles of Macroeconomics *(related requirement for the major; also fulfills first behavioral and social sciences requirement)*	3
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
◆ STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics	

Foundation Courses *(to be taken within the first 60 credits)*

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
◆ ACCT 301	Accounting for Nonaccounting Majors	3
or ACCT 221	Principles of Accounting II *(students should note prerequisite)*	
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
ECON 203	Principles of Microeconomics *(related requirement for the major)*	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems *(related requirement for the major; also fulfills the interdisciplinary issues/computing requirement; students should note prerequisite)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
◆ BMGT 364	Management and Organization Theory	3
◆ HRMN 300	Human Resource Management	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
BMGT 392	Global Business Management *(recommended elective)*	3
◆ HRMN 400	Human Resource Management: Analysis and Problems	3
◆ HRMN 408	Employment Law for Business	3
◆ HRMN 362	Labor Relations	3
or HRMN 395	The Total Rewards Approach to Compensation Management	
or HRMN 406	Employee Training and Development	
◆ FINC 330	Business Finance *or other supplemental major course*	3
◆ MRKT 310	Marketing Principles *or other supplemental major course*	3
BMGT 496	Business Ethics *(recommended elective)*	3
◆ BMGT 380	Business Law I *or other supplemental major course*	3

Capstone Course for Major *(to be taken in the last 15 credits)*

◆ HRMN 495	Contemporary Issues in Human Resource Management Practice	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 31

Recommended Elective

MATH 140	Calculus I *(students should note prerequisites)*	

Recommended Minors

Business administration, finance, or other business-related minor

Total credits for BS in human resource management **120**

Minor in Human Resource Management

The human resource management minor complements the skills the student gains in his or her major discipline by examining the human resource functions in a private- or public-sector organizational setting. These functions include human resource planning; recruitment, selection, and placement; employee appraisal and compensation; employee training and career development; management of labor relations; and development of a human resource department implementation plan.

Requirements for the Minor

A minor in human resource management requires the completion of 15 credits of coursework in human resource management. Any HRMN course applies. It is recommended that students take HRMN 300 and 400 for the minor (if the courses have not already applied elsewhere in the degree).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Information Systems Management

Students may seek an academic major in information systems management.

Major in Information Systems Management

The information systems management major develops students' abilities to conceptualize and manage the design and implementation of high-quality information systems. The curriculum focuses on the concepts, methods, and practical applications of information systems in the workplace. Students are provided the skills needed to make substantive contributions to the use of information systems in corporate decision making.

Intended Program Outcomes

The student who graduates with a major in information systems management will be able to

- Evaluate, select, and apply appropriate analytical and measurement methods/tools and system development life cycle (SDLC) methodologies to meet organizational needs.
- Research, assess, recommend/select, and implement information technology that aligns with business needs and meets business objectives.
- Effectively communicate with stakeholders orally, visually, and in writing to determine stakeholders' business requirements, explain how their requirements will be met, and provide ongoing audience-appropriate information.
- Responsibly protect organizations' critical information and assets by integrating cybersecurity best practices and risk management throughout global enterprises.
- Plan, execute, and evaluate technology solutions to achieve strategic goals by managing high-performing teams and projects.

Degree Requirements

A degree with a major in information systems management requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE INFORMATION SYSTEMS MANAGEMENT MAJOR

Coursework for a major in information systems management includes the following:

- Required foundation courses (15 credits): CMIS 141 (or other programming language course) and IFSM 300, 310, 410, and 461
- Core courses (9 credits): Any upper-level IFSM courses (3 credits must be in 400-level coursework)
- Supplemental major courses (6 credits): Any IFSM, CMIS, CMIT, CMSC, CMST, or CSIA courses
- Required related course (3 credits), which may be applied anywhere in the degree: STAT 200

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in information systems management. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Information Systems Management Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
IFSM 201	Introduction to Computer-Based Systems *(prerequisite to later courses)*	3
CMIS 102	Introduction to Problem Solving and Algorithm Design *(fulfills the interdisciplinary issues/computing requirement; prerequisite to later courses)*	3
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	

WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3

Foundation Courses *(to be taken within the first 60 credits)*

STAT 200	Introduction to Statistics *(related requirement for the major)*	3
◆ CMIS 141	Introductory Programming *or other programming course*	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
◆ IFSM 300	Information Systems in Organizations	3
ANTH 344	Cultural Anthropology and Linguistics	3
or a foreign language course	*(recommended elective)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
IFSM 304	Ethics in the Information Age *(recommended elective)*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 393/393X	Advanced Technical Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
◆ IFSM 310	Software and Hardware Concepts	3
◆ IFSM 410	Database Concepts	3
◆ IFSM 461	Systems Analysis and Design	3
◆ IFSM 303	Human Factors in Information Systems *or other core course for the major*	3
◆ CSIA 303	Foundations of Information System Security *or other supplemental major course*	3
◆ IFSM 438	Project Management *or other core course for the major*	3
◆ IFSM 433	Information Security Needs Assessment and Planning *or other core course for the major*	3
◆ CSIA 302	Telecommunications in Information Systems *or other supplemental major course*	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 37

Recommended Minors

Computing, business administration, psychology, or marketing

Recommended Elective

MATH 140	Calculus I *(for students who plan to go on to graduate school; students should note prerequisites)*	
EDTP 500	Professional Fundamentals of Teaching and Learning *(for students who plan to enter the MAT program at UMUC; students should note prerequisites and consult an advisor)*	

Total credits for BS in information systems management **120**

International Business Management

Students may seek an academic minor in international business management.

Minor in International Business Management

The international business management minor complements the skills the student gains in his or her major discipline by presenting the basic concepts, theories, policies, and practices that support the institutional, environmental, functional, and strategic framework for conducting global business transactions.

Requirements for the Minor

A minor in international business management requires the completion of 15 credits of coursework in international business management.

Students must take one of the following courses:

BMGT 392	Global Business Management
BMGT 454	Global Business and Public-Policy Regimes
BMGT 456	Multinational Management

Students may choose remaining courses from those listed above and the following:

BMGT 407	Managing Global Trade
BMGT 437	International Business Law
FINC 460	International Finance

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the

minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Investigative Forensics

Students may seek an academic major in investigative forensics. A related minor is available in forensics (p. 45).

Major in Investigative Forensics

The investigative forensics major prepares students with the knowledge, skills, and ethical principles necessary to process and report on physical evidence at a crime scene or in connection with a civil investigation. Students will understand both the theory and practice of the forensic disciplines and of police work. The curriculum, based on national guidelines, provides students with a basic foundation in investigative, scientific, and laboratory-based forensics, and introduces them to the various disciplines that make up the forensic collaborative workgroup. It prepares students for further education or employment in the field.

Intended Program Outcomes

The student who graduates with a major in investigative forensics will be able to

- Apply the scientific method to draw conclusions regarding forensic information.
- Utilize ethical principles and an understanding of legal precedents to make decisions related to investigation, analyses, and testimony as a crime scene or forensic professional.
- Access, interpret, and apply investigative, forensic, and criminal justice research to maintain competency within the field.
- Use effective written and oral communication to clearly report and articulate information, analyses, or findings to relevant end users in a timely manner.
- Recognize and evaluate evidence to determine all appropriate analyses to gather all available forensic information.
- Synthesize forensic, evidential, and investigatory information from multiple sources to generate theories about a crime.
- Use an understanding of the capabilities, processes, and limitations of the crime laboratory to be an informed consumer or practitioner.

Degree Requirements

A degree with a major in investigative forensics requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE INVESTIGATIVE FORENSICS MAJOR

Coursework for a major in investigative forensics includes the following:

- Required foundation courses (9 credits): CCJS 100, 234, and 320
- Required criminal/forensic psychology course (3 credits): CCJS 461 or PSYC 370
- Required core courses (9 credits): CCJS 420 and 421 and FSCN 306
- Forensic laboratory science courses (6 credits): Chosen from BIOL 356; CCJS 425, 486A, and 486B; and any courses designated as forensic lab science
- Supplemental major course (3 credits): Chosen from ANTH 351, BIOL 160, 320, 350, and 356; CCJS 380; FSCN 414; and any chemistry, forensic science, or physics courses
- Required related courses (6 credits), which may be applied anywhere in the degree: STAT 200 and WRTG 393

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in investigative forensics. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Investigative Forensics Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ CCJS 100	Introduction to Criminal Justice	3
Introductory Courses *(to be taken within the first 30 credits)*		
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3

Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ CCJS 234	Criminal Procedures and Evidence	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*		

Foundation Courses *(to be taken within the first 60 credits)*

STAT 200	Introduction to Statistics *(related requirement for the major)*	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science *or other course to fulfill the biological and physical sciences lecture requirement*	3
◆ CCJS 320	Introduction to Criminalistics	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication *or other course to fulfill the communications/writing or speech requirement*	3
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
ANTH 344	Cultural Anthropology and Linguistics *(recommended elective)*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 393/393X	Advanced Technical Writing *(related requirement for the major; also fulfills the communications/upper-level advanced writing requirement)*	3
◆ CCJS 461	Psychology of Criminal Behavior	3
or PSYC 370	Foundations of Forensic Psychology	
◆ CCJS 420	Medical and Legal Investigations of Death	3
◆ CCJS 421	Computer Forensics	3
◆ FSCN 306	Fire Investigation and Analysis	3
◆ CCJS 486A	Internship in Criminal Justice Through Co-op *or other forensic laboratory science course*	3
◆ CCJS 425	Forensics Lab *or other forensic laboratory science course*	3
◆ BIOL 320	Forensic Biology	3
or FSCN 414	Fire Dynamics *or other supplemental major course*	

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 40

Total credits for BS in investigative forensics **120**

Journalism

Students may seek an academic minor in journalism.

Minor in Journalism

The journalism minor complements the skills the student gains in his or her major discipline by introducing the fundamental concepts and techniques in public relations and mass media writing. Students learn how to create highly effective messages in both traditional and new media for different audiences and contexts. They also develop an understanding of the legal and ethical implications of communication.

Requirements for the Minor

A minor in journalism requires the completion of 15 credits of coursework in journalism and communication studies. All JOUR and COMM courses apply. At least 9 credits must be earned in JOUR courses. It is recommended that students take JOUR 201 and 202 first, followed by COMM 300 and 400 (if they have not already applied the courses toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Laboratory Management

Students who have completed an Associate of Applied Science degree in a biology- or chemistry-related field from a community college with which UMUC has an articulation agreement for this major may seek an academic major in laboratory management. Students should consult an advisor before electing this major.

The major in laboratory management is based on collaborative arrangement between UMUC and specific Maryland community colleges. Students with a similar degree from another institution may be considered for this program based on an institutional articulation agreement with UMUC.

Major in Laboratory Management

The laboratory management major prepares students to manage and coordinate the nontechnical activities that contribute to a safe and well-run laboratory. It builds on the technical and scientific knowledge gained through the associate's degree program and direct experience in the field. The curriculum provides both in-depth study of scientific concepts and procedures and management skills related to inventory, budget, personnel, and operations. It is designed to prepare students to meet employer needs for scientific technicians trained in both the sciences and the management of laboratory activities.

Intended Program Outcomes

The student who graduates with a major in laboratory management will be able to

- Create a healthy, safe, and productive workplace by effectively and appropriately hiring, training, supporting, and evaluating laboratory personnel.
- Manage (plan, organize, and direct) the daily work activities of a laboratory setting by working independently and as a member of a team, meeting job expectations, and adhering to organizational policies and goals.
- Communicate thoughts orally and in writing in a clear, well-organized manner that effectively persuades, informs, and clarifies ideas, information, and lab techniques/procedures to staff, the scientific community, and the public.
- Practice ethical standards of integrity, honesty, and fairness as a laboratory manager and professional.
- Monitor and maintain laboratory-related documentation, equipment, and supplies necessary for conducting efficient, safe, cost-effective, and hygienic laboratory operations.
- Manage scientific and laboratory practices and procedures by complying with and adhering to national, state, and local standards, policies, protocols, and regulations.

Degree Requirements

A degree with a major in laboratory management requires the successful completion of 120 credits of coursework from UMUC and the collaborating community college, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE MAJOR

Coursework for a major in laboratory management includes the following lower-level coursework taken as part of an appropriate Associate of Applied Science degree program at a collaborating community college:

- Foundation courses (15 credits, at least 12 of which should be in laboratory science coursework): Chosen from biology, biochemistry, biotechnology, chemistry, microbiology, and molecular biology courses
- Additional required related science coursework (14–22 credits), which may be applied anywhere in the bachelor's degree

Coursework for a major in laboratory management also includes the following:

- Required upper-level core courses (12 credits): BIOL 400, BMGT 364, COMM 300, and NSCI 301 (or ENMT 322)
- Supplemental major course (3 credits): Chosen from BMGT 317 and 487; IFSM 300; and SPCH 324, 397, 426, 470, and 482
- Required Co-op internship (6 credits): Courses numbered 486A or 486B in any related discipline
- Required related courses (6 credits), which may be applied anywhere in the degree: STAT 200 and WRTG 393

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BTPS in laboratory management (if the student selects appropriate courses as part of the articulated degree program from the community college). Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Laboratory Management Degree Courses	Credits
Required Courses from Community College	
◆ Lower-level coursework in biology, biochemistry, biotechnology, chemistry, microbiology, and molecular biology	15
Additional required science coursework	14–22
(should also fulfill requirements in biological and physical sciences)	

First Courses *(to be taken within the first 18 credits at UMUC if not brought in transfer)*
Note: Placement tests are required for math and writing courses.

LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory and General Education Courses *(to be taken within the first 30 credits)*

IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*		
STAT 200	Introduction to Statistics *(related requirement for the major)*	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
ANTH 344	Cultural Anthropology and Linguistics	3
or SPCH 482	Intercultural Communication *(recommended elective)*	

Required Upper-Level Courses for Major *(to be taken after introductory and foundation courses)*

WRTG 393/393X	Advanced Technical Writing *(related requirement for the major; also fulfills the communications/upper-level advanced writing requirement)*	3
◆ BIOL 400	Life Science Seminar	3
◆ BMGT 364	Management and Organization Theory	3
◆ COMM 300	Communication Theory	3
◆ NSCI 301	Laboratory Organization and Management	3
or ENMT 322	Occupational Health and Safety	
◆ BMGT 317	Problem Solving for Managers *or other supplemental major course*	3

Internship for Major *(to be taken in the last 30 credits)*

◆ Internship through Cooperative Education	6

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 22–30

Total credits for BTPS in laboratory management **120**

Legal Studies

Students may seek an academic major in legal studies.

Major in Legal Studies

The legal studies program prepares students with the knowledge, skills, and ethical principles necessary to research and produce legal information and documents in law-related environments. Focus is on fundamental legal knowledge, skills, and ethical principles. The curriculum addresses the organization, function, and processes of the lawmaking institutions in the American legal system, as well as the role of the paralegal in the legal system and the governing rules of legal ethics. It emphasizes legal analysis, legal writing and drafting, legal research, and computer competence in the legal environment. The major in legal studies provides a solid foundation for challenging paralegal work in various legal settings as well as for further education in a variety of fields.

Intended Program Outcomes

The student who graduates with a major in legal studies will be able to

- Conduct research using appropriate resources to identify relevant, current legal authority.
- Draft writings that reflect critical thinking and legal reasoning to inform, advocate, or persuade on legal matters.
- Use interpersonal and leadership skills to work both independently and cooperatively as a member of a legal team.
- Apply knowledge of legal systems, concepts, and methodologies to efficiently and ethically support the resolution of legal disputes.
- Gather relevant information and properly complete a wide variety of forms and documents used in private practice and government service.

- Implement appropriate office systems consistent with legal and ethical requirements and best practices using a variety of technologies.

Degree Requirements

A degree with a major in legal studies requires the successful completion of 120 credits of coursework, including 33 credits for the major; 41 credits in general education requirements; and 46 credits in the minor, electives, and other degree requirements. At least 17 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE LEGAL STUDIES MAJOR

Coursework for a major in legal studies includes the following:

- Required foundation courses (12 credits): LGST 101, 200, 201, and 204
- General practice procedure and skills course (3 credits): LGST 320, 322, 325, 400, or 401
- General practice substantive law course (3 credits): LGST 312, 315, 316, 340, or 442
- Procedure and skills courses (6 credits): Chosen from any general practice procedure and skills courses and LGST 327, 330, 360, 363A, 425, 486A, and 486B
- Substantive law courses (6 credits): Chosen from any general practice substantive law courses and LGST 335, 343, 411, 415, 420, 432, 434, 445, and 450
- Supplemental major course (3 credits): Chosen from any LGST courses; CCJS 432 and 453; COMM 400; FSCN 412; and GVPT 399B, 402, and 434

Note: A maximum of 6 credits in 1-credit LGST courses may be applied to the major and used in any category except the foundation and general practice coursework.

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in legal studies. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Legal Studies Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
CCJS 100	Introduction to Criminal Justice	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
Foundation Courses *(to be taken within the first 60 credits)*		
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
◆ LGST 101	Introduction to Law	3
◆ LGST 200	Techniques of Legal Research	3
ANTH 344	Cultural Anthropology and Linguistics *(recommended elective)*	3
◆ LGST 201	Legal Writing	3
◆ LGST 204	Legal Ethics	3
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
◆ LGST 320	Criminal Law and Procedures *or other general practice procedure and skills course for the major*	3
◆ LGST 312	Torts *or other general practice substantive law course for the major*	3
◆ LGST 325	Litigation *or other procedure and skills course for the major*	3
◆ LGST 315	Domestic Relations *or other substantive law course for the major*	3
◆ LGST 322	Evidence *or other procedure and skills course for the major*	3
◆ LGST 316	Estates and Probate *or other substantive law course for the major*	3
◆ LGST 486A *or* 486B	Legal Studies Internship Through Co-op *or other supplemental major course*	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		40
Total credits for BS in legal studies		**120**

Management Studies

Students may seek an academic major in management studies.

Major in Management Studies

The management studies major provides an interdisciplinary and holistic approach to developing skills and knowledge in decision making, problem solving, and leadership. The curriculum includes a foundation in business, accounting, economics, statistics, communications, and management theory and focuses on analysis and decision making across a wide spectrum of management activities. The major prepares students for a variety of management-related careers.

Intended Program Outcomes

The student who graduates with a major in management studies will be able to

- Apply leadership skills to promote communication, ethical behavior, and quality performance.
- Implement appropriate employment practices, encourage team building, and mentor junior members of the staff.
- Effectively communicate with culturally diverse audiences using a variety of formats and technology.
- Assess and develop performance measures, feedback, and coaching that facilitate employee development.
- Employ self-reflection and mindfulness of individual and cultural differences when interacting with others.
- Research, plan, and develop processes and procedures that ensure organizational performance.

Degree Requirements

A degree with a major in management studies requires the successful completion of 120 credits of coursework, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE MANAGEMENT STUDIES MAJOR

Coursework for a major in management studies includes the following:

- Required foundation courses (12 credits): BMGT 110 (or prior business experience and an additional supplemental course), ACCT 220, ECON 201 (or 203), and STAT 230
- Required core courses (6 credits): BMGT 364 and HRMN 302
- Supplemental major courses (18 credits): Any ACCT, BMGT, ENMT, FINC, FSCN, HRMN, MGST, and MRKT courses
- Required related course (3 credits), which may be applied anywhere in the degree: ACCT 326 or IFSM 300

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in management studies. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Management Studies Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)* **Note:** Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ BMGT 110	Introduction to Business and Management *(students with business experience should substitute a supplemental major course in the last 60 credits of study)*	3

Introductory Courses *(to be taken within the first 30 credits)*		
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
◆ ECON 201	Principles of Macroeconomics	3
or ECON 203	Principles of Microeconomics	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Foundation Courses *(to be taken within the first 60 credits)*		
◆ STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics	
◆ ACCT 220	Principles of Accounting I	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems *(related requirement for the major; also fulfills the interdisciplinary issues/computing requirement; students should note prerequisites)*	
◆ BMGT 364	Management and Organization Theory	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ HRMN 302	Organizational Communication	3
◆ MRKT 310	Marketing Principles *or other supplemental major course*	3
◆ FINC 330	Business Finance *or other supplemental major course*	3
◆ HRMN 300	Human Resource Management *or other supplemental major course*	3
◆ BMGT 392	Global Business Management *or other supplemental major course*	3
◆ BMGT 496	Business Ethics *or other supplemental major course*	3
◆ BMGT 495	Strategic Management *or other supplemental major course*	3
Minor and Elective Courses *(to be taken in the last 60 credits along with required major courses)*		40
Total credits for BS in management studies		**120**

Marketing

Students may seek either an academic major or minor in marketing.

Major in Marketing

The marketing major prepares students with the marketing skills and business acumen necessary for professional and personal success in today's global business environment. The curriculum provides a balanced course of study that exposes students to a common body of knowledge and leads them to understand marketing processes and situations, think independently, communicate effectively, and appreciate their own and other cultures. Students with a major in marketing will be well-positioned to enter a broad spectrum of marketing positions in private and public corporations, marketing agencies, or entrepreneurial endeavors.

Intended Program Outcomes

The student who graduates with a major in marketing will be able to

- Apply marketing knowledge and skills to meet organizational goals through analytic and managerial techniques related to customers, executives, finance, information technology, law, operational domains, and customer relations.
- Employ strategic marketing skills, including scenario planning, market intelligence, customer profiles, marketing plans, and competitive analysis, to respond to organizational marketing challenges.

- Conduct research, analyze data, create an effective marketing plan, and support decisions that meet the needs and wants of global customers.
- Utilize verbal and nonverbal communication skills, including strategic communication, technology, fluency in business language, and effective customer communication, to achieve personal and organizational goals.
- Act with personal and professional integrity, conveying an ethical orientation in the global marketplace of employers, peers, and customers.
- Cultivate and maintain positive interpersonal relationships based on demonstrated character, behavior, engagement, and positive interaction with teams, managers, and customers.

Degree Requirements

A degree with a major in marketing requires the successful completion of 120 credits of coursework, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE MARKETING MAJOR

Coursework for a major in marketing includes the following:

- Required business courses (15 credits): ACCT 221 (or 301); BMGT 364, 380, and 496; and STAT 230
- Required marketing courses (12 credits): MRKT 310, 410, 412, and 454
- Supplemental major courses (6 credits): Any MRKT courses
- Required capstone course (3 credits): MRKT 495
- Required related courses (9 credits), which may be applied anywhere in the degree: ACCT 326 (or IFSM 300) and ECON 201 and 203

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in marketing. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Marketing Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
BMGT 110	Introduction to Business and Management *(strongly recommended elective for students with no prior business experience)*	3
Introductory Courses *(to be taken within the first 30 credits)*		
ECON 201	Principles of Macroeconomics *(related requirement for the major; also fulfills the first behavioral and social sciences requirement)*	3
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ STAT 230	Business Statistics	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ART'T, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Foundation Courses *(to be taken within the first 60 credits)*		
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
ECON 203	Principles of Microeconomics *(related requirement for the major)*	3
◆ ACCT 301	Accounting for Nonaccounting Majors	3
or ACCT 221	Principles of Accounting II *(students should note prerequisite)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
◆ BMGT 364	Management and Organization Theory	3
IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems *(related requirement for the major; fulfills the interdisciplinary issues/computing requirement; students should note prerequisite)*	

◆ MRKT 310	Marketing Principles	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
◆ BMGT 380	Business Law I	3
◆ MRKT 354	Integrated Marketing Communications *or other supplemental major course*	3
◆ MRKT 395	Managing Customer Relationships *or other supplemental major course*	3
◆ MRKT 410	Consumer Behavior	3
◆ BMGT 496	Business Ethics	3
◆ MRKT 454	Global Marketing	3
◆ MRKT 412	Marketing Research Applications	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ MRKT 495	Marketing Policies and Strategy	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		34
Total credits for BS in marketing		**120**

Minor in Marketing

The marketing minor complements the skills the student gains in his or her major discipline by enhancing the knowledge and skills related to marketing situations and processes and the emerging global marketplace.

Requirements for the Minor

A minor in marketing requires the completion of 15 credits of coursework in marketing. All MRKT courses apply. It is recommended that students take MRKT 310 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Mathematical Sciences

Students may seek an academic minor in mathematical sciences.

Minor in Mathematical Sciences

The mathematical sciences minor complements the skills the student gains in his or her major discipline by developing skills in solving mathematical problems and addressing complex and technical materials and by providing a mathematical background to support study in other areas, such as business and management, computer and information technology, and the biological and social sciences.

Requirements for the Minor

A minor in mathematical sciences requires the completion of 17 credits of coursework in mathematics. All MATH courses numbered 130 or above apply.

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 6 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Microbiology

Students may seek an academic minor in microbiology.

Minor in Microbiology

The microbiology minor complements the skills the student gains in his or her major discipline by providing a laboratory-based approach to the study of microorganisms, with applications to biotechnology, molecular and cellular biology, research and development, and public health.

Requirements for the Minor

A minor in microbiology requires the completion of 15 credits of coursework in microbiology, drawn from various disciplines as appropriate.

Students must take one course from the following:

BIOL 230	General Microbiology
BIOL 331	Concepts in Microbiology
BIOL 430–439	Advanced microbiology series

Students may choose the remaining courses from those above and the following:

BIOL 220	Human Genetics
BIOL 222	Principles of Genetics
BIOL 301	Human Health and Disease
BIOL 305	The Biology of AIDS
BIOL 320	Forensic Biology
BIOL 330–339	Applied microbiology series
BIOL 350	Molecular and Cellular Biology
BIOL 356	Molecular Biology Laboratory
BIOL 400	Life Science Seminar
BIOL 486A or 486B	Internship in Life Science Through Co-op

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Natural Science

Students may seek an academic minor in natural science.

Minor in Natural Science

The natural science minor complements the skills the student gains in his or her major by providing an underlying scientific basis upon which to build a career in natural science, life science, physical science, and the allied health fields, as well as bioinformatics, environmental management, science journalism, and science education.

Requirements for the Minor

A minor in natural science requires the completion of 17 credits of coursework in natural science, chosen from any courses in astronomy, biology, chemistry, geology, natural science, and physics.

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Philosophy

Students may seek an academic minor in philosophy.

Minor in Philosophy

The philosophy minor complements the skills the student gains in his or her major discipline by providing a study of the relationships between personal opinions and real-world issues faced by members of a pluralistic, open society.

Requirements for the Minor

A minor in philosophy requires the completion of 15 credits of coursework in philosophy. All PHIL courses apply. It is recommended that students take PHIL 140 and a course in critical thinking or logic, such as PHIL 110 or 170 (if they have not already applied the courses toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Political Science

Students may seek an academic major or minor in political science.

Major in Political Science

A major in political science provides students with valuable, comprehensive knowledge of American government and global politics, preparing them to analyze complex political problems and recognize potential solutions in both the public and private sector. Students gain an understanding of political structure, theory, and methodology. They develop their research skills and sense of intellectual property using libraries, archives, and online sources. They develop their writing skills and learn the responsibility for clearly presenting and interpreting political issues using the language of the discipline. Students with a major in political science will be able to analyze complex political problems and recognize potential solutions in both the public and private sectors.

Intended Program Outcomes

The student who graduates with a major in political science will be able to

- Analyze and participate in the formulation and implementation of public policy at the local, state, federal, and international level by building consensus and using effective lobbying techniques.
- Participate in and/or influence government at all levels through an understanding of the establishment, structure, and interaction of such governmental institutions.
- Use effective writing, research, analysis, advocacy, and coalition-building skills to develop and influence policy at the national and international levels.
- Conduct, analyze, and evaluate theoretical and empirical research for specific problems to affect domestic and international policy by applying political theory, systems, and processes in organizational environments.
- Apply knowledge of ethical principles and issues to public-policy and politics.

Degree Requirements

A degree with a major in political science requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE POLITICAL SCIENCE MAJOR

Coursework for a major in political science includes the following:

- Required foundation course (3 credits): GVPT 100
- Core courses (15 credits): GVPT 101 (or 444), 170 (or 475), 200 (or 401), and 280 and STAT 200 (Note minimum requirements for upper-level coursework.)
- Supplemental major courses (12 credits): Any upper-level GVPT courses

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in political science. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Political Science Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ GVPT 100	Introduction to Political Science	3
Introductory Courses *(to be taken within the first 30 credits)*		
SOCY 100	Introduction to Sociology *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
◆ GVPT 280	Comparative Politics and Government	3

Foundation Courses *(to be taken within the first 60 credits)*		
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
◆ GVPT 170	American Government	3
or GVPT 475	The Presidency and the Executive Branch	
PSYC 100	Introduction to Psychology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ GVPT 200	International Political Relations	3
or GVPT 401	Problems of World Politics	
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/writing or speech requirement*	
◆ STAT 200	Introduction to Statistics	3
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ GVPT 444	American Political Theory	3
or GVPT 101	Introduction to Political Theory	
◆ GVPT 403	Law, Morality, and War *or other supplemental major course*	3
◆ GVPT 406	Global Terrorism *or other supplemental major course*	3
◆ GVPT 457	American Foreign Policy *or other supplemental major course*	3
◆ GVPT 404	Democratization *or other supplemental major course*	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		46
Total credits for BS in political science		**120**

Minor in Political Science

The political science minor complements the skills the student gains in his or her major discipline by providing systematic study of politics and government. It exposes the student to the basic concepts, theories, policies, and the role of government at local, state, and national levels in domestic and foreign settings.

Requirements for the Minor

A minor in political science requires the completion of 15 credits of coursework in government and politics. All GVPT courses apply. It is recommended that students take GVPT 100, 101, or 170 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a list of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Psychology

Students may seek either an academic major or minor in psychology.

Major in Psychology

The psychology major provides students with a knowledge base of theory, research, and practice in psychological sciences. The curriculum enables students to use the principles of psychology and prepares students for graduate study or for careers in professions for which psychological training is crucial.

Intended Program Outcomes

The student who graduates with a major in psychology will be able to

- Apply major concepts, theoretical perspectives, empirical findings, and historical trends in psychology to prepare for graduate studies or careers in which psychological training is relevant.
- Apply basic knowledge of research methodology, statistics, measurement, guidelines, ethical standards, laws, and regulations to design, participate in, and evaluate research in a variety of contexts.
- Apply knowledge of human behavior to inform personal growth, communicate effectively, solve problems, make decisions, and interact with individuals, communities, and organizations.
- Use critical and creative thinking, skeptical inquiry, and (where possible) appropriate technology and the scientific approach to solve problems related to current and emerging trends within the domains of psychology.
- Value diversity and different perspectives, tolerate ambiguity, and act ethically to communicate appropriately with various sociocultural and international populations.

Degree Requirements

A degree with a major in psychology requires the successful completion of 120 credits of coursework, including 33 credits for the major; 41 credits in general education requirements; and 46 credits in the minor, electives, and other degree requirements. At least 17 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE PSYCHOLOGY MAJOR

Coursework for a major in psychology includes the following:

- Required foundation courses (9 credits): PSYC 100 and 305 and STAT 225
- Natural science psychology courses (6 credits): Chosen from BIOL 362 and PSYC 301, 310, 315, 341, and 441
- Social science psychology courses (6 credits): Chosen from PSYC 321, 345, 351, 354, 355, 357, 361, and 424
- Clinical science psychology courses (6 credits): Chosen from PSYC 353, 432, 435, 436, and 437
- Supplemental major courses (6 credits): Any PSYC courses (but no more than three 1-credit courses)

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in psychology. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Psychology Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
◆ PSYC 100	Introduction to Psychology	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
SOCY 100	Introduction to Sociology *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
◆ STAT 225	Introduction to Statistical Methods in Psychology	3
or STAT 200	Introduction to Statistics	
Foundation Courses *(to be taken within the first 60 credits)*		
GVPT 170	American Government	3
or GERO 100	Introduction to Gerontology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/ computing requirement*	3
ANTH 344	Cultural Anthropology and Linguistics *(recommended elective)*	3
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/writing or speech requirement*	
◆ PSYC 305	Research Methods in Psychology	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/ upper-level advanced writing requirement*	3
◆ PSYC 321	Social Psychology *or other social science psychology course for the major*	3
◆ PSYC 301	Biological Basis of Behavior *or other natural science psychology course for the major*	3

◆ PSYC 353	Abnormal Psychology *or other clinical science psychology course for the major*	3
◆ PSYC 354	Cross-Cultural Psychology *or other social science psychology course for the major*	3
◆ PSYC 310	Sensation and Perception *or other natural science psychology course for the major*	3
◆ PSYC 432	Introduction to Counseling Psychology *or other clinical science psychology course for the major*	3
◆ PSYC 355	Child Psychology *or other supplemental major course*	3
◆ PSYC 341	Introduction to Memory and Cognition *or other supplemental major course*	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		40
Recommended Electives		
PSYC 415	History of Psychology *(for students who plan to go on to graduate school)*	
PSYC 451	Principles of Psychological Assessment	
Total credits for BS in psychology		**120**

Minor in Psychology

The psychology minor complements the skills the student gains in his or her major discipline by investigating the nature of mind and behavior, including the biological basis of behavior, perception, memory and cognition, the influence of environmental and social forces on the individual, personality, lifespan development and adjustment, research methods, and statistical analysis.

Requirements for the Minor

A minor in psychology requires the completion of 15 credits of coursework in psychology.

Students must choose one of the following foundation courses:

PSYC 100	Introduction to Psychology
PSYC 305	Research Methods in Psychology
STAT 225	Introduction to Statistical Methods in Psychology

They must also choose one natural science psychology course, one social science psychology course, and one clinical science psychology course from those listed under the requirements for the major. The remaining course may be chosen from any PSYC course.

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Social Science

Students may seek an academic major in social science.

Major in Social Science

The social science major provides breadth of knowledge in the social sciences through interdisciplinary study in areas such as anthropology, behavioral sciences, economics, gerontology, government and politics, psychology, and sociology and depth through focused study in a single area. It also offers depth and focus through selection of core courses in one social science area. Graduates in social science may pursue a variety of careers in which understanding of social science issues is important, including business administration, elder care, government, health services, law enforcement, human resources, and community service.

Intended Program Outcomes

The student who graduates with a major in social science will be able to

- Analyze issues, identify improvements, and recommend solutions using statistics, data analysis, and appropriate quantitative and qualitative methods for social science research and/or program evaluation.
- Communicate effectively to professional and nonprofessional individuals and groups through an appropriate media to provide information about social science research, services, or programs.
- Apply an understanding of the relationship between micro- and macro-level problems and issues to identify and evaluate individual and community needs.
- Analyze complex social problems and work towards realistic solutions using diversity awareness and global multicultural perspectives.
- Recognize and apply ethical principles and standards to support the professional responsibilities and conduct of social scientists in the workplace.
- Apply critical and creative thinking, information literacy, technology, and an interdisciplinary perspective to solve practical problems in the social sciences

Degree Requirements

A degree with a major in social science requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE SOCIAL SCIENCE MAJOR

Coursework for a major in social science includes the following:

- Required statistics course (3 credits): STAT 230 (or 200 or 225)
- Required introductory courses (6 credits): BEHS 210 and SOCY 100
- Foundation course (3 credits): Chosen from CCJS 105, ECON 201 and 203, GEOG 100 and 110, GERO 100, GVPT 100, and PSYC 100
- Core courses (9 credits in a single area): Chosen from applicable 3-credit CCJS courses (350, 360, 454, and 461); any 3-credit ANTH and SOCY courses; any 3-credit GVPT courses; any 3-credit GERO courses; or any 3-credit PSYC courses (**Note:** Anthropology and sociology are considered to constitute a single area; in all other cases, courses must be chosen from a single discipline.)
- Supplemental major courses (9 credits): Chosen from any ANTH, BEHS, ECON, GERO, GVPT, PSYC, and SOCY courses and CCJS 350, 360, 454, and 461

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in social science. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Social Science Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
Note: General education courses may not be applied to major requirements.		
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
PSYC 100	Introduction to Psychology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	3
◆ BEHS 210	Introduction to Social and Behavioral Science	3
Foundation Courses *(to be taken within the first 60 credits)*		
◆ STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ SOCY 100	Introduction to Sociology	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/writing or speech requirement*	
◆ GERO 100	Introduction to Gerontology	3
or ECON 203	Principles of Microeconomics *or other foundation course for the major*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
ANTH 344	Cultural Anthropology and Linguistics *(recommended elective)*	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/upper-level advanced writing requirement*	3
◆ The first of three core courses in a single area	*(recommendations available on social science degree planning worksheet)*	3
◆ A second core course for the major	*(in the same discipline as the first)*	3
◆ A third core course for the major	*(in the same discipline as the first and second)*	3
◆ A supplemental major course	*(recommendations available on social science degree planning worksheet)*	3
◆ A supplemental major course		3
◆ A supplemental major course		3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		43
Recommended Elective		
EDTP 500	Professional Fundamentals of Teaching and Learning *(for qualified students who plan to enter the MAT program at UMUC; students should note prerequisites and consult an advisor)*	
Total credits for BS in social science		**120**

Sociology

Students may seek an academic minor in sociology.

Minor in Sociology

The sociology minor complements the skills the student gains in his or her major discipline by providing a study of contemporary sociological theory and research and applying it to social issues, including globalization, social inequality, diversity, health care, education, family, work, and religion.

Requirements for the Minor

A minor in sociology requires the completion of 15 credits of coursework in sociology. All SOCY courses apply. Students should take SOCY 100 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Speech Communication

Students may seek an academic minor in speech communication.

Minor in Speech Communication

The minor in speech communication complements the skills the student gains in his or her major discipline by developing communication skills, particularly oral communication, as well as providing a greater understanding of human interaction in a variety of personal and professional contexts.

Requirements for the Minor

A minor in speech communication requires the completion of 15 credits of coursework in speech communication. All SPCH and COMM courses apply, but at least 9 credits must be earned in SPCH courses. It is recommended that students take COMM 300 and SPCH 100 as the first courses for the minor (if they have not already applied the courses toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

Note: Students should have taken SPCH 100 or have comparable public speaking experience before enrolling in courses for the speech communication minor.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Strategic and Entrepreneurial Management

Students may seek an academic minor in strategic and entrepreneurial management.

Minor in Strategic and Entrepreneurial Management

The strategic and entrepreneurial management minor complements the skills the student gains in his or her major discipline by providing a study of current issues in the effective use of information, the globalization of business, and strategic management and by exploring the mind-set of an innovator and an entrepreneur.

Requirements for the Minor

A minor in strategic and entrepreneurial management requires the completion of 15 credits of coursework in strategic and entrepreneurial management, chosen from the following courses:

BMGT 339	Government and Business Contracting
BMGT 364	Management and Organization Theory
BMGT 365	Organizational Leadership
BMGT 392	Global Business Management
BMGT 464	Organizational Behavior
BMGT 495	Strategic Management
BMGT 496	Business Ethics
FINC 310	Entrepreneurship and New Venture Planning
HRMN 302	Organizational Communication

Students are recommended to take BMGT 364 as the first course for the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Women's Studies

Students may seek an academic minor in women's studies.

Minor in Women's Studies

The women's studies minor complements the skills the student gains in his or her major discipline by providing an interdisciplinary study of the history, status, and experiences of women.

Requirements for the Minor

A minor in women's studies requires the completion of 15 credits of coursework in women's studies, chosen from the following courses:

WMST	Any courses
BEHS 220	Diversity Awareness
BEHS 343	Parenting Today
BEHS 453	Domestic Violence
BMGT 312	Women in Business
BMGT 313	Women as Entrepreneurs
BMGT 314	Women as Leaders
BMGT 315	Gender Relations in Business
ENGL 354	American Women Writers Since 1900
ENGL 358	British Women Writers Since 1900
GERO 311	Women and Aging
HIST 375	Modern European Women's History
HIST 376	Women and the Family in America to 1870
HIST 377	Women in America Since 1870
PHIL 343	Sexual Morality
PHIL 346	Contemporary Sexual Ethics
PSYC 334	Psychology of Interpersonal Relationships
PSYC 338	Psychology of Gender
SOCY 325	The Sociology of Gender
SOCY 443	The Family and Society
SOCY 462	Women in the Military
SPCH 324	Communication and Gender

Students are recommended to take WMST 200 as the first course for the minor (if they have not already applied the course toward other degree requirements).

Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

ASSOCIATE OF ARTS DEGREE

The curricula and courses listed below are available only to active-duty military personnel and certain others who conform to special stipulations.

REQUIREMENTS

The Associate of Arts degree (AA) requires the completion of a minimum of 60 credits, at least 15 of which must be taken through UMUC. Of these 60 credits, 35 credits must be earned in courses that fulfill the general education requirements listed below. The remaining 25 credits must satisfy the requirements of the curriculum the student has selected.

A grade point average of 2.0 or higher in all courses taken through UMUC is required. A student should complete one associate's degree before applying for another.

General Education Requirements (35 credits)

The general education requirements for the associate's degree generally correspond to those for the bachelor's degree (listed on p. 8), with the following exception: The second computing course and the upper-level advanced writing course are not required for the associate's degree.

Curriculum Requirements (25 credits)

In addition to the general education requirements, students must take 25 credits of coursework related to their educational goals. They may choose a general curriculum (described below) or a specialized curriculum with its own particular requirements (detailed on the following pages). Students must earn a grade of C or higher in all core or core-related curriculum courses. For the specialized curricula, at least 9 credits of coursework taken through UMUC must be earned in core or core-related courses for the chosen curriculum. Students who anticipate seeking a bachelor's degree should select courses that will advance that goal.

CURRICULA

General Curriculum

The Associate of Arts general curriculum is for adult students who wish to pursue their own educational goals.

REQUIREMENTS FOR THE GENERAL CURRICULUM

Students may choose related courses from several disciplines, explore several interests at once, or choose a variety of courses from UMUC's offerings. Students in this program accept responsibility for developing a curriculum that meets their intended learning outcomes. They are encouraged to seek assistance from academic advisors in arranging their curriculum as appropriate to their personal interests and future educational plans.

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in general studies. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

General Curriculum Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	

GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Curriculum course	*(to be selected based on educational and career goals)*	3
Additional Required Courses *(to be taken after first and introductory courses)*		
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or JOUR 201	Writing for the Mass Media *or other course to fulfill the communications/writing or speech requirement*	
Curriculum course	*(to be selected based on educational and career goals)*	3
Curriculum course	*(to be selected based on educational and career goals)*	3
Curriculum course	*(to be selected based on educational and career goals)*	3
Elective Courses *(to be chosen from any courses to complete the 60 credits for the degree)*		13
Total credits for AA with general curriculum		**60**

Specialized Curricula

The Associate of Arts specialized curricula are for adult students who wish to pursue a specific career or educational goal, often as a basis for further study toward the bachelor's degree. Each of the specialized curricula has its own requirements. In the following curricula, coursework for the individual curriculum is indicated by ◆. Students should take careful note of course prerequisites and recommended course sequences. Curricula may be available only in limited geographic areas.

Accounting Curriculum

REQUIREMENTS FOR THE ACCOUNTING CURRICULUM

Coursework for the accounting curriculum includes the following (students should note prerequisites and other sequencing requirements):

- Required core courses (6 credits): ACCT 220 and 221
- Additional core courses (9 credits): Any ACCT, BMGT, FINC, or MGST courses in accounting or finance (except MGST 140)
- Accounting-related courses (9 credits): Chosen from any ACCT and FINC courses; BMGT 110, 364, 380, 381, and 496; CMIS 102; CMST 340; ECON 201 and 203; IFSM 300; MRKT 310; and STAT 200 (or 230)
- Elective (1 credit): Any course related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in accounting. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Accounting Curriculum Courses		**Credits**
First Courses *(to be taken within the first 18 credits)* **Note:** Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ BMGT 110	Introduction to Business and Management *(recommended accounting-related course for the curriculum for students with no prior business experience)*	3
◆ ACCT 220	Principles of Accounting I	3
Introductory Courses *(to be taken within the first 30 credits)*		
◆ ACCT 221	Principles of Accounting II	3
ECON 201	Principles of Macroeconomics	3
or ECON 203	Principles of Microeconomics *(required for BS in accounting)* *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible GERO or CCJS course to fulfill the first behavioral and social sciences requirement*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	

WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	

Additional Required Courses *(to be taken after first and introductory courses)*

PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ A core course for the curriculum		3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
◆ BMGT 380	Business Law I	3
or STAT 230	Business Statistics *or other accounting-related course for the curriculum*	
◆ BMGT 364	Management and Organization Theory *or other accounting-related course for the curriculum*	3
◆ A core course for the curriculum		3
◆ A core course for the curriculum		3

Elective Course *(to be chosen from any course to complete the 60 credits for the degree)* 1

Total credits for AA with accounting specialization **60**

Business and Management Curriculum

REQUIREMENTS FOR THE BUSINESS AND MANAGEMENT CURRICULUM

Coursework for the business and management curriculum includes the following:

- Core courses (15 credits): Chosen from BMGT 110 (required for students with no previous business experience), ACCT 220 and 221, ECON 201 and 203, and STAT 230 (or 200)
- Management-related courses (6 credits): Chosen from any ACCT, BMGT, CMIS, ECON, FINC, HRMN, IFSM, MGST, and MRKT courses; any 3-credit CMST courses; GVPT 210; and PSYC 321 and 361
- Electives (4 credits): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in business and management. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Business and Management Curriculum Courses		**Credits**

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ BMGT 110	Introduction to Business and Management *(required core course for the curriculum for students with no prior business experience; also required for BS in business administration)*	3

Introductory Courses *(to be taken within the first 30 credits)*

ECON 201	Principles of Macroeconomics *(required for BS in business administration; strongly recommended)* *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	

WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ ACCT 220	Principles of Accounting I *(core course for the curriculum)*	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	

Additional Required Courses *(to be taken after first and introductory courses)*

◆ STAT 230	Business Statistics *(core course for the curriculum)*	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
◆ ACCT 221	Principles of Accounting II *(core course for the curriculum)*	3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ ECON 203	Introduction to Microeconomics *(core course for the curriculum)*	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
◆ Management-related course for the curriculum	*(course required for BS in business administration is recommended)*	3
◆ Management-related course for the curriculum	*(course required for BS in business administration is recommended)*	3

Elective Courses *(to be chosen from any courses to complete the 60 credits for the degree—courses applicable to the BS in business administration are recommended)* 4

Total credits for AA with business and management specialization **60**

Computer Studies Curriculum

REQUIREMENTS FOR THE COMPUTER STUDIES CURRICULUM

Coursework for the computer studies curriculum includes the following:

- Required core courses (6 credits): CMIS 102 and 141 (or CMIS 170 or other appropriate programming language course)
- Additional core courses (6 credits): Chosen from CMIS 242 and 310, IFSM 300, and any CMST courses (up to 3 credits)
- Computer studies–related course (3 credits): Any CMIS, CMST, CMIT, CMSC, CSIA, or IFSM course
- Electives (10 credits): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in computer studies. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Computer Studies Curriculum Courses		**Credits**
First Courses *(to be taken within the first 18 credits)* **Note:** Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
◆ CMIS 102	Introduction to Problem Solving and Algorithm Design *(required for BS in computer studies; first required core course for the curriculum)*	3
◆ CMIS 141	Introductory Programming *(required core course for the curriculum)*	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	

◆ CMIS 242	Intermediate Programming *(required for BS in computer studies)* *or other core course for the curriculum*	3
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3

Additional Required Courses *(to be taken after first and introductory courses)*

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
◆ Additional core course for the curriculum		3
◆ Additional computer studies–related course for the curriculum		3

Elective Courses *(chosen from any courses to complete 60 credits for the degree—CMIS, CMST, or IFSM courses that may be applied to the BS in computer studies are recommended)* 10

Total credits for AA with computer studies specialization **60**

Criminal Justice Curriculum

REQUIREMENTS FOR THE CRIMINAL JUSTICE CURRICULUM

Coursework for the criminal justice curriculum includes the following:

- Core courses (12 credits): Any CCJS courses
- Electives (13 credits): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in criminal justice. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Criminal Justice Curriculum Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ CCJS 100	Introduction to Criminal Justice	3
or CCJS 105	Introduction to Criminology *or other core course for the curriculum*	
Introductory Courses *(to be taken within the first 30 credits)*		
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ CCJS 230	Criminal Law in Action *or other core course for the curriculum*	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	

Additional Required Courses *(to be taken after first and introductory courses)*

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/writing or speech requirement*	
◆ CCJS 320	Introduction to Criminalistics *or other core course for the curriculum*	3
◆ CCJS 350	Juvenile Delinquency *or other core course for the curriculum*	3

Elective Courses *(chosen from any courses to complete 60 credits for the degree—courses that may be applied to the BS in criminal justice are recommended)* 13

Total credits for AA with criminal justice specialization **60**

Foreign Language Area Studies Curriculum

REQUIREMENTS FOR THE FOREIGN LANGUAGE AREA STUDIES CURRICULUM

Coursework for the foreign language area studies curriculum includes the following (see also the specific requirements for each language area):

- Language core courses (12 credits): Sequential courses in a single language, usually numbered 111–112 and 114–115 (or 211–212)
- Related area studies courses (12 credits): Any courses in the culture, history, language, literature, or government and politics of the area (see specific courses for each language area)
- Elective (1 credit): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in foreign language area studies if the appropriate core and related courses for the specific language area are selected. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Foreign Language Area Studies Curriculum Courses **Credits**

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ Language core course (numbered 111) for the curriculum		3

Introductory Courses *(to be taken within the first 30 credits)*

Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective*	
◆ Language core course (numbered 112) for the curriculum		3
◆ Language core course (numbered 114) for the curriculum		3
GVPT 200	International Political Relations *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
◆ Language core course (numbered 115) for the curriculum		3

Additional Required Courses *(to be taken after first and introductory courses)*

◆ Related area studies course for the curriculum		3
◆ Related area studies course for the curriculum		3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
ANTH 102	Introduction to Anthropology: Cultural Anthropology and Linguistics *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	3
◆ Related area studies course for the curriculum		3
PHIL 140	Contemporary Moral Issues *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement (discipline must differ from other humanities course)*	3
SPCH 100	Foundations of Speech Communication *or other course to fulfill the communications/writing or speech requirement*	3

◆ Related area studies course for the curriculum	3
Elective Course *(to be chosen from any courses to complete the 60 credits for the degree)*	1
Total credits for AA with foreign language area studies specialization	**60**

Legal Studies Curriculum

REQUIREMENTS FOR THE LEGAL STUDIES CURRICULUM

Coursework for the legal studies curriculum includes the following:

- Required core courses (12 credits): LGST 101, 200, 201, and 204
- Legal studies–related courses (6 credits): Any LGST courses
- Electives (7 credits): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in legal studies. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Legal Studies Curriculum Courses		**Credits**
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
PHIL 140 *or* a foreign language course	Contemporary Moral Issues *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
CCJS 100	Introduction to Criminal Justice	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
Additional Required Courses *(to be taken after first and introductory courses)*		
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/writing or speech requirement*	
◆ LGST 101	Introduction to Law *(required core course for the curriculum)*	3
◆ LGST 200	Techniques of Legal Research *(required core course for the curriculum)*	3
◆ LGST 201	Legal Writing *(required core course for the curriculum)*	3
◆ LGST 204	Legal Ethics *(required core course for the curriculum)*	3
◆ LGST 320	Criminal Law and Procedures *(or other legal studies–related course for the curriculum)*	3
◆ LGST 312	Torts *(or other legal studies–related course for the curriculum)*	3
Elective Courses *(to be chosen from any courses to complete 60 credits for the degree—courses that may be applied to the BS in legal studies are recommended)*		7
Total credits for AA with legal studies specialization		**60**

Management Studies Curriculum

REQUIREMENTS FOR THE MANAGEMENT STUDIES CURRICULUM

Coursework for the management studies curriculum includes the following:

- Management-related courses (15 credits): Chosen from any ACCT, BMGT, CMIS, CMST, ECON, FINC, HRMN, IFSM, MGST, and MRKT courses; WRTG 390; GVPT 210; PSYC 321 and 361; and STAT 230 (or 200)
- Electives (10 credits): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in management studies. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Management Studies Curriculum Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ BMGT 110	Introduction to Business and Management *(recommended management-related course for the curriculum for students with no prior business experience; also required for BS in business administration)*	3
Introductory Courses *(to be taken within the first 30 credits)*		
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
ECON 201	Principles of Macroeconomics	3
or ECON 203	Principles of Microeconomics *(required for BS in management studies)* *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Additional Required Courses *(to be taken after first and introductory courses)*		
◆ STAT 230	Business Statistics *(recommended management-related course for the curriculum; required for BS in management studies)*	3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 394/394X	Advanced Business Writing *or other course to fulfill the communications/writing or speech requirement*	
◆ BMGT 364	Management and Organization Theory	3
or MGST 160	Principles of Supervision *or other management-related course for the curriculum*	
◆ Management-related course for the curriculum	*(course that may be applied to BS in management studies is recommended)*	3
◆ Management-related course for the curriculum	*(course that may be applied to BS in management studies is recommended)*	3
Elective Courses *(chosen from any courses to complete 60 credits for the degree—courses that may be applied to BS in management studies are recommended)*		10
Total credits for AA with management studies specialization		**60**

Mathematics Curriculum

REQUIREMENTS FOR THE MATHEMATICS CURRICULUM

Coursework for the mathematics curriculum includes the following:

- Required mathematics core courses (18–20 credits): MATH 130, 131, and 132 (or 140 and 141); 240 (or 246); 241; and STAT 230 (or 200)
- Mathematics-related course (3 credits): Chosen from any ACCT or FINC courses; CHEM 103 and 113; CMIS 102, 170 (or CMSC 150), and 242; ECON 201, 203, 430, and 440; any MATH course numbered 108 or higher; and PHYS 111 or higher
- Electives (2–4 credits): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in mathematics. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Mathematics Curriculum Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 107	College Algebra *(fulfills general education requirement in mathematics)* *or a higher-level math course*	3
Note: Courses applied to general education requirements may not be applied to the major.		
MATH 108	Trigonometry and Analytical Geometry *(prerequisite for later courses)*	3
Introductory Courses *(to be taken within the first 30 credits)*		
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective*	
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Studies	3
or CMST 303	Advanced Application Software	
ECON 201	Principles of Macroeconomics	3
or ECON 203	Principles of Microeconomics *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	
◆ MATH 130	Calculus A *(required core course for the curriculum)*	3
◆ MATH 131	Calculus B *(required core course for the curriculum)*	3
◆ MATH 132	Calculus C *(required core course for the curriculum)*	3
Additional Required Courses *(to be taken after first and introductory courses)*		
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication *or other course to fulfill the communications/writing or speech requirement*	3
◆ MATH 241	Calculus III *(required core course for the curriculum)*	4
◆ MATH 246	Differential Equations	3
or MATH 240	Introduction to Linear Algebra *(required core course for the curriculum)*	
◆ STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics *(required core course for the curriculum)*	
◆ A mathematics-related course for the curriculum		3
Total credits for AA with mathematics specialization		**60**

Women's Studies Curriculum

REQUIREMENTS FOR THE WOMEN'S STUDIES CURRICULUM

Coursework for the women's studies curriculum includes the following:

- Required core course (3 credits): WMST 200
- Women's studies–related courses (15 credits): Chosen from ARTH 199U and 478, BEHS 220, PHIL 343, and related women's studies and special topics courses (with prior approval)
- Electives (7 credits): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in women's studies. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Women's Studies Curriculum Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ WMST 200	Introduction to Women's Studies: Women and Society *(required core course for the curriculum)*	3
Introductory Courses *(to be taken within the first 30 credits)*		
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
HIST 141	Western Civilization I	3
or HIST 142	Western Civilization II *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective*	
◆ BEHS 220	Diversity Awareness *or other women's studies–related course for the curriculum*	3
GVPT 200	International Political Relations *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
◆ Women's studies–related course for the curriculum		3
Additional Required Courses *(to be taken after first and introductory courses)*		
SPCH 100	Foundations of Speech Communication *or other course to fulfill the communications/writing or speech requirement*	3
◆ Women's studies–related course for the curriculum		3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
ANTH 102	Introduction to Anthropology: Cultural Anthropology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	3
PHIL 140	Contemporary Moral Issues *or other ARTH, ART, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement (discipline must differ from other humanities course)*	3
◆ Women's studies–related course for the curriculum		3
◆ Women's studies–related course for the curriculum		3
Electives Courses *(chosen from any courses to complete 60 credits for the degree)*		7
Total credits for AA with women's studies specialization		**60**

CERTIFICATE PROGRAMS

To help nontraditional students meet their educational goals, UMUC offers a full range of certificate programs that respond to current trends in today's demanding job market. Certificate programs offer working adults a convenient, flexible way to earn credentials for career advancement. Many programs are available online.

The undergraduate certificate programs generally require 16 to 21 credits (except for the certificate in Paralegal Studies, which requires 60 credits). All courses for the certificate programs carry college credit and may be applied toward a degree.

CURRICULA

In addition to the certificates listed below, some certificates are available only to active-duty military personnel and certain others who conform to special stipulations.

Accounting—Introductory
Accounting—Advanced
Applied Behavioral and Social Sciences
Business Project Management
Clinical Mental Health Care
Computer Graphics and Design
Computer Networking
Criminal Justice Intelligence
Database Design and Implementation
Database Management
Desktop Publishing
Diversity Awareness
Financial Management
Fraud Investigation
Game Development
Health Issues for the Aging Adult
Human Development
Human Resource Management
Information Assurance
Information Management
Internet Technologies
Management Foundations
Object-Oriented Design and Programming
Paralegal Studies
Project Management for IT Professionals
Terrorism and Institutions: Prevention and Response
UNIX System Administration
Visual Basic Programming
Web Design
Workplace Communications
Workplace Spanish

REQUIREMENTS

- Students pursuing certificate programs must be admitted as UMUC students.
- Students are responsible for notifying UMUC of their intention to complete certificate work before completion of their last course. (The application is available at *https://my.umuc.edu.*)
- Students may pursue a degree and certificate simultaneously or pursue a degree after completing the certificate, but the application for any certificate completed while in progress toward the bachelor's degree must be submitted before award of the bachelor's degree.
- Students may not use the same course toward completion of more than one certificate. In cases where the same course is required for two certificates, the student must replace that course with an approved substitute for the second certificate.
- No more than half of the total credits for any certificate may be earned through credit by examination, prior-learning portfolio credit, internship/cooperative education credit, or transfer credit from other schools.
- Certificates consisting primarily of upper-level coursework may assume prior study in that area. Students should check prerequisites for certificate courses. Prerequisites for certificate courses may be satisfied by coursework, credit by examination, or prior-learning portfolio credit, under current policies for such credit.
- At least half of the total credits for any certificate must be earned through graded coursework.
- Students must complete all required coursework for the certificate with a minimum grade of C (2.0) in all courses. Certificate courses may not be taken pass/fail.

The individual certificate coursework requirements specified in the following section are applicable to students enrolling on or after August 1, 2010. However, should certificate requirements change, students must either complete these requirements within two years of the change or fulfill the new requirements.

Unless otherwise specified, course sequences for each certificate suggest but do not require that courses be taken in a prescribed order.

Accounting—Introductory

The introductory accounting certificate is designed to meet the needs of nonaccounting personnel and managers who feel they require knowledge of accounting to advance in their professions. It can also be used by individuals who are interested in pursuing new careers in accounting and need to learn the major elements. Students without a background in economics, basic mathematics, and statistics are encouraged to take courses in those subjects before starting the certificate program. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in accounting.

Overall certificate requirements are listed on p. 88.

Accounting—Introductory Certificate Requirements			**Credits**
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Four required courses:			
ACCT	220	Principles of Accounting I	3
ACCT	221	Principles of Accounting II	3
ACCT	321	Cost Accounting	3
ACCT	323	Federal Income Tax I	3
One supporting elective chosen from the following:			3
ACCT	310	Intermediate Accounting I	
ACCT	311	Intermediate Accounting II	
ACCT	326	Accounting Information Systems	
ACCT	328	Accounting Software	
ACCT	426	Advanced Cost Accounting	
ACCT	486A	Internship in Accounting	
FINC	330	Business Finance	
A second supporting elective chosen from the above list			3
Total credits for certificate in Accounting—Introductory			**18**

Accounting—Advanced

The advanced accounting certificate is designed to meet the needs of accounting professionals who want to enhance their accounting skills. Before starting the certificate program, students are encouraged to take courses in economics, basic mathematics, and statistics in addition to fulfilling all prerequisites. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in accounting.

Overall certificate requirements are listed on p. 88.

Accounting—Advanced Certificate Requirements			**Credits**
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Four required courses:			
ACCT	310	Intermediate Accounting I	3
ACCT	311	Intermediate Accounting II	3
ACCT	417	Federal Income Tax II	3
ACCT	422	Auditing Theory and Practice	3
A supporting elective chosen from the following:			3
ACCT	321	Cost Accounting	
ACCT	323	Federal Income Tax I	
ACCT	326	Accounting Information Systems	
ACCT	410	Accounting for Government and Not-for-Profit Organizations	
ACCT	411	Ethics and Professionalism in Accounting	
ACCT	424	Advanced Accounting	
ACCT	425	International Accounting	
ACCT	426	Advanced Cost Accounting	
ACCT	427	Advanced Auditing	
ACCT	436	Internal Auditing	
FINC	330	Business Finance	
A second supporting elective chosen from the above list			3
Total credits for certificate in Accounting—Advanced			**18**

CERTIFICATE PROGRAMS

Applied Behavioral and Social Sciences

The certificate in applied behavioral and social sciences is designed to provide a range of skills and knowledge in the behavioral and social sciences. The key ideas and methods of various disciplines within the behavioral and social sciences are explored to gain an understanding of contemporary social and cultural issues. Focus is on practical applications. The certificate is useful for students seeking career opportunities and/or graduate study in social work, human services, and public health. With appropriate selection of courses, this certificate may be completed while pursuing the Bachelor of Science in social science.

Overall certificate requirements are listed on p. 88.

Applied Behavioral and Social Sciences Certificate Requirements			**Credits**
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Three required courses:			
PSYC	100	Introduction to Psychology	3
BIOL	160	Human Biology	3
PSYC	351	Lifespan Development Psychology	3
A statistics course chosen from the following:			3
STAT	200	Introduction to Statistics	
STAT	225	Introduction to Statistical Methods in Psychology	
STAT	230	Business Statistics	
A supporting elective chosen from the following:			3
ANTH	350	Medical Anthropology	
BEHS	320	Disability Studies	
BEHS	343	Parenting Today	
BEHS	364	Alcohol in U.S. Society	
BEHS	453	Domestic Violence	
GERO	306	Programs, Services, and Policies	
PSYC	305	Research Methods in Psychology	
PSYC	432	Introduction to Counseling Psychology	
A Cooperative Education internship in the social sciences (ANTH, BEHS, GERO, PSYC, or SOCY 486A)			
A second supporting elective chosen from the above list			3
Total credits for certificate in Applied Behavioral and Social Sciences			**18**

Business Project Management

The business project management certificate prepares students for supervisory and midlevel management positions involving project management and team management. It enables project managers, project team members, and other employees assigned to project teams within a private- or public-sector organization to upgrade their skills with the theory and practical knowledge needed to advance to a higher level.

Overall certificate requirements are listed on p. 88.

Business Project Management Certificate Requirements			**Credits**
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Three required courses:			
BMGT	364	Management and Organization Theory	3
BMGT	487	Project Management I	3
BMGT	488	Project Management II	3
A supporting elective chosen from the following:			3
ACCT	220	Principles of Accounting I	
ACCT	221	Principles of Accounting II	
BMGT	304	Managing E-Commerce in Organizations	
BMGT	317	Problem Solving for Managers	
BMGT	339	Government and Business Contracting	
BMGT	366	Global Public Management	
FINC	330	Business Finance	
FINC	351	Risk Management	
HRMN	363	Negotiation Strategies	
WRTG	494	Grant and Proposal Writing	
A second supporting elective chosen from the above list			3
A third supporting elective chosen from the above list			3
Total credits for certificate in Business Project Management			**18**

Clinical Mental Health Care

The clinical mental health care certificate is designed to meet the needs of individuals who currently work or desire to work in mental health care settings. The program focuses on mental health disorders, diagnostic procedures, and treatment protocols. It is designed to better prepare students to work in clinical settings (such as hospitals, outpatient clinics, and nonprofit outreach programs) under the supervision of a licensed psychologist or medical doctor. With appropriate choice of courses, the certificate may be completed while pursuing the Bachelor of Science in psychology.

Overall certificate requirements are listed on p. 88.

Clinical Mental Health Care
Certificate Requirements **Credits**

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.

Five required courses:

PSYC	100	Introduction to Psychology	3
PSYC	353	Abnormal Psychology	3
PSYC	435	Personality Theories	3
PSYC	436	Introduction to Clinical Psychology	3
PSYC	451	Principles of Psychological Assessment	3

A supporting elective or electives totaling 3 credits chosen from the following: 3

PSYC	301	Biological Basis of Behavior
PSYC	307X	Substance Abuse: An Introduction
PSYC	309C	Psychology of Eating Disorders
PSYC	309X	Ethics in Mental Health and Psychological Treatment
PSYC	310	Sensation and Perception
PSYC	405	Principles of Behavior Modification

Total credits for certificate in Clinical Mental Health Care **18**

Computer Graphics and Design

The computer graphics and design certificate is for students who seek to develop design and composition skills in a computer environment. Emphasis is on integrating effective design principles with Internet applications and mixed media.

Overall certificate requirements are listed on p. 88.

Computer Graphics and Design
Certificate Requirements **Credits**

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.

Four required courses:

ARTT	250	Elements of Commercial Design	3
ARTT	354	Elements of Computer Graphics	3
ARTT	479	Advanced Computer Graphics	3
CMST	386	Advanced Internet and Web Design	3

A supporting elective chosen from the following: 3

CMST	310	Electronic Publishing
CMST	311	Advanced Electronic Publishing
CMST	450	Web Design with XML
COMM	493	Strategies for Visual Communication

A second supporting elective chosen from the above list 3

Total credits for certificate in Computer Graphics and Design **18**

CERTIFICATE PROGRAMS

Computer Networking

The computer networking certificate is appropriate for students who want to work as network administrators for a business, government, or nonprofit organization. The program provides hands-on training in state-of-the art computer technology. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in computer information technology.

Overall certificate requirements are listed on p. 88.

Computer Networking Certificate Requirements			Credits
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Four required courses:			
CMIT	265	Networking Essentials	3
CMIT	368	Windows Server	3
CMIT	376	Windows Network Infrastructure	3
CMIT	377	Windows Directory Services Infrastructure	3
A supporting elective chosen from the following:			3
CMIT	320	Network Security	
CMIT	331	Wireless Network Administration	
CMIT	350	Interconnecting Cisco Devices	
CMIT	480	Designing Security for a Windows Network	
A second supporting elective chosen from the above list			3
Total credits for certificate in Computer Networking			**18**

Criminal Justice Intelligence

The criminal justice intelligence certificate prepares students for work in high-intensity drug trafficking areas nationwide. Students learn about the importance of interagency communication and cooperation among officers and personnel in this area, the history of the intelligence community and the political underpinnings for its current structure and processes, and the current intelligence cycle. Legal and ethical issues are presented within given scenarios. The program also provides experience with the decision-making process and reviews possible outcomes in common situations. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in criminal justice.

Overall certificate requirements are listed on p. 88.

Criminal Justice Intelligence Certificate Requirements			Credits
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Six required courses:			
CCJS	341	Criminal Investigation	3
CCJS	411	History of Intelligence and the U.S. National Intelligence Community	3
CCJS	412	The Intelligence Cycle	3
CCJS	413	Legal and Ethical Issues in Intelligence	3
CCJS	414	Intelligence Analysis	3
CCJS	415	Advanced Intelligence Analysis	3
Total credits for certificate in Criminal Justice Intelligence			**18**

Database Design and Implementation

The certificate in database design and implementation is appropriate for technical professionals who want to work as advanced users or database designers or administrators. Students are taught Structured Query Language (SQL) and learn about issues in database design and implementation. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in computer studies or in computer and information science.

Overall certificate requirements are listed on p. 88.

Database Design and Implementation Certificate Requirements			Credits
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Four required courses:			
CMIS	170	Introduction to XML	3
CMIS	320	Relational Databases	3
CMIS	420	Advanced Relational Databases	3
CMIS	485	Web Database Development	3
A supporting elective chosen from the following:			3
CMIS	355	Database Forms	
CMIS	375	Programming in Perl	
CMST	385	Internet and Web Design	
A second supporting elective chosen from the above list			3
Total credits for certificate in Database Design and Implementation			**18**

Database Management

The database management certificate offers an introduction to the design and management of database systems in a business environment. In-depth practice in the use of Structured Query Language (SQL) is provided in the context of business-related case studies. The program covers advanced database concepts, including database administration, database technology, and selection and acquisition of database management systems. Supporting elective courses include database mining and the systems analysis required to begin developing the information technology (IT) infrastructure in a business environment. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in computer studies.

Overall certificate requirements are listed on p. 88.

Database Management Certificate Requirements			**Credits**
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
An introductory computing course chosen from the following:			3
CMIS	102	Introduction to Problem Solving and Algorithm Design	
CMST	306	Introduction to Visual Basic Programming *or previous workplace experience with C, C++, Visual Basic, Ada, COBOL, or another high-level language plus an additional supporting elective from the list below*	
Three required courses:			
IFSM	410	Database Concepts	3
IFSM	411	SQL	3
IFSM	420	Advanced Database Concepts	3
A supporting elective chosen from the following:			3
CMIS	485	Web Database Development	
CMIT	261	Introduction to Oracle	
CMIT	361	Developing PL/SQL Applications	
IFSM	304	Ethics in the Information Age	
IFSM	461	Systems Analysis and Design	
A second supporting elective chosen from the above list			3
Total credits for certificate in Database Management			**18**

Desktop Publishing

The desktop publishing certificate is designed for entry-level personnel whose goal is to become proficient using popular software programs in desktop publishing. It includes study of both desktop publishing techniques and design elements.

Overall certificate requirements are listed on p. 88.

Desktop Publishing Certificate Requirements			**Credits**
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Four required courses:			
CMST	310	Electronic Publishing	3
ARTT	354	Elements of Computer Graphics	3
COMM	493	Strategies for Visual Communications	3
CMST	311	Advanced Electronic Publishing	3
A supporting elective chosen from the following:			3
CMST	103	Application Software	
IFSM	201	Introduction to Computer-Based Systems	
WRTG	289	Introduction to Principles of Text Editing	
WRTG	489	Advanced Technical Editing	
A second supporting elective chosen from the above list			3
Total credits for certificate in Desktop Publishing			**18**

Diversity Awareness

The diversity awareness certificate provides an interdisciplinary perspective on diversity in contemporary society, geared toward practical application in the workplace. The program is based in the social sciences and grounded in sociological concepts. Focus is on applying social science concepts to foster an awareness and sensitivity to the diverse groups that an individual is likely to encounter in today's workplace. It provides students with the requisite concepts to adapt, think flexibly, and appreciate the interrelatedness of different groups and perspectives in the workplace. The certificate allows those currently working in human resource, personnel, and management sectors to update and expand their knowledge, understanding, and awareness of contemporary diversity issues. It is appropriate for students pursuing degrees in business administration, communication studies, criminal justice, gerontology, global business and public policy, humanities, human resource management, legal studies, management studies, political science, or psychology. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in social science.

Overall certificate requirements are listed on p. 88.

Diversity Awareness
Certificate Requirements **Credits**

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.

Two required foundation courses:

BEHS	220	Diversity Awareness	3
SOCY	100	Introduction to Sociology	3

A course in anthropology chosen from the following: 3

ANTH	102	Introduction to Anthropology: Cultural Anthropology
ANTH	344	Cultural Anthropology and Linguistics

A course in cultural/racial aspects of diversity chosen from the following: 3

PSYC	354	Cross-Cultural Psychology
SOCY	423	Ethnic Minorities
SOCY	424	Sociology of Race Relations
SPCH	482	Intercultural Communication

A course in gender- and age-related aspects of diversity chosen from the following: 3

BMGT	314	Women as Leaders
BMGT	315	Gender Relations in Business
GERO	311	Women and Aging
GERO	327	Ethnicity and Aging
PSYC	338	Psychology of Gender
PSYC	357	Psychology of Adulthood and Aging
SOCY	325	The Sociology of Gender
SPCH	324	Communication and Gender

A course in specialized aspects of diversity chosen from the following: 3

BEHS	320	Disability Studies
HUMN	351	Myth and Culture
PHIL	315	Workplace Ethics
SOCY	426	Sociology of Religion
SOCY	432	Social Movements

Total credits for certificate in Diversity Awareness **18**

Financial Management

The financial management certificate is designed to meet the needs of new financial managers, other managers who feel they require greater knowledge of finance to advance in their professions, individuals interested in pursuing new careers in financial management, and financial management professionals who want to upgrade their skills. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in finance.

Overall certificate requirements are listed on p. 88.

Financial Management
Certificate Requirements **Credits**

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.

A finance course chosen from the following: 3

FINC	330	Business Finance
FINC	331	Finance for the Nonfinancial Manager

Four required courses:

FINC	340	Investments	3
FINC	351	Risk Management	3
FINC	430	Financial Management	3
FINC	460	International Finance	3

A supporting elective chosen from the following:			3
ACCT	301	Accounting for Nonaccounting Managers	
ECON	430	Money and Banking	
FINC	321	Fundamentals of Building Wealth	
FINC	352	Life Insurance	
FINC	440	Security Analysis and Valuation	
FINC	441	Futures Contracts and Options	
FINC	450	Commercial Bank Management	
Total credits for certificate in Financial Management			**18**

Fraud Investigation

The fraud investigation certificate provides an interdisciplinary foundation of the core knowledge needed in the field of fraud investigation, both by law enforcement personnel and internal organizational personnel and consultants. The certificate is designed to enhance one's understanding of fraud, including motives, rationalization, and opportunity (the fraud triangle). Case studies and current events are used to analyze fraud from various points of view: incentives and pressures, the capacity to commit fraud, opportunity, and integrity (the fraud diamond).

Overall certificate requirements are listed on p. 88.

Fraud Investigation
Certificate Requirements **Credits**

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.

One of the following accounting foundation courses:			3
ACCT	220	Principles of Accounting	
ACCT	301	Accounting for Nonaccounting Managers	
The following criminal justice foundation course:			
CCJS	234	Criminal Procedure and Evidence	3
One of the following investigation and deterrence courses in accounting:			3
ACCT	320	Fraud Detection and Deterrence	
ACCT	438	Fraud and Forensic Accounting	
One of the following investigation and deterrence courses in criminal justice:			3
CCJS	341	Criminal Investigation	
CCJS	453	White-Collar and Organized Crime	
One of the following courses:			3
CCJS	421	Computer Forensics	
CCJS	496	Cyber Crime and Security	
ACCT	433	Audit and Control of Information Technology	
The following required course:			
ACCT	440	Forensic and Investigative Accounting	3
Total credits for certificate in Fraud Investigation			**18**

Game Development

The game development certificate prepares students for entry-level programming positions in the gaming industry. Through a hands-on, project-based approach, students are able to create their own video games and become familiar with the core programming language skills necessary for game development. The certificate also helps them become proficient in the areas of mathematics common to most game projects. To gain a thorough understanding of the main concepts involved in real-time 3D graphics programming, students are given the opportunity to work with an industry-standard gaming engine. With appropriate choice of major and elective courses, students may complete this certificate while pursuing the Bachelor of Science in computer science.

Overall certificate requirements are listed on p. 88.

Game Development
Certificate Requirements **Credits**

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.

Four required courses:			
CMSC	230	Computer Science II	3
CMSC	335	Object-Oriented and Concurrent Programming	3
CMSC	325	Game Design and Development	3
CMSC	425	Building Applications for Mobile Devices	3
A supporting elective chosen from the following courses:			3
CMIS	445	Distributed Systems	
CMSC	480	Advanced Programming in Java	
MATH	240	Introduction to Linear Algebra	
A second supporting elective chosen from the above list			3
Total credits for certificate in Game Development			**18**

Health Issues for the Aging Adult

The certificate in health issues for the aging adult is designed for students who seek the knowledge and skills necessary to effectively work with older adults in a variety of roles. The certificate integrates gerontological knowledge and skills from the fields of health/biology, sociology, psychology, and policy/services and provides the opportunity to apply these skills to work with older adults. Coursework may help students seeking a bachelor's degree in a variety of areas to integrate gerontology knowledge with their major area of academic study or prepare students who are vocationally oriented and not seeking a higher education degree to improve work skills. Through a practicum or Co-op experience, students work with professionals to apply knowledge acquired through coursework to practical experience with aging individuals or aging issues in different settings that address the needs of older adults (e.g., assisted living centers, retirement communities, nursing homes, hospitals, senior centers, companies producing products and services for seniors, or area agencies on aging).

Overall certificate requirements are listed on p. 88.

Health Issues for the Aging Adult
Certificate Requirements **Credits**

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.

A required course:

GERO	100	Introduction to Gerontology	3

A course on the sociocultural aspects of aging chosen from the following: 3

GERO	331	Sociology of Aging
GERO	410	Cross-Cultural Perspectives of Aging

A psychology course chosen from the following: 3

GERO	220	Psychological Aspects of Aging
PSYC	357	Psychology of Adulthood and Aging

A life health and science course or courses totaling 3 credits chosen from the following: 3

BIOL	307	The Biology of Aging
GERO	302	Health and Aging
GERO	355	Nutritional Concerns of Aging
GERO	495D	Adaptation to Sensory Changes and Aging
GERO	495H	Illness and Aging
GERO	495K	Geriatric Nutrition

A required practicum experience: 3

GERO	486A	Internship in Gerontology Through Co-op

A course specific to the student's academic goals chosen from the following: 3

GERO	306	Programs, Services, and Policies
GERO	380	End of Life: Issues and Perspectives

Total credits for certificate in Health Issues for the Aging Adult **18**

Human Development

The human development certificate is designed to meet the needs of individuals who work in health care settings that require a thorough background in human development from birth to an advanced age. It enables students to understand and recognize developmental milestones across the lifespan and examines age-specific related topics. The program is particularly useful for individuals either currently working or desiring to work in settings such as childcare, adult care, boys' and girls' clubs, and other community-related settings. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in psychology.

Overall certificate requirements are listed on p. 88.

Human Development
Certificate Requirements **Credits**

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.

Five required courses:

PSYC	100	Introduction to Psychology	3
PSYC	351	Lifespan Development Psychology	3
PSYC	355	Child Psychology	3
PSYC	356	Psychology of Adolescence	3
PSYC	357	Psychology of Adulthood and Aging	3

A supporting elective chosen from the following: 3

PSYC	332	Psychology of Human Sexuality
PSYC	334	Psychology of Interpersonal Relationships
PSYC	338	Psychology of Gender

Total credits for certificate in Human Development **18**

Human Resource Management

The human resource management certificate prepares students for supervisory and midlevel management positions in human resource management and enables employees in public- and private-sector organizations to upgrade their skills with the theory and practical knowledge necessary to advance to a higher level. The certificate prepares the student for the Professional in Human Resources (PHR) and Senior Professional in Human Resources (SPHR) certification examinations. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in human resource management.

Overall certificate requirements are listed on p. 88.

Human Resource Management Certificate Requirements			**Credits**
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Three required courses:			
BMGT	364	Management and Organization Theory	3
HRMN	300	Human Resource Management	3
HRMN	400	Human Resource Management: Analysis and Problems	3
A labor management course chosen from the following:			3
HRMN	362	Labor Relations	
HRMN	365	Conflict Management in Organizations	
A supporting elective chosen from the following:			3
BMGT	391	Motivation, Performance, and Productivity	
BMGT	464	Organizational Behavior	
BMGT	465	Organization Development and Change	
BMGT	484	Managing Teams in Organizations	
HRMN	367	Organizational Culture	
HRMN	395	The Total Awards Approach to Compensation Management	
HRMN	406	Employee Training and Development	
HRMN	495	Contemporary Issues in Human Resource Management Practice	
A second supporting elective chosen from the above list			3
Total credits for certificate in Human Resource Management			**18**

Information Assurance

The information assurance certificate supports those who wish to acquire or improve information security knowledge in response to the national imperative for maintaining the security of the technology and information infrastructure of government and industry. Students gain specific skills and are instructed in areas of policy formation, needs assessment, security applications, and disaster prevention and recovery. Laboratories employing both state-of-the-art and industry-standard tools are used. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in cybersecurity.

Overall certificate requirements are listed on p. 88.

Information Assurance Certificate Requirements			**Credits**
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Two required courses:			
CSIA	302	Telecommunications in Information Systems	3
CSIA	303	Foundations of Information System Security	3
A supporting elective chosen from the following:			3
CMIT	265	Networking Essentials	
CMIT	320	Network Security	
CSIA	454	Information System Security Mechanisms	
CSIA	457	Cyber Crime and Cyber Terrorism	
CSIA	459	Security Issues and Emerging Technologies	
IFSM	432	Disaster Recovery Planning	
IFSM	433	Information Security Needs Assessment and Planning	
A second supporting elective chosen from the above list			3
A third supporting elective chosen from the above list			3
A fourth supporting elective chosen from the above list			3
Total credits for certificate in Information Assurance			**18**

CERTIFICATE PROGRAMS

Information Management

The information management certificate offers an overview of information systems, their role in organizations, and the relation of information systems to the objectives and structure of an organization. An introduction to the design and management of database systems in a business environment is provided. A study of the methods used in analyzing information needs and specifying application system requirements is complemented with a study of the concepts and techniques used in specifying the physical design of the targeted system. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in information systems management.

Overall certificate requirements are listed on p. 88.

Information Management Certificate Requirements			**Credits**
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
An introductory computing course chosen from the following:			3
CMIS	102	Introduction to Problem Solving and Algorithm Design	
CMST	306	Introduction to Visual Basic Programming *or previous workplace experience with C, C++, Visual Basic, Ada, COBOL, or another high-level language plus an additional supporting elective from the lists below*	
Three required courses:			
IFSM	300	Information Systems in Organizations	3
IFSM	410	Database Concepts	3
IFSM	461	Systems Analysis and Design	3
A 300-level supporting elective course chosen from the following:			3
IFSM	302	Workplace Productivity	
IFSM	303	Human Factors in Information Systems	
IFSM	304	Ethics in the Information Age	
A 400-level supporting elective course chosen from the following:			3
CSIA	303	Foundations of Information System Security	
IFSM	411	SQL	
IFSM	438	Project Management	
Total credits for certificate in Information Management			**18**

Internet Technologies

The Internet technologies certificate is designed to provide an introduction to Internet applications and their design and development. Hands-on experience is provided in Web site management and design, with an emphasis on subject-related projects.

Overall certificate requirements are listed on p. 88.

Internet Technologies Certificate Requirements			**Credits**
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Four required courses:			
CMST	385	Internet and Web Design	3
CMST	386	Advanced Internet and Web Design	3
CMST	430	Web Site Management	3
CMST	450	Web Design with XML	3
A supporting elective chosen from the following:			3
CMIS	242	Intermediate Programming	
CMIS	345	Object-Oriented Design and Programming	
CMIS	375	Programming in Perl	
CMSC	480	Advanced Programming in Java	
CMST	460	Web Application Development Using ColdFusion	
A second supporting elective chosen from the above list			3
Total credits for certificate in Internet Technologies			**18**

Management Foundations

The management foundations certificate prepares students for supervisory and midlevel management positions and enables employees in public- and private-sector organizations to upgrade their skills with the theory and practical knowledge necessary to advance to a higher level. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in business administration.

Overall certificate requirements are listed on p. 88.

Management Foundations
Certificate Requirements **Credits**

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.

Four required courses:

IFSM	300	Information Systems in Organizations	3
BMGT	364	Management and Organization Theory	3
MRKT	310	Marketing Principles	3
HRMN	300	Human Resource Management	3

A finance course chosen from the following: 3

FINC	330	Business Finance
FINC	331	Finance for the Nonfinancial Manager

A supporting elective chosen from the following: 3

BMGT	365	Organizational Leadership
BMGT	380	Business Law I
BMGT	464	Organizational Behavior
BMGT	496	Business Ethics

Total credits for certificate in Management Foundations **18**

Object-Oriented Design and Programming

The certificate in object-oriented design and programming is appropriate for technical professionals who will be working as programmer/analysts or application developers. Students are taught introductory and advanced features of object-oriented languages, as well as program design concepts. Students should check course descriptions to ensure that they have taken all prerequisites for each course. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in computer and information science.

Overall certificate requirements are listed on p. 88.

Object-Oriented Design and Programming
Certificate Requirements **Credits**

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.

Three required courses:

CMIS	141	Introductory Programming	3
CMIS	242	Intermediate Programming	3
CMIS	345	Object-Oriented Design and Programming	3

A supporting elective chosen from the following: 3

CMIS	330	Software Engineering Principles and Techniques
CMIS	440	Advanced Programming in Java
CMIS	455	Requirements Development
CMIS	460	Software Design and Development

A second supporting elective chosen from the above list 3

A third supporting elective chosen from the above list 3

Total credits for certificate in Object-Oriented Design and Programming **18**

CERTIFICATE PROGRAMS

Paralegal Studies

The paralegal studies certificate focuses on the legal concepts, procedures, and skills used in a wide variety of legal environments. The program addresses the organization, functions, and processes of institutions in the U.S. legal system; roles and issues in the paralegal field; legal ethics; and selected specialty areas. The curriculum emphasizes important skills, including legal analysis, communication, legal research, computer competence, legal drafting, investigation, organization, and specialized legal skills. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in legal studies. (However, students may not pursue the paralegal studies certificate within the associate of arts curriculum in legal studies.)

Overall certificate requirements are listed on p. 88.

Paralegal Studies
Certificate Requirements — **Credits**

General education and other college coursework — 36

This requirement may be fulfilled through transfer credit, and up to 30 credits may be earned through credit by examination or prior-learning portfolio credit. Total must include 18 credits in general education courses (described on p. 8) covering at least three different disciplines and WRTG 101/101X (unless the student already has earned an associate's or bachelor's degree before taking the first legal studies course).

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses. No more than six 1-credit courses may be applied toward this certificate. No more than 12 credits of certificate coursework as listed below may be fulfilled through transfer credit.

Four required legal studies courses:

LGST	101	Introduction to Law	3
LGST	200	Techniques of Legal Research	3
LGST	201	Legal Writing	3
LGST	204	Legal Ethics	3

A general practice procedure and legal skills elective chosen from the following: — 3

LGST	320	Criminal Law and Procedures
LGST	322	Evidence
LGST	325	Litigation
LGST	400	Advanced Legal Research and Analysis
LGST	401	Advanced Legal Writing

A general practice substantive law elective chosen from the following: — 3

LGST	312	Torts
LGST	315	Domestic Relations
LGST	316	Estates and Probate
LGST	340	Contract Law
LGST	442	Business Organizations

A supporting elective or electives totaling 3 credits chosen from any LGST course — 3

A supporting elective or electives totaling 3 credits chosen from any LGST course — 3

Total credits for certificate in Paralegal Studies — **60**

Project Management for IT Professionals

The certificate in project management for IT professionals offers an overview of information systems, their role in organizations, and the relationship of information systems to the objectives and structure of an organization. The planning, scheduling, and controlling of a system project during its life cycle is explored. A survey of techniques for improving the productivity of workplace practices and procedures is included. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in information systems management.

Overall certificate requirements are listed on p. 88.

Project Management for IT Professionals
Certificate Requirements — **Credits**

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.

Four required courses:

IFSM	201	Introduction to Computer-Based Systems	3
IFSM	300	Information Systems in Organizations	3
IFSM	438	Project Management	3
IFSM	461	Systems Analysis and Design	3

A supporting elective chosen from the following:			3
CSIA	302	Telecommunications in Information Systems	
CSIA	303	Foundations of Information System Security	
CSIA	457	Cyber Crime and Cyber Terrorism	
IFSM	302	Workplace Productivity	
IFSM	303	Human Factors in Information Systems	
IFSM	304	Ethics in the Information Age	
A second supporting elective chosen from the above list			3
Total credits for certificate in Project Management for IT Professionals			**18**

Terrorism and Institutions: Prevention and Response

The certificate in terrorism and institutions explores how institutions confront terrorism and the aftermath of terrorist acts. Institutions examined include government agencies, private security organizations, schools, and commercial enterprises. The certificate addresses emerging terrorist threats and the institutional response to terrorist acts. It can benefit security individuals who are in charge of protecting government facilities, private security agency employees, police officers, detective agents, public health and public safety administrators and officers, counterterrorism professionals, and the general public.

Overall certificate requirements are listed on p. 88.

Terrorism and Institutions: Prevention and Response Certificate Requirements **Credits**

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.

Three required courses:			
CCJS	491	Institutional Security	3
GVPT	406	Global Terrorism	3
GVPT	409	Terrorism, Antiterrorism, and Homeland Security	3
An institutional response elective chosen from the following:			3
GVPT	240	Political Ideologies	
GVPT	407	State Terrorism	
GVPT	408	Counterterrorism	
HIST	319A	History of Terrorism	
PSYC	386	Psychology of Stress	
A specialized supporting elective chosen from the following:			3
CCJS	462	Protection of Business Assets	
CCJS	463	Security: A Management Perspective	
CCJS	496	Cyber Crime and Security	
CMIS	335	Software Safety	
ENMT	305	Hazardous Materials Toxicology	
ENMT	310	Emergency Planning and Operations Management	
FSCN	306	Fire Investigation and Analysis	
FSCN	401	Disaster Planning and Control	
IFSM	432	Disaster Recovery Planning	
A second specialized supporting elective chosen from the above list			3
Total credits for certificate in Terrorism and Institutions: Prevention and Response			**18**

UNIX System Administration

The UNIX system administration certificate is designed to provide an understanding of the UNIX operating system, its maintenance and security, and related theory and implementation issues.

Overall certificate requirements are listed on p. 88.

UNIX System Administration Certificate Requirements **Credits**

Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.

Six required courses:			
CMIS	141	Introductory Programming	3
CMIS	325	UNIX with Shell Programming	3
CMIS	375	Programming in Perl	3
CMIS	415	Advanced UNIX and C	3
CMIT	391	UNIX/Linux System Administration	3
CMIT	491	Advanced UNIX/Linux System Administration	3
Total credits for certificate in UNIX System Administration			**18**

CERTIFICATE PROGRAMS

Visual Basic Programming

The Visual Basic programming certificate is designed for students seeking entry-level programming positions. Hands-on experience using Visual Basic software is provided. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in computer studies.

Overall certificate requirements are listed on p. 88.

Visual Basic Programming Certificate Requirements			Credits
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
An introductory course:			3
CMIS	102	Introduction to Problem Solving and Algorithm Design	
Two required courses:			
CMST	306	Introduction to Visual Basic Programming	3
CMST	416	Advanced Visual Basic Programming	3
A computer systems course chosen from the following:			3
CMIS	310	Computer Systems and Architecture	
IFSM	310	Software and Hardware Concepts	
A supporting elective chosen from the following:			3
CMIS	242	Intermediate Programming	
CMIS	345	Object-Oriented Design and Programming	
CMSC	480	Advanced Programming in Java	
CMST	385	Internet and Web Design	
CMST	386	Advanced Internet and Web Design	
IFSM	410	Database Concepts	
IFSM	420	Advanced Database Concepts	
A second supporting elective chosen from the above list			3
Total credits for certificate in Visual Basic Programming			**18**

Web Design

The Web design certificate prepares students to use Internet applications and design principles to produce effective Web pages. The program is appropriate for nontechnical employees who wish to advance within their organizations and who want to learn how to establish, develop, and maintain a Web site.

Overall certificate requirements are listed on p. 88.

Web Design Certificate Requirements			Credits
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Five required courses:			
CMST	385	Internet and Web Design	3
ARTT	250	Elements of Commercial Design	3
CMST	386	Advanced Internet and Web Design	3
ARTT	354	Elements of Computer Graphics	3
CMST	450	Web Design with XML	3
A supporting elective chosen from the following:			3
ARTT	479	Advanced Computer Graphics	
CMIS	375	Programming in Perl	
CMSC	480	Advanced Programming in Java	
CMST	460	Web Application Development Using ColdFusion	
A second supporting elective chosen from the above list			3
Total credits for certificate in Web Design			**21**

Workplace Communications

The workplace communications certificate is designed to prepare students in the basics of communication vehicles and modes in the modern workplace. It introduces them to the vocabulary of the field and to the tools and techniques used to create workplace documents. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Arts in communication studies.

Overall certificate requirements are listed on p. 88.

Workplace Communications Certificate Requirement			**Credits**
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Four required courses:			
WRTG	101/101X	Introduction to Writing	3
IFSM	201	Introduction to Computer-Based Systems	3
CMST	310	Electronic Publishing	3
COMM	495	Seminar in Workplace Communication	3
A writing course chosen from the following:			3
WRTG	393/393X	Advanced Technical Writing	
WRTG	394/394X	Advanced Business Writing	
An editing course chosen from the following:			3
WRTG	289	Introduction to Principles of Text Editing	
WRTG	489	Advanced Technical Editing	
Total credits for certificate in Workplace Communications			**18**

Workplace Spanish

The workplace Spanish certificate combines language and professional study to give students a language foundation that will prepare them to work and communicate in a Spanish-speaking environment.

Note: This certificate is not intended for students who already have native or near-native ability in Spanish. Students may send an e-mail to *languages@umuc.edu* for additional information on course content and eligibility.

Overall certificate requirements are listed on p. 88.

Workplace Spanish Certificate Requirements			**Credits**
Note: Courses may be applied to only one certificate; some prerequisites may need to be fulfilled before beginning certificate courses.			
Five required courses:			
SPAN	111	Elementary Spanish I	3
SPAN	112	Elementary Spanish II	3
SPAN	211	Intermediate Spanish I	3
SPAN	212	Intermediate Spanish II	3
SPAN	318	Commercial and Workplace Spanish	4
Total credits for certificate in Workplace Spanish			**16**

INFORMATION ON COURSES

THE UNIT OF CREDIT

The unit of credit defines the amount of university-level credit to be awarded for course completion, transfer of coursework from another institution, or evaluation of college-level prior learning. One credit is awarded on the basis of either of two sets of criteria, as follows:

- At least 15 hours (50 minutes each) of actual class meeting or the equivalent in guided learning activity (exclusive of registration and study days, holidays, and final examinations);
- At least 30 hours (50 minutes each) of supervised laboratory or studio work (exclusive of registration and study days, holidays, and final examinations).

PREREQUISITES

Prerequisites, normally stated in terms of numbered courses, represent the level of knowledge a student should have acquired before enrolling in a given course. It is each student's personal responsibility to make certain he or she is academically prepared to take a course. Faculty members are not expected to repeat material listed as being prerequisite.

Students may be barred from enrolling in or may be removed from courses for which they do not have the necessary prerequisites. Students who have not taken prerequisite courses recently should consult advisors or teachers and follow their recommendations. Faculty members are always available to discuss whether a student has the preparation necessary to perform well in a given course.

WRTG 101 Introduction to Writing is prerequisite to any higher-level course in English, communication studies, or writing. MATH 107 College Algebra is prerequisite to any higher-level course in mathematics. (Further guidance is in the section describing courses in mathematics.)

Students who have not successfully completed the equivalent of an introductory collegiate course in writing (WRTG 101) at UMUC will be tested for placement. Placement testing is also required for certain courses in mathematics (p. 198). More information may be obtained by calling 800-888-UMUC or by visiting *www.umuc.edu/testing*.

Another way to fulfill prerequisites is to obtain credit by course-challenge examination (described on p. 232). Advisors can explain the procedures. The goal is for students to earn college credit in areas in which they can demonstrate prior learning by successfully completing comprehensive tests of material normally covered in a semester-long course. These examinations are specifically prepared for the required level of knowledge in a given subject. Students may not take course-challenge examinations for lower-level courses that are prerequisite to courses for which they have already received credit.

KEY TO COURSE DESCRIPTIONS

Undergraduate courses that have been (or may be) offered by UMUC are listed on the following pages. They are arranged alphabetically by academic discipline or subject. The number of credits is shown by an arabic numeral in parentheses—e.g., (3)—after the title of the course.

Course numbers are designated as follows:

000–099	Noncredit and institutional credit courses (which do not count toward any degree or certificate)
100–199	Primarily freshman courses
200–299	Primarily sophomore courses
300–399	Upper-level, primarily junior courses
400–499	Upper-level, primarily senior courses
500–599	Senior-level courses acceptable for credit toward some graduate degrees

Subject	Catalog Number	Title	Number of Credits
BMGT	394	Real Estate Principles II	(3)

(Designed to fulfill the requirements for the Maryland licensing examination to sell real estate.)[1] Prerequisite: BMGT 393.[2] A continuation of the study of real estate. Topics include principles, definitions, professional issues and problems, construction and ownership problems, and other major aspects of real estate sales.[3] Students may receive credit for only one of the following courses: BMGT 394 or BMGT 398H.[4]

1. Explanatory material, if needed, may
   - Explain course sequence, purpose, or audience.
   - Identify courses fulfilling general education requirements (listed on p. 8).
   - Identify courses requiring a special fee, equipment, or materials.
2. Prerequisites represent the level of knowledge a student should have acquired before enrolling in this course. A prerequisite is usually stated as a specific numbered course; sometimes the prerequisite calls for a specific course "or equivalent experience."
3. The course description describes the focus and level of the course.
4. Statements beginning "Students may receive credit for only one of the following courses" are designed to avoid course duplication and, therefore, loss of credit. The courses listed are courses that duplicate or significantly overlap content. If a course in the list is not described elsewhere in the catalog, that means that the course has changed designator or number over the years or that the course is not offered at all UMUC locations.

INDEX TO COURSE DESCRIPTIONS

The courses summarized in the following pages are listed alphabetically by discipline or subject, as follows. The discipline designators that precede the course numbers are listed in parentheses.

Students should check the course descriptions carefully to avoid duplicating previous coursework. UMUC will not award credit for courses that repeat material the student has already been credited with learning.

Accounting (ACCT) 106
African American Studies (AASP)* 109
Anthropology (ANTH)* 109
Arabic (ARAB)* 111
Art (ARTT) 112
Art History (ARTH)* 113
Asian Studies (ASTD)* 114
Astronomy (ASTR)* 115
Behavioral and Social Sciences (BEHS) 115
Biology (BIOL) 117
Business and Management (BMGT) 121
Career Planning (CAPL)* 128
Chemistry (CHEM)* 128
Chinese (CHIN)* 128
Communication Studies (COMM) 129
Computer and Information Science (CMIS) 130
Computer Information Technology (CMIT) 134
Computer Science (CMSC) 137
Computer Studies (CMST) 140
Cooperative Education 143
Criminology/Criminal Justice (CCJS) 144
Cybersecurity (CSIA) 149
Economics (ECON) 151
Educational Principles (EDCP)* 152
Education: Teacher Preparation (EDTP)* 153
Emergency Management (EMGT) 153
English (ENGL) 154
Environmental Management (ENMT) 158
Experiential Learning (EXCL) 160
Finance (FINC) 161
Fire Science (FSCN) 164
Geography (GEOG)* 166
Geology (GEOL)* 166
German (GERM)* 166
Gerontology (GERO) 167
Government and Politics (GVPT) 171
History (HIST) 175
Homeland Security (HMLS) 181
Humanities (HUMN) 182
Human Resource Management (HRMN) 183
Information Systems Management (IFSM) 186
Japanese (JAPN)* 188
Journalism (JOUR)* 189
Legal Studies (LGST) 190
Library Skills and Information Literacy (LIBS)* 195
Marketing (MRKT) 196
Mathematics (MATH) 198
Music (MUSC)* 200
Natural Science (NSCI) 201
Philosophy (PHIL)* 202
Psychology (PSYC) 204
Sociology (SOCY) 209
Spanish (SPAN)* 211
Speech Communication (SPCH) 213
Statistics and Probability (STAT)* 214
Theatre (THET)* 216
Women's Studies (WMST)* 216
Writing (WRTG) 216

** Only a limited number of courses are available each session in this discipline.*

INFORMATION ON COURSES

UNDERGRADUATE COURSES

The following entries describe courses offered through University of Maryland University College. Requirements pertain only to degrees conferred at UMUC. To use these courses toward degrees offered by other institutions in the University System of Maryland, students should refer to the catalogs of those institutions for restrictions that may apply. In transferring to UMUC—particularly from a community college—students should be careful not to enroll in courses that duplicate their previous studies.

Accounting

Courses in accounting (designated ACCT) may be applied as appropriate (according to individual program requirements) toward

- a major in accounting, business administration, finance, global business and public policy, human resource management, management studies, or marketing;
- a minor in accounting, business administration, customer service management, human resource management, management studies, marketing, or strategic and entrepreneurial management;
- a certificate in Introductory Accounting, Advanced Accounting, Fraud Investigation, or a number of other business-related areas;
- certain UMUC graduate degree programs, where recognized as equivalent coursework (specific equivalencies are detailed in the UMUC graduate catalog); and
- electives.

A description of the curriculum for the accounting major and minor begins on p. 13. Descriptions of related curricula may be found on the following pages: business administration (p. 19), business supply chain management (p. 22), customer service management (p. 33), finance (p. 41), global business and public policy (p. 47), human resource management (p. 56), management studies (p. 66), marketing (p. 67), and strategic and entrepreneurial management (p. 77).

ACCT 220 Principles of Accounting I (3)

An introduction to the basic theory and techniques of contemporary financial accounting. Topics include the accounting cycle and the preparation of financial statements for single-owner business organizations that operate as service companies or merchandisers. Students may receive credit for only one of the following courses: ACCT 220 or BMGT 220.

ACCT 221 Principles of Accounting II (3)

Prerequisite: ACCT 220. Continuation of the study of financial accounting (emphasizing accounting for liabilities, equity, and corporate forms of ownership), followed by an introduction to managerial accounting. Topics include responsibility accounting, budgets, cost control, and standard costing procedures and variances. Emphasis is on management reporting. Students may receive credit for only one of the following courses: ACCT 221, ACCT 301, BMGT 221, MGMT 301, or MGST 301.

ACCT 301 Accounting for Nonaccounting Managers (3)

(May not be applied toward a major or minor in accounting.) A survey of principles of accounting relevant in making managerial decisions on the basis of accounting information. Topics include internal controls, financial planning and reporting, analysis of financial statements, and elements of managerial cost accounting and budgeting. Students may receive credit for only one of the following courses: ACCT 221, ACCT 301, BMGT 221, MGMT 301, or MGST 301.

ACCT 310 Intermediate Accounting I (3)

(Students should be cautious about enrolling in ACCT 310 or ACCT 311. These are professional courses requiring intensive study and analysis and are not to be undertaken casually. Students who have not taken ACCT 221 within the last two years may have difficulty.) Prerequisites: BMGT 110 (or at least two years of business or management experience) and ACCT 221. A comprehensive analysis of financial accounting topics involved in preparing financial statements and in external reporting. Students may receive credit for only one of the following courses: ACCT 310 or BMGT 310.

ACCT 311 Intermediate Accounting II (3)

(A continuation of ACCT 310. Students should be cautious about enrolling in ACCT 310 or ACCT 311. These are professional courses requiring intensive study and analysis and are not to be undertaken casually. Students who have not taken ACCT 310 within the last two years may have difficulty.) Prerequisite: ACCT 310. A comprehensive analysis of financial accounting topics, including preparation of financial statements and external reports. Students may receive credit for only one of the following courses: ACCT 311 or BMGT 311.

ACCT 320 Fraud Detection and Deterrence (3)

Prerequisite: ACCT 301 or ACCT 220. A study of the principles and standards for examination, identification, detection, and minimization of fraud. Focus is on the fraud triangle (opportunity, incentive, and rationalization). Topics include cash larceny, check tampering, skimming, register disbursement schemes, billing schemes, payroll and expense reimbursement issues, asset misappropriations, corruption, accounting principles and fraud, fraudulent financial statements, whistle blowing, interviewing witnesses, and writing reports.

ACCT 321 Cost Accounting (3)

Prerequisites: BMGT 110 (or at least two years of business or management experience) and ACCT 221. A study of the basic concepts of determining, setting, and analyzing costs for purposes of managerial planning and control. Emphasis is on the role of the accountant in the management of organizations and in the analysis of cost behavior, standard costing, budgeting, responsibility accounting, and costs that are relevant for making decisions. Various techniques are used to study cost and managerial accounting concepts; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 321 or BMGT 321.

ACCT 323 Federal Income Tax I (3)

Prerequisite: ACCT 220. An introduction to federal taxation. Discussion covers different components of taxable income, including property transactions. Examples and problems illustrate tax laws. Computer applications may be used to analyze specific examples. Students may receive credit for only one of the following courses: ACCT 323 or BMGT 323.

ACCT 326 Accounting Information Systems (3)

Prerequisite: ACCT 221. A study of the control aspects of accounting systems. Topics include setting standards; defining and imposing administrative, operational, and security controls; and judging cost-effectiveness of systems. Various techniques are used to study accounting information-systems concepts; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 326, BMGT 320, or BMGT 326.

ACCT 327 Enterprise Management Systems for Accountants (3)

Prerequisites: ACCT 221 and either ACCT 326 or IFSM 300. An overview of integrated financial and business resource information systems, with an emphasis on accounting information system and management reporting. Topics include the impact of information systems on business operations; economic value of financial systems, financial and economic considerations in software selection, organizational culture and its impact on enterprise management systems, and implementation strategies and operational reengineering. An introduction to enterprise-wide project management is provided using current software tools.

ACCT 328 Accounting Software (3)

Prerequisite: ACCT 221. An introduction to accounting software, focusing on evaluation of the benefits, costs, and risks of specific programs. Topics include payroll, inventory, accounts payable, accounts receivable, job cost, and point-of-sale applications. Popular software packages in the areas of tax and financial statement preparation are introduced. Projects and assignments integrate the principles of accounting information systems with the evaluation of accounting software. Students may receive credit for only one of the following courses: ACCT 328 or ACCT 398A.

ACCT 410 Accounting for Government and Not-for-Profit Organizations (3)

Prerequisite: ACCT 310. An introduction to the theory and practice of accounting and auditing as applied to governmental entities and not-for-profit organizations. Various techniques are used to study fund accounting concepts; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 410 or BMGT 410.

ACCT 411 Ethics and Professionalism in Accounting (3)

Prerequisite: ACCT 311. Analysis and discussion of issues relating to ethics and professionalism in accounting. The AICPA Code of Professional Conduct and the reasoning, philosophy, and application of that code are examined.

ACCT 417 Federal Income Tax II (3)

Prerequisites: ACCT 311 and 323. A study of federal income taxation of business entities, including C corporations, S corporations, and partnerships. Discussion covers federal estate, gift, and trust taxation. Various techniques are used to study tax concepts; these may include the use of problem sets, case studies, and computer applications. Students may receive credit for only one of the following courses: ACCT 417 or BMGT 417.

ACCT 422 Auditing Theory and Practice (3)

Prerequisite: ACCT 311. Recommended: ACCT 326. A study of the independent accountant's attest function. Topics include generally accepted auditing standards, tests of controls and substantive tests, and report forms and opinions. Various techniques are used to study auditing concepts and practices; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 422 or BMGT 422.

ACCT 424 Advanced Accounting (3)

Prerequisite: ACCT 311. Recommended: ACCT 326. A study of advanced accounting theory, applied to specialized topics and contemporary problems. Emphasis is on consolidated statements and partnership accounting. Various techniques are used to study accounting theory and practice; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 424 or BMGT 424.

ACCT 425 International Accounting (3)

Prerequisite: ACCT 311. A study of accounting in a multinational context. Topics include evolving international accounting and reporting standards, problems of foreign exchange and taxation, intercompany transfer pricing, and emerging issues in international accounting. Students may receive credit for only one of the following courses: ACCT 425 or ACCT 498A.

ACCT 426 Advanced Cost Accounting (3)

Prerequisite: ACCT 321. A study of advanced cost accounting that emphasizes the managerial aspects of internal systems of recordkeeping, performance management, and control. Various techniques are used to study cost and managerial accounting practices and problems; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 426 or BMGT 426.

ACCT 427 Advanced Auditing (3)

Prerequisite: ACCT 422. An examination and a thorough study of special auditing topics. Topics include statistical sampling, information systems auditing, attestation standards, assurance services, and SEC accounting. Various techniques are used to study auditing theory and practice; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 427 or BMGT 427.

ACCT 428 Advanced Accounting for Information Systems (3)

Prerequisite: ACCT 326. A comprehensive review of accounting information systems (AIS). Topics include AIS core requirements (transactional processing) and an evaluation process for migrating to a new system. Midrange accounting systems are reviewed. Focus is on advanced concepts such as control frameworks and AIS audit considerations. Assignments require using applications to perform advanced accounting functions and include a major project designing an accounting information system using a commercial database software package. Course materials may be helpful in preparing for various certifications, including CMA, CPA, IIA, and CISA.

ACCT 433 Audit and Control of Information Technology (3)

Prerequisite: ACCT 422 and either ACCT 326 or IFSM 300. Analysis and discussion of issues related to audit and control of information technology. Focus is on the perspectives of public, internal, and private accountants. Discussion covers the principles and standards for proactive and reactive auditing, as well as management and control of information technology.

ACCT 436 Internal Auditing (3)

Prerequisite: ACCT 311. An introduction to internal auditing, its rapid growth, and its role in the modern corporation. Topics include internal auditing standards, scope, responsibilities, ethics, controls, techniques, and reporting practices. Material included in the Certified Internal Auditor examination is considered. Various techniques are used to study internal auditing theory and practice; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 436, ACCT 498E, or BMGT 498E.

ACCT 438 Fraud and Forensic Accounting (3)

Prerequisite: ACCT 311. Analysis and discussion of issues related to fraud and forensic accounting. Focus is on the perspectives of public, internal, and private accountants. Discussion covers the principles and standards for proactive and reactive investigation, as well as detection and control of fraud.

ACCT 440 Forensic and Investigative Accounting (3)

Prerequisite: ACCT 320 or ACCT 438. Analysis and discussion of issues relating to forensic and investigative accounting, based on a foundation of accounting knowledge and skills. Forensic and investigative methods are demonstrated. Cases, problems, and examples are used to examine practical concepts in the areas of litigation support and criminal justice, including investigative auditing techniques, criminology, and courtroom procedures.

ACCT 486A Internship in Accounting Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in accounting. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to accounting and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ACCT 486B Internship in Accounting Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in accounting. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to accounting and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ACCT 495 Contemporary Issues in Accounting Practice (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: ACCT 311, 321, and 422 and BMGT 364. A study of accounting that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in accounting, business transactions, and financing are considered. Web accounting and business technology, accounting theory, and management techniques are used to research and analyze developing issues in the workplace. Topics include e-commerce, financial derivatives, balanced scorecards, and the changing nature of financial reporting and risk management. Students may receive credit for only one of the following courses: ACCT 495 or ACCT 498C.

African American Studies

Courses in African American studies (designated AASP) may be applied as appropriate (according to individual program requirements) toward

- a minor in African American studies;
- the general education requirement in behavioral and social sciences; and
- electives.

UMUC offers only a limited number of courses each session in this discipline.

A description of the curriculum for the African American studies minor begins on p. 15.

AASP 201 Introduction to African American Studies (3)

(Fulfills the general education requirement in behavioral and social sciences.) An interdisciplinary study of significant aspects of African American history and culture, emphasizing the development of African American communities from the Middle Passage to the present. Topics include definitions of African American identity, influences and achievements within American culture, and issues confronting African Americans. Students may receive credit for only one of the following courses: AASP 100 or AASP 201.

Anthropology

Courses in anthropology (designated ANTH) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences;
- a major in social science;
- a major or minor in Asian studies;
- a certificate in Diversity Awareness; and
- electives.

Descriptions of related curricula may be found on the following pages: Asian studies (p. 16) and social science (p. 74).

ANTH 101 Introduction to Anthropology: Archaeology and Physical Anthropology (3)

A survey of general patterns in the development of human culture, addressing the biological and morphological aspects of humans viewed in their cultural setting. Students who complete both ANTH 101 and 102 may not receive credit for ANTH 340, BEHS 340, or BEHS 341.

ANTH 102 Introduction to Anthropology: Cultural Anthropology (3)

A survey of social and cultural principles inherent in ethnographic descriptions. Students who complete both ANTH 101 and 102 may not receive credit for ANTH 340, BEHS 340, or BEHS 341.

ANTH 298 Special Topics in Anthropology (1–3)

A presentation of anthropological perspectives on selected topics of broad general interest. May be repeated to a maximum of 6 credits when topics differ.

ANTH 343 Physical Anthropology and Archaeology (3)

An interdisciplinary, intermediate-level exploration of contemporary and applied issues in physical anthropology and archaeology. Discussion covers evolution, human biological variation, primate studies, and archaeological frameworks and challenges. Focus is on theory and its application in dealing with concerns in our global society. Students may receive credit for only one of the following courses: ANTH 340, ANTH 343, or BEHS 340.

ANTH 344 Cultural Anthropology and Linguistics (3)

An interdisciplinary, intermediate-level, exploration of contemporary issues in cultural anthropology and linguistics. Discussion covers variation in human social organization, ethnographic field methods, world views, and relationships amongst cultures, as well as cultural dimensions of language. Focus is on theory and its application in dealing with concerns in our global society. Students may receive credit for only one of the following courses: ANTH 340, ANTH 344, or BEHS 340.

ANTH 350 Medical Anthropology (3)

Recommended: ANTH 102 or ANTH 344. A global survey of health, illness, and healing. Discussion covers the interactions between health, culture, and disease, as well as Western and non-Western biomedical traditions and biocultural approaches to health. Emphasis is on application of anthropological research methods (e.g., observational, qualitative, and ethnographic approaches) to the study of health and disease.

ANTH 351 Introduction to Forensic Anthropology (3)

Recommended: BIOL 160 or BIOL 201. An introduction to the study of forensic anthropology, designed to provide a basic understanding of the analysis of human skeletal remains and how forensic anthropologists work as part of the medical forensic team. Topics include the investigative methods used in forensic anthropology; the standards for forensic anthropological investigations; and methods for determining sex, ancestry, time since death, and personal identity of human remains. Specific examples of forensic anthropology cases are reviewed.

ANTH 398 Intermediate Special Topics in Anthropology (1–3)

A presentation of anthropological perspectives on selected topics of broad general interest. May be repeated to a maximum of 6 credits when topics differ.

ANTH 398C Parenting in Monkeys (1)

An exploration of parental care systems in monkeys, from evolutionary and socioecological perspectives. Topics include maternal, paternal, and sibling care; the costs and benefits of parental care; parental investment; allomothering (nonmaternal infant care); and parent-offspring conflict.

ANTH 398F Human Skeletal Remains (1)

A fundamental overview of investigative methods used by anthropologists and archaeologists in the study of human skeletal remains. Discussion covers the application of forensic anthropology and archaeology to crime scene investigations, mass disasters, human rights work, and historical reconstructions.

ANTH 398K The Great Apes (1)

An introduction to the behavior, ecology, and life history of great apes (bonobos, chimpanzees, gorillas, and orangutans), emphasizing conservation of great ape populations in the wild. Great ape taxonomy is reviewed. Topics include great ape behaviors and adaptations (such as hunting, tool use, self-medication) and whether great apes exhibit culture and language.

ANTH 398S Peoples and Cultures of the World: South Asia (1)

Recommended: ANTH 102 or ANTH 344. An anthropological overview of peoples and cultures of South Asia, comprising the modern nations of India, Pakistan, Bangladesh, Nepal, Sri Lanka, the Maldives, and Bhutan. A survey of the geography, archaeology, history, and languages of South Asia is provided. Discussion covers social and religious traditions, with particular emphasis on the caste system of social hierarchy and its impact on society from an anthropological point of view.

ANTH 486A Internship in Anthropology Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in anthropology. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to anthropology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ANTH 486B Internship in Anthropology Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in anthropology. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to anthropology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Arabic

Courses in Arabic (designated ARAB) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities; and
- electives.

UMUC offers a limited number of foreign language courses each session.

A description of the curriculum for the humanities major and minor begins on p. 55.

ARAB 111 Elementary Arabic I (3)

(Not open to native speakers of Arabic; assumes no prior knowledge of Arabic.) An elementary study of modern standard Arabic. Emphasis is on oral communication skills as a foundation for building balanced proficiency in the four communication skills of listening, speaking, reading, and writing. Topics include basic structures, vocabulary, pronunciation, and writing, as well as elements of culture, history, and geography. Authentic text from native speakers is used as much as possible.

ARAB 112 Elementary Arabic II (3)

(Not open to native speakers of Arabic.) Prerequisite: ARAB 111. Continued basic study of modern standard Arabic, emphasizing oral communication as a foundation for building balanced proficiency in the four communication skills of listening, speaking, reading, and writing. Topics include basic structures, vocabulary, pronunciation, and writing, as well as further elements of culture, history, and geography. Oral and written authentic text from native speakers is used as much as possible.

ARAB 114 Elementary Arabic III (3)

(Not open to native speakers of Arabic.) Prerequisite: ARAB 112. Further development of skills in listening, speaking, reading, and writing in Arabic. Arabic culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and composition. Focus is on acquiring the skills necessary to communicate with native Arabic speakers orally and in writing at an advanced elementary level. Oral and written authentic text is used as much as possible.

ARAB 115 Elementary Arabic IV (3)

(Not open to native speakers of Arabic.) Prerequisite: ARAB 114. Improvement of skills in listening, speaking, reading, and writing in Arabic. Arabic culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and composition. Focus is on acquiring the skills necessary to communicate with native Arabic speakers orally and in writing at a basic intermediate level. Oral and written authentic text is used as much as possible.

Art

Courses in art (designated ARTT) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a minor in art;
- a major in graphic communication;
- a major or minor in humanities;
- a certificate in Computer Graphics and Design, Desktop Publishing, or Web Design; and
- electives.

A description of the curriculum for the art minor begins on p. 15. Descriptions of related curricula may be found on the following pages: graphic communication (p. 49) and humanities (p. 55).

ARTT 110 Elements of Drawing I (3)

An introduction to various media and related techniques. Problems for study are based on the figure, still life, and nature.

ARTT 205 Art Appreciation (3)

An introduction to a variety of two- and three-dimensional art forms, with particular emphasis on two-dimensional arts. Examples from different media—including illustration; painting with oils, acrylics, and watercolors; and sculpture—are used to examine form, light, color, perspective, and other elements of art.

ARTT 210 Elements of Drawing II (3)

Prerequisite: ARTT 110. Drawing taught with an emphasis on understanding organic form as related to study of the human figure and pictorial composition. Students may receive credit for only one of the following courses: ARTS 210 or ARTT 210.

ARTT 250 Elements of Commercial Design (3)

A study of essential design concepts focusing on the creative skills needed to better solve internal corporate and external advertising/marketing problems in visual media. Theoretical and practical applications include corporate/institutional identity programs, collateral corporate and marketing materials, and advertising campaigns. Discussion also covers the primary relationship between word and image communications. Emphasis is on creative problem solving in media communications. An exploration of symbolism and its relationship to image addresses visual structure, continuity, and coherence. Psychological and sociocultural questions are also examined as they relate to ethical standards and practices.

ARTT 320 Elements of Painting (3)

Prerequisite: ARTT 110. Practice in the basic tools and vocabulary of painting. Oil and/or water-based paints are used.

ARTT 354 Elements of Computer Graphics (3)

Recommended: One lower-level ARTT course (or equivalent experience in graphic design) and experience in art fundamentals, Microsoft Office applications, and Windows. An introduction to computer graphics programs and basic concepts in electronic design. Focus is on creating artwork in various formats, including print and the Web. Projects require six hours of computer work per week, some of which must be completed independently.

ARTT 418 Drawing (3)

Prerequisite: ARTT 210. Creation of original compositions based on the figure and nature, supplemented by problems of personal and expressive drawing. May be repeated to a maximum of 12 credits.

ARTT 428 Painting (3)

Prerequisite: ARTT 320. Creation of original compositions based on the figure, nature, and still life, as well as expressive painting. Emphasis is on the development of personal directions. May be repeated to a maximum of 12 credits.

ARTT 458 Graphic Design and Illustration (3)

An introduction to the basic elements of design. Projects focus on problems central to the commercial arts. Basic skills with a variety of media and techniques are developed.

ARTT 470 Watercolor (3)

An opportunity for further development of painting in watercolors at beginning or advanced levels. May be repeated to a maximum of 6 credits.

ARTT 479 Advanced Computer Graphics (3)

Prerequisite: ARTT 354. A study of advanced techniques in and the theory behind computer imaging, graphics, illustration, and mixed media. Projects require six hours of computer work per week, some of which must be completed independently.

ARTT 486A Internship in Art Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in art. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to art and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ARTT 486B Internship in Art Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in art. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to art and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ARTT 495 Graphic Communication Portfolio (3)

(Intended as a final, capstone course to be taken in a students last 15 credits. Fulfills the general education requirement in the arts and humanities.) Development of a portfolio that demonstrates competencies in graphic communication.

Art History

Courses in art history (designated ARTH) may be applied as appropriate (according to individual program requirements) toward

- the general education requirements in the arts and humanities;
- a minor in art history;
- a major or minor in humanities; and
- electives.

UMUC offers a limited number of ARTH courses each session. To complete a minor, students may need to take courses at other institutions in the University System of Maryland or extend the time spent fulfilling the degree requirements. Students are advised to consult an advisor before selecting this discipline.

A description of the curriculum for the art history minor begins on p. 15. A description of the curriculum for a major or minor in humanities begins on p. 55.

ARTH 204 Film and American Culture Studies (3)

(Formerly HUMN 204.) Exploration of the American film from a historical perspective, illustrating the motion picture's role as an institutional phenomenon, as a form of communication, and as a source of cross-cultural study. Students may receive credit for only one of the following courses: AMST 204, HUMN 204, or ARTH 204.

ARTH 334 Understanding Movies (3)

(Formerly HUMN 334.) An analysis of one of the most important means of artistic expression of the 20th century. The goal is to acquire a deeper understanding of the aesthetic qualities of film by considering the stylistic elements of film as it has evolved throughout the century and weighing the special relationship between cinema and literature. Students may receive credit for only one of the following courses: ARTH 334, HUMN 334, or HUMN 498D.

ARTH 370 History of World Art I (3)

A survey of the development of world visual art in its various forms, examining and comparing the expression of cultural and aesthetic values in different parts of the world from prehistory to 1400, when the European Age of Exploration began and world cultures came into contact.

ARTH 371 History of World Art II (3)

A survey of the development of world visual art in its various forms, examining and comparing the expression of cultural and aesthetic values in different parts of the world from 1400, when the European Age of Exploration began, to modern day. The effects of contact among world cultures on both the form and content of artistic expression is examined.

ARTH 380 Masterpieces of Painting (3)

Analysis of selected masterworks of painting, intended to reveal the creative process, the personality of the artist, and the cultural context. Students may receive credit for only one of the following courses: ARTH 320 or ARTH 380.

ARTH 486A Internship in Art History Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in art history. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to art history and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ARTH 486B Internship in Art History Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in art history. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to art history and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Asian Studies

Courses in Asian studies (designated ASTD) may be applied as appropriate (according to individual program requirements) toward

- the general education requirements in the arts and humanities or the behavioral and social sciences (based on course content);
- a major or minor in Asian studies or humanities; and
- electives.

UMUC offers a limited number of courses each session in this discipline. To complete a major or minor, students may need to take courses at other institutions in the University System of Maryland or extend the time spent fulfilling the degree requirements. Students are advised to consult an advisor before selecting this discipline.

A description of the curriculum for the Asian studies major and minor begins on p. 16. A description of the curriculum for the humanities major and minor begins on p. 55.

ASTD 150 Introduction to Asian Studies I (3)

(Fulfills the general education requirements in the arts and humanities or the social sciences.) An interdisciplinary examination of the classical Asian tradition, encompassing a general survey of the region.

ASTD 160 Introduction to Asian Studies II (3)

(Fulfills the general education requirements in the arts and humanities or the social sciences.) An interdisciplinary examination of the modern period in Asian history, beginning approximately with the 17th century.

ASTD 198 Special Topics in Asian Studies (3)

An investigation of a special topic, problem, or issue of particular relevance to countries or peoples of the Pacific Rim or Indian Ocean. Typical investigations include historical or contemporary subjects focusing on cultural, economic, military, or political issues.

ASTD 309 Business in Asia (3)

(Fulfills the general education requirement in the social sciences.) An integrative study of business conditions and practices in the Asian/Pacific region from the perspective of contemporary history, economics, government, and cross-cultural interests.

ASTD 380 American Relations with China and Japan: 1740 to Present (3)

(Fulfills the general education requirement in the social sciences.) A study of American political, economic, and cultural relations with China and Japan from the American colonial era to modern times. Topics include diplomacy and power politics; Christian missions; immigration and exclusion; overseas education; art and literature; and trade, investment, and technology.

ASTD 398 Advanced Special Topics in Asian Studies (3)

An investigation of a special topic, problem, or issue of particular relevance to countries or peoples of the Pacific Rim or Indian Ocean. Typical investigations include historical or contemporary subjects focusing on cultural, economic, military, or political issues. Assignments include advanced reading and research.

ASTD 438 Japanese Literature in Translation (3)

(Formerly JAPN 418. Conducted in English. Fulfills the general education requirement in the arts and humanities.) A study of representative works of Japanese literature in English translation. May be repeated for a total of six credits when course content differs.

ASTD 485 Great Issues in Asian Studies (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits. Fulfills the general education requirement in the arts and humanities.) Prerequisites: ASTD 150 and 160. A study of Asian issues that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in Asian studies are considered. Focus is on the broad issue of modernization in Asian nations.

Astronomy

Courses in astronomy (designated ASTR) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the biological and physical sciences;
- a minor in natural science; and
- electives.

UMUC offers only a limited number of courses each session in this discipline.

A description of the curriculum for the natural science minor begins on p. 70.

ASTR 100 Introduction to Astronomy (3)

(Not open to students who have taken or are taking any astronomy course numbered 250 or higher. For students not majoring or minoring in a science.) Prerequisite: MATH 012 or higher. A discussion of the major areas of astronomy. Topics include the solar system, stars and stellar evolution, and galaxies. Current topics in astronomy are also discussed. Students may receive credit for only one of the following courses: ASTR 100, ASTR 101, ASTR 120, or GNSC 125.

ASTR 399 Independent Study in Astronomy (1–6)

Prerequisite: 6 credits in ASTR courses and agreement of faculty member to act as supervisor. Directed independent study of topics of special interest not covered by regularly scheduled courses in astronomy. May be repeated to a maximum of 6 credits when topics differ.

Behavioral and Social Sciences

Courses in behavioral and social sciences (designated BEHS) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences;
- a major in social science or environmental management;
- a minor in environmental management or women's studies;
- a certificate in Applied Behavioral and Social Sciences or Diversity Awareness; and
- electives.

A description of the curriculum for the social science major begins on p. 74. A description of the curriculum for the women's studies minor may be found on p. 77.

BEHS 198A Sociology of Astrology (1)

Recommended: Concurrent or previous enrollment in ASTR 100. An exploration of social and psychological reasons for believing in things that cannot logically be true. Focus is on the pseudo-science of astrology, including its historical origins, its mechanics, and its persistence in modern culture.

BEHS 210 Introduction to Social and Behavioral Science (3)

An interdisciplinary introduction to the study of society that addresses what it is to be a social scientist from a variety of social science perspectives. Empirical and theoretical contributions of the different social science disciplines are used to better understand the nature of society. Survey covers culture, geography, the individual, family, education, stratification in society, government and politics, and economics. Topics also include the scientific method and research methods in the social science disciplines and the current relationships among the different social science disciplines. A historical overview of the development of the social sciences is provided, and an analysis of social phenomena that integrates insights from the social sciences is presented. Students may receive credit for only one of the following courses: BEHS 201 or BEHS 210.

BEHS 220 Diversity Awareness (3)

An interdisciplinary study of diversity issues designed to encourage critical thinking about their impact in today's world. Emphasis is on consciousness of diversity and awareness that each individual lives within a diverse environment. Topics include issues related to age, disability, race, creed, gender, sexual orientation, national origin, and socioeconomic status, as well as current issues in diversity studies.

BEHS 320 Disability Studies (3)

An interdisciplinary study of disability issues that focuses on understanding and evaluating traditional and current interpretations of the meaning of disability. Topics include the construction of images of people with disabilities by people without disabilities; attitudes and actions toward those with disabilities by those without disabilities; approaches taken by major social institutions (e.g., law, education, religion, the arts) toward disability; distinctions between a sociocultural approach to disability and the medical model; and current issues in disability studies.

BEHS 343 Parenting Today (3)

An overview of critical issues of parenthood in the United States today. Topics include characteristics of effective parenting styles and capable parents, the role of nontraditional parenting techniques, and the social forces that cause changes in parent/child relationships and give rise to varying styles of parenting as developed in the United States. Some cross-cultural comparisons are included.

BEHS 364 Alcohol in U.S. Society (3)

An interdisciplinary examination of the use and abuse of alcoholic beverages from the perspectives of psychology, physiology, sociology, medicine, and public health. The effects of alcohol on all age groups throughout the lifespan are explored in relation to gender, families, race, the workplace, and public safety. Analysis covers current research and trends in the treatment of alcoholism, including prevention, assessment, and intervention, as well as legal aspects.

BEHS 365 Individuals, Society and Environmental Sustainability (3)

(Formerly BEHS 398O.) An interdisciplinary study of the role of individual human behavior and social institutions in environmental sustainability, stewardship, and conservation. Ways in which our own conduct contributes to larger global patterns are examined. Emphasis is on consumer behavior and the concept of reduce, reuse, and recycle. Discussion covers the identification of barriers to participation in sustainability and mechanisms for the elimination of those barriers. Students may receive credit for only one of the following courses: BEHS 365 or BEHS 398O.

BEHS 453 Domestic Violence (3)

An examination of the complex phenomenon of domestic violence from a systems perspective that integrates individual, social, political, cultural/ethnic, economic, legal, and medical viewpoints from the past and present. Topics include the physical, emotional, and sexual abuse of children, partners, and the elderly. Discussion also covers response systems and mechanisms to prevent and treat violence. Students may receive credit for only one of the following courses: BEHS 453 or BEHS 454.

BEHS 486A Internship in Behavioral Science Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in behavioral and social sciences. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to behavioral and social sciences and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

BEHS 486B Internship in Behavioral Science Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in behavioral and social sciences. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to behavioral and social sciences and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Biology

Courses in biology (designated BIOL) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the biological and physical sciences;
- a major in biotechnology, homeland security, investigative forensics, or laboratory management;
- a minor in biology, forensics, microbiology, or natural science; and
- electives (including related requirements for the environmental management major).

A description of the curriculum for the biology minor begins on p. 17. Descriptions of related curricula may be found on the following pages: biotechnology (p. 18), environmental management (p. 39), forensics (p. 45), homeland security (p. 53), investigative forensics (p. 61), laboratory management (p. 63), microbiology (p. 70), and natural science (p. 70).

BIOL 101 Concepts of Biology (3)

(For students not majoring in a science.) An introduction to living things in light of knowledge of physical, chemical, and biological principles. The organization, processes, interdependence, and variety of living organisms are explored. Emphasis is on understanding the impact of biological knowledge on human societies. Current events that involve biological systems are considered. Students may receive credit for only one of the following courses: BIOL 101, BIOL 103, BIOL 105, or BSCI 105.

BIOL 102 Laboratory in Biology (1)

(For students not majoring in a science. Fulfills the laboratory science requirement only with previous or concurrent credit for BIOL 101.) Prerequisite or corequisite: BIOL 101. A laboratory study of the concepts underlying the structure and functioning of living organisms. Laboratory exercises emphasize the scientific method and explore topics such as the chemical foundations of living organisms, pH, cell structure and function, metabolism, DNA structure and function, mechanisms and patterns of inheritance, evolution, classification, and population biology and ecosystems. Students may receive credit for only one of the following courses: BIOL 102, BIOL 103, BIOL 105, or BSCI 105.

BIOL 103 Introduction to Biology (4)

(Not open to students who have completed BIOL 101 or BIOL 102. For students not majoring in a science. Fulfills the laboratory science requirement.) An introduction to the concepts underlying the structure and function of living organisms. The organization, chemical foundations, metabolism, genetics, evolution, ecosystems, and interdependence of living organisms are explored. Laboratory activities emphasize the scientific method in exploring these topics. Students may receive credit for only one of the following courses: BIOL 101, BIOL 102, BIOL 103, BIOL 105, or BSCI 105.

BIOL 160 Human Biology (3)

(Science background not required.) A general introduction to human structure, functions, genetics, evolution, and ecology. The human organism is examined from the basic cellular level and genetics, through organ systems, to interaction with the outside world. Pertinent health topics are also discussed. Students may receive credit for only one of the following courses: BIOL 160 or GNSC 160.

BIOL 181 Life in the Oceans (3)

A study of the major groups of plants and animals in various marine environments, as well as their interactions with each other and the nonliving components of the ocean. The impact of human activity on life in the ocean and the potential uses and misuses of the ocean are discussed. Students may receive credit for only one of the following courses: BIOL 181 or ZOOL 181.

BIOL 211 Environmental Science (3)

A survey of ecological principles as they apply to the interrelated dilemmas of sustainability. Topics include overpopulation, pollution, over-consumption of natural resources, and the ethics of land use. Students may receive credit for only one of the following courses: BIOL 211, BOTN 211, or PBIO 235.

BIOL 215 Population Biology and General Ecology (3)

A general introduction to population and community biology. Topics include evolution, population genetics, population growth and steady states, age structure of populations, multispecies dependencies, and ecosystem energetics. Illustrations are drawn both from both natural and human populations. Students may receive credit for only one of the following courses: BIOL 215 or ZOOL 270.

BIOL 220 Human Genetics (3)

(For students not majoring in a science.) An introduction to genetics, focusing on the human organism. Topics include transmission and biochemical genetics, mutation, the behavior of genes in populations, and genetic engineering. The roles of recent discoveries in the treatment of genetic diseases, cancer, and organ transplantation are examined. Students may receive credit for only one of the following courses: BIOL 220, BIOL 346, ZOOL 146, or ZOOL 346.

BIOL 222 Principles of Genetics (3)

Prerequisite: BIOL 101, BIOL 103, or BIOL 105. Recommended: CHEM 103. A study of the principles and mechanisms of heredity and gene expression. Plant, animal, and microbial organisms are considered. Students may receive credit for only one of the following courses: BIOL 220, BIOL 222, or BSCI 222.

BIOL 226 Evolution (3)

Prerequisite: BIOL 101, BIOL 103, BIOL 105, or BIOL 161. An introduction to biological evolution, its principles, and their application to understanding the history of life on Earth. Discussion covers the history and evidence for modern evolutionary concepts and mechanisms, the origin of life, the molecular mechanisms of evolution, the evolution of plants, the evolution of animals (including man), the relationship between ontogeny and phylogeny, and the reciprocal relationships of evolution to the environment (including human culture).

BIOL 301 Human Health and Disease (3)

(For students majoring in both science and nonscience disciplines.) A survey of the mechanisms of disease and their expression in major organ systems of the human body. Topics include infections, cancer, heart disease, lung disease, diabetes, stroke, malnutrition, poisoning by environmental toxins, stress, inflammation, disorders of the immune system, and aging. Emphasis is on prevention of disease through control of risk factors and early detection. Students may receive credit for only one of the following courses: BIOL 301 or BIOL 398H.

BIOL 302 Bacteria, Viruses, and Health (3)

(For students majoring in both science and nonscience disciplines.) An introductory study of the basic structure, genetic and regulatory systems, and life cycles of bacteria and viruses. Student may receive credit for only one of the following courses: BIOL 230, BIOL 302, BIOL 331, BIOL 398G, BSCI 223, MICB 200, or MICB 388A.

BIOL 304 The Biology of Cancer (3)

(For students majoring in both science and nonscience disciplines.) An overview of the biological basis of cancer. The development and progression of cancer are considered at the level of cell structure and function. The roles of genes and proteins are also examined. Students may receive credit for only one of the following courses: BIOL 304 or GNSC 398C.

BIOL 305 The Biology of AIDS (3)

(For students majoring in both science and nonscience disciplines.) An overview of Acquired Immune Deficiency Syndrome (AIDS) from a biological perspective. The development and treatment of AIDS and human immunodeficiency virus (HIV) infection are considered with respect to cells, viruses, genes, and proteins.

BIOL 307 The Biology of Aging (3)

(For students majoring in both science and nonscience disciplines.) An overview of the biological basis of aging. Topics include typical changes that occur in cells, molecules, metabolism, and structure during the aging process. The development and progression of several diseases associated with aging (including cancer, neurodegenerative diseases such as Alzeheimer's and Parkinson's disease, osteoporosis, and loss of visual acuity and memory) are discussed with respect to the role of genes, proteins, and environmental influences. Students may receive credit for only one of the following courses: BIOL 307 or BIOL 398V.

BIOL 320 Forensic Biology (3)

An introduction to the basic principles of biology as applied to the field of forensic science. Topics include the biological features and characteristics of various types of evidentiary materials, as well as the basic principles of chemistry, cell biology, microbiology, and genetics that underlie various types of forensic analysis.

BIOL 331 Concepts in Microbiology (4)

(Fulfills the laboratory science requirement.) Prerequisite: BIOL 102, BIOL 103, or BIOL 105. An examination of the morphology, genetics, ecology, physiology, immunology, and pathogenesis of microorganisms. The use of microorganisms in the fields of medicine, food design and safety, and biotechnology are also explored. Students may receive credit for only one of the following courses: BIOL 230, BIOL 302, BIOL 331, BIOL 398G, BSCI 223, MICB 200, or MICB 388A.

BIOL 334 Vaccines and Society (3)

(For students majoring in both science and nonscience disciplines.) An overview of the development and testing of vaccines, the prevention of disease by vaccines, and the role of vaccines in society. The scientific, clinical, and practical aspects of vaccines and vaccination are considered with regard to the immune system. Vaccine development is considered from a historical perspective, as well as in the context of current vaccine research. Students may receive credit for only one of the following courses: BIOL 334, BIOL 335, BIOL 398R, GNSC 398H, or MICB 388D.

BIOL 350 Molecular and Cellular Biology (3)

(For students majoring or minoring in a science.) Prerequisite: BIOL 101, BIOL 103, or BIOL 105. An introduction to the basic structure and function of cells, with an emphasis on eukaryotic cell biology. Topics include cell-cycle growth and death; protein structure and metabolism; gene replication, repair, recombination, and expression; RNA processing and metabolism; and molecular transport, traffic, and signaling. The principles and uses of recombinant DNA and genetic engineering technology are also discussed. Students may receive credit for only one of the following courses: BIOL 350 or BIOL 398S.

BIOL 356 Molecular Biology Laboratory (4)

(For students majoring or minoring in a science. Fulfills the laboratory science requirement.) Prerequisite: BIOL 222, BIOL 230, or BIOL 350. A laboratory study of current molecular biology and genetic engineering procedures. Topics include the isolation of DNA, RNA, and proteins; electrophoresis; the use of restriction enzymes; cloning procedures; polymerase chain reaction (PCR) analysis; and gene expression analysis. Students may receive credit for only one of the following courses: BIOL 355 or BIOL 356.

BIOL 357 Bioinformatics (3)

Recommended: Some background in either computer science or introductory biology. An introduction to the use of computers in the analysis of DNA and protein sequences and the significance of these analyses. Topics include genome analysis, evolutionary relationships, structure-function identification, pattern recognition, database searches and structures, and algorithms. Students may receive credit for only one of the following courses: BIOL 357 or BIOL 398U.

BIOL 360 Developmental Biology (3)

Prerequisite: BIOL 101, BIOL 103, or BIOL 105. An overview of animal development, with an emphasis on the underlying cellular and molecular mechanisms that guide it. Topics include fertilization, embryonic cleavage, gastrulations, early vertebrate morphogenesis, neural development, fate determination by cytoplasm specification and cell-cell interactions, transcriptional and post-transcriptional gene regulation mechanisms that mediate developmental processes, homeobox gene families, protein gradients, pattern formation, and sex determination and gametogenesis. Students may receive credit for only one of the following courses: BIOL 360 or BIOL 398T.

BIOL 362 Neurobiology (3)

(For students majoring or minoring in a natural science or psychology.) Prerequisite: BIOL 101, BIOL 103, or BIOL 105. An in-depth discussion of the biology and development of the nervous system. Topics include neuronal structure and function, communication at the synapse, membrane receptors and intra- and intercellular signaling systems, gene regulation, gross organization of the brain and spinal cord, the processing of sensory information, the programming of motor responses, and higher functions such as learning, memory, cognition, and speech.

BIOL 398A Human Evolution and Ecology (1)

An examination of the varied biological evidence for the theory of evolution, including fossil records, DNA analysis, and geological and biogeographical changes. Discussion covers the struggle for existence, the survival of the fittest, and adaptation to the environment. Topics include Darwinian medicine, the evolution of disease, and the role of evolution in the human ecosystem.

BIOL 398J The Role of Nutrition in Cancer and Heart Disease (1)

A study of the relationship between diet and the development of cancer and heart disease at the level of molecules, cells, and genes. Topics include the scientific and epidemiological evidence supporting the roles of various foods, nutrients, antioxidants, fiber, fats, and genetics in the progression or prevention of these two major causes of mortality. Students may receive credit for only one of the following courses: BIOL 398J or GNSC 398F.

BIOL 398K Stem Cells in Society (1)

An introduction to the biological principles that govern the origin, development, and utility of stem cells. Topics include the features of stem cells; their various sources; and their potential uses in medicine, agriculture, and industry. The risks and legal and ethical issues associated with stem cell technologies are also examined.

BIOL 398P Pesticides and the Environment (1)

A survey of the history of pesticides, their importance in America's environmental "awakening," and their significance as contaminants. The evolution of pesticide usage, from overdependence to attempts at reduction, is also covered.

BIOL 400 Life Science Seminar (3)

(For students majoring or minoring in a science.) Prerequisite: BIOL 101, BIOL 103, BIOL 105, or BSCI 105. An examination of current topics in the life sciences through seminars and discussions based on representative publications in the recent and primary literature.

BIOL 422 Epidemiology of Emerging Infections (3)

Prerequisite: BIOL 230, BIOL 302, or BIOL 398G. An investigation of factors contributing to the emergence of new infectious diseases and the resurgence of diseases once thought to have been controlled. Disease symptoms, patterns of spread, and possible control measures are examined for new infectious diseases (such as Lyme disease and AIDS and those caused by E. coli 0157, the Ebola virus, hantaviruses, and cryptosporidia). Resurgent diseases (such as small pox, anthrax, botolism, bubonic plague, dengue, influenza, tuberculosis, cholera, and malaria) and those caused by flesh-eating bacteria are also discussed. Students may receive credit for only one of the following courses: BIOL 422 or MICB 388E.

BIOL 434 General Virology (3)

(Students seeking to satisfy the laboratory science requirement should take BIOL 435). Prerequisite: BIOL 230. A broad investigation of viruses. Topics include the physical and chemical nature of viruses, methods of cultivation and assay, modes of replication, characteristics of the major viral groups, and the types of viral diseases. Emphasis is on viral genetics and the oncogenic viruses. Students may receive credit for only one of the following courses: BIOL 434, BIOL 435, MICB 460, or MICB 461.

BIOL 435 General Virology with Laboratory (4)

(Fulfills the laboratory science requirement.) Prerequisite: BIOL 230 or BIOL 302. Comprehensive survey of viruses and techniques for their investigation. Topics include the physical and chemical nature of viruses, methods of cultivation and assay, modes of replication, characteristics of the major viral groups, and the types of viral diseases. Emphasis is on viral genetics and the oncogenic viruses. Students may receive credit for only one of the following courses: BIOL 434, BIOL 435, MICB 460, or MICB 461.

BIOL 438 Immunology (4)

(Fulfills the laboratory science requirement.) Prerequisite: BIOL 230 or BIOL 302. An exposition of the principles of immunity and hypersensitivity. The fundamental techniques of immunology are presented. Students may receive credit for only one of the following courses: BIOL 438 or MICB 450.

BIOL 486A Internship in Life Science Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in the life sciences. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to biology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

BIOL 486B Internship in Life Science Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in the life sciences. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to biology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Business and Management

Courses in business and management (designated BMGT) may be applied as appropriate (according to individual program requirements) toward

- a major in business administration, emergency management, finance, global business and public policy, homeland security, human resource management, laboratory management, management studies, or marketing;
- a minor in business administration, business law and public policy, business supply chain management, customer service management, finance, human resource management, international business management, management studies, marketing, or strategic and entrepreneurial management;
- a certificate in various business-related areas;
- certain UMUC graduate degree programs, where recognized as equivalent coursework; and
- electives.

A description of the curriculum for the business administration major and minor begins on p. 19. Descriptions of related curricula may be found on the following pages: business law and public policy (p. 21), business supply chain management (p. 22), customer service management (p. 33), finance (p. 41), global business and public policy (p. 47), homeland security (p. 53), human resource management (p. 56), international business management (p. 60), laboratory management (p. 63), management studies (p. 66), marketing (p. 67), and strategic and entrepreneurial management (p. 77).

BMGT 110 Introduction to Business and Management (3)

(For students with little or no business background. Recommended preparation for many other BMGT courses.) A survey of the field of business management. Topics include human relations, technology in business, ethical behavior, the environment, global and economic forces, organization, quality, products and services, functional management, and current issues and developments.

BMGT 304 Managing E-Commerce in Organizations (3)

An introduction to the history and design of Internet-based business models (i.e., e-commerce) in organizations. Topics include e-commerce management principles, management of different types of organizations, integration of human and information technology resources, training and development, and use of information systems. Investigation also covers knowledge management strategies; the management of business units to implement technological marketing (or e-marketing); the creation of new roles and responsibilities for managers in the e-commerce environment of organizations; relationships among the Internet, government, and society; and future prospects of e-commerce. Students may receive credit for only one of the following courses: BMGT 304 or BMGT 388M.

BMGT 305 Knowledge Management (3)

An introduction to the ways in which organizations create, identify, capture, process, and distribute knowledge. Topics include knowledge generation and coordination, knowledge markets, knowledge transfer and skills, and knowledge management principles. Discussion also covers new organizations and intellectual capital; the integration of human resources, training and development, information systems and security, and business units to implement knowledge management strategies; and new roles and responsibilities for knowledge workers. Students may receive credit for only one of the following courses: BMGT 305 or BMGT 388C.

BMGT 312 Women in Business (3)

Prerequisite: BMGT 110 or at least two years of business and management experience. An examination of women's evolving roles in the business world and the forces that have created change and opportunities. Discussion explores how organizational theory, human resource practices, industrialization, and information technology have created new paths for professional growth. Students may receive credit for only one of the following courses: BMGT 312, BMGT 398I, or MGMT 398I.

BMGT 313 Women as Entrepreneurs (3)

A study of the qualities that help women excel in business. Topics include the rapid increase in female-owned companies, especially small businesses, and ways women have overcome the barriers they face in starting a business. Discussion also covers the reasons for female exclusion from traditional financing alternatives and current funding options for women. Inspirational real-life examples of women who have achieved success are presented. Students may receive credit for only one of the following courses: BMGT 313 or BMGT 388H.

BMGT 314 Women as Leaders (3)

A study of the opportunities and challenges for women in leadership positions. Focus is on increasing awareness of the unique talents and skills of women and identifying ways to help women change historically self-limiting beliefs. Topics include personal perceptions, traditional stereotypes of femininity, and the evaluation of leadership and coaching skills. Success stories of leading women managers illustrate the key principles. Students may receive credit for only one of the following courses: BMGT 314 or BMGT 388J.

BMGT 315 Gender Relations in Business (3)

An exploration of how gender differences affect the way that women and men interact at work, receive and perceive workplace information, and make workplace decisions. Discussion is based on the premise that men and women are different and that those differences profoundly influence their productivity in the modern business workplace. Situations that can result in gender-based misunderstanding, miscommunication, conflict, and organizational ineffectiveness are examined. The goal is to use understanding of gender differences to improve harmony and collaboration among staff members.

BMGT 317 Problem Solving for Managers (3)

Presentation of the theoretical and practical aspects of strategies used in solving problems, an activity that takes up much of the manager's day. Approaches evaluated include holistic thinking, the use of analogy, internal brainstorming and other methods of creative thinking, the development of an ability to shift perspectives, the scientific method, the analysis of language, systems analysis, and graphic representations. Case studies illustrate the definition of the problem, the formulation of hypotheses, the collection and analysis of data, and application to improve quality. Students may receive credit for only one of the following courses: BMGT 317 or TMGT 310.

BMGT 324 Introduction to Entrepreneurship: Starting a Small Business (1)

An introduction to entrepreneurship and the concept of starting a small business. Topics include the costs and benefits of operating a small business venture and types of small businesses that can be successfully operated. Special considerations and laws that apply to small business operations are also covered. Students may receive credit for only one of the following courses: BMGT 324, BMGT 398F, MGMT 324, MGMT 398B, or SBUS 398B.

BMGT 325 The Small-Business Plan (1)

An introduction to the preparation of a business plan for entry into small business. Topics include locating and using primary and secondary research to prepare a business plan, assessing formats for presenting it, finding sources of assistance in preparing it, writing it, and identifying who should prepare it. Students may receive credit for only one of the following courses: BMGT 325, BMGT 398G, MGMT 325, MGMT 330, MGMT 398C, SBUS 200, or SBUS 398C.

BMGT 339 Government and Business Contracting (3)

(Designed for aspiring entrepreneurs, executives, and administrators in the public and private sectors involved in evaluating contracting and grant opportunities in domestic and global environments.) An investigation of the opportunities available for new business development and government and business contracting, as well as the problems involved throughout the contracting life cycle—from planning, evaluation, and negotiation of new contracts to the administration and closeout of contracts after award. Topics include various methods governments and businesses use in determining requirements, choosing the procurement method, evaluating contractors and grant proposals, setting terms and conditions for contracts, awarding contracts, and administering contracts. Students may receive credit for only one of the following courses: BMGT 339, MGMT 220, or MGMT 339.

BMGT 361 Health Management (3)

Conceptual and functional analysis and application of management principles and theories for effective leadership in the health care services environment. Topics include relevant theories of organization and management, leadership, communication, motivation, and decision making; organizational change and strategic planning; human resource administration; and management control systems. Discussion covers the structure of health systems in the United States and in other countries, current policy issues, and advocacy for public health and health care reform. Students may receive credit for only one of the following courses: BMGT 361 or HMGT 320.

BMGT 364 Management and Organization Theory (3)

Prerequisite: BMGT 110 or at least two years of business and management experience. A study of the development of theories about management and organizations. Processes and functions of management discussed include the communication process, the role of the manager as an organizer and director, the determination of goals, and the allocation of responsibilities. Students may receive credit for only one of the following courses: BMGT 364, TEMN 202, TEMN 300, TMGT 301, or TMGT 302.

BMGT 365 Organizational Leadership (3)

Prerequisite: BMGT 364. An exploration of the challenges to effective leadership and management that the contemporary manager faces in a rapidly changing environment. Focus is on leadership styles and motivational techniques conducive to high performance in various organizational settings with a very diverse workforce. Topics include issues in the design of organizations, the corporate/organizational culture, the design and enrichment of jobs, and communication within organizations. Students may receive credit for only one of the following courses: BMGT 365, MGMT 300, MGST 310, or TEMN 310.

BMGT 366 Global Public Management (3)

A conceptual and functional analysis and application of management principles and strategies encompassing state and non-state institutional actors, such as intergovernmental and nongovernmental organizations (IGOs and NGOs), in the global environment. Focus is on the nature, scope and application of public management. Topics include the evolution of public sector management, theoretical, administrative, ethical, and policy models of decision making and accountability; the dynamics of organizational behavior, bureaucratic structures, and processes; core functionalities, strategic planning, and issues involving public-sector management, planning, leadership, human resources, collective bargaining, communications, and e-government; marketing; public finance; and governance. Students may receive credit for only one of the following courses: BMGT 366 or TMGT 305.

BMGT 369 Health Practice Management (3)

Prerequisite: BMGT 361. Examination and application of health care practice theories and concepts in the management of medicine, health, and dental group services. Topics include both managed care and fee-for-service payment arrangements and the influence of insurance. Group practices examined include preferred provider organizations, physician hospital organizations, independent practice associations, management service organizations, and dental group practice networks. Analysis covers applied issues such as structuring compensation packages for professionals; negotiating contractual arrangements with insurance companies; and implementing regulatory guidelines for medical equipment, pharmaceutical storage, and dispensing. Discussion also reviews policy issues relevant to managed care, public financing, insurance, the employment of health care professionals, and legislative politics that affect health care management and practice. Students may receive credit for only one of the following courses: BMGT 369 or HMGT 498E.

BMGT 372 Supply Chain Management (3)

Prerequisite BMGT 364. An examination of supply chain management systems with a focus on maximizing the value generated by a company. Topics include supply chain management strategy, planning, designing and operations; the role information technology, and financial factors that influence decisions. Discussion also covers the trade-offs between cost and service and between the purchase and supply of raw materials; the warehousing and control of inventory; transportation; facilities and handling; information; and the distribution of finished goods to customers required to minimize costs, maximize profits, or increase customer service levels.

BMGT 375 Purchasing Management (3)

Prerequisite: BMGT 364. A study of purchasing management and the roles of certified purchasing managers in medium to large organization from the perspective of the chief purchasing officer. Focus is on purchasing techniques proven in the global marketplace. Topics include ethical guidelines, commodity councils, supply chain interface, balanced performance measures, total ownership cost analysis, supplier relationship management, negotiation techniques, and global structures for purchasing operations. Students may receive credit for only one of the following courses: BMGT 375, MGMT 375, or TEMN 360.

BMGT 378 Legal Environment of Business (3)

(For students with little or no legal background.) An overview of fundamental legal concepts and principles that affect business in the relevant functional and regulatory environments in domestic and global settings. Emphasis is on the definition and application of legal principles and concepts through illustrative examples and cases. Topics include the interplay among business, ethics, and law; legal reasoning and research; the judicial system and conflict resolution; and torts and business crimes. Key concepts relating to transactional aspects of business are defined; these include contracts and business organizations, property, and government regulations in the human resource, marketing, and financial dimensions of business. Assignments include conducting relevant research using computer databases and networks (such as Lexis and the Web) as well as other methods for accessing information. Students may receive credit for only one of the following courses: BMGT 378 or BMGT 480.

BMGT 380 Business Law I (3)

(Strongly recommended for students seeking careers as CPAs, lawyers, or managers.) A conceptual and functional analysis and application of legal principles relevant to the conduct and understanding of commercial business transactions in the domestic and global environment. Topics include the legal, ethical, and social environment of business; agencies, partnerships, and other forms of business organizations; and contracts and sales agreements.

BMGT 381 Business Law II (3)

(Strongly recommended for students seeking careers as CPAs, lawyers, or managers.) Prerequisite: BMGT 380. Further conceptual and functional analysis and application of legal principles relevant to the conduct and understanding of commercial business transactions in the domestic and global environment. Topics include personal and real property, government regulations affecting employment and marketing, negotiable instruments, debtor/creditor relationships, and bankruptcy and reorganization.

BMGT 388G Effective Business Presentations (1)

An overview of the process of creating and delivering effective business presentations. Focus is on the importance of effective communication in business. Topics include audience analysis, presentation planning, outline development, style alternatives, presentation structure (i.e., the beginning, body, ending, and questions and answers), visual aids, and delivery techniques.

BMGT 391 Motivation, Performance, and Productivity (3)

Prerequisite: BMGT 364. An examination of the challenges of motivating employees. Topics include effective principles for job design, theories and practices of successful leadership, the setting of goals and objectives, the development of reward systems, and the attributes of effective managerial communication. The causes and impact of performance problems and methods for measuring management practices are explored. Students may receive credit for only one of the following courses: BMGT 391, BMGT 398S, or HRMN 394.

BMGT 392 Global Business Management (3)

Prerequisite: BMGT 110 or at least two years of business and management experience. Examination and analysis of global business in its historical, theoretical, environmental, and functional dimensions. Focus is on understanding the growing economic interdependence of nations and its impact on managerial and corporate policy decisions that transcend national boundaries. Topics include the nature and scope of international business; the institutional, sociocultural, political, legal, ethical, and economic environments; trade, foreign investment, and development; transnational management (including global operations), strategic planning, human resources, marketing, and finance; and international business diplomacy and conflict resolution. Students may receive credit for only one of the following courses: BMGT 392, MGMT 305, or TMGT 390.

BMGT 393 Real Estate Principles I (3)

(Designed to fulfill the requirements for the Maryland licensing examination to sell real estate.) Recommended: ECON 203. A survey of the principles, definitions, and uses of real estate. Topics include real estate as a business, problems of construction and home ownership, city planning, and public control and ownership of real estate.

BMGT 394 Real Estate Principles II (3)

(Designed to fulfill the requirements for the Maryland licensing examination to sell real estate.) Prerequisite: BMGT 393. A continuation of the study of real estate. Topics include principles, definitions, professional issues and problems, construction and ownership problems, and other major aspects of real estate sales. Students may receive credit for only one of the following courses: BMGT 394 or BMGT 398H.

BMGT 398 Special Topics in Business and Management (1–3)

Intensive inquiry into special topics in business and management that reflect the changing needs and interests of students and faculty.

BMGT 405 Environmental Management and Business (3)

(Formerly BMGT 498F.) Examination and analysis of salient environmental issues and their impact on business management and institutional policies and strategies in both domestic and global settings. Topics include air- and water-quality controls, toxic substances, hazardous waste, energy and natural resources, deforestation, biological diversity, global warming, and ozone depletion. These issues are examined from the perspectives of ecology, ethics, the law, and public policy. The implications of sociopolitical and economic issues (e.g., population, poverty, trade, business growth, sustainable development, and competitiveness) on the environment are also discussed. Students may receive credit for only one of the following courses: BMGT 405, BMGT 498F, or MGMT 498F.

BMGT 407 Managing Global Trade (3)

An exploration and analysis of managing global trade within today's fast-paced, highly interconnected global economy. Discussion covers international trade policy, export-import strategies (including licensing and franchising), direct investment, conflict resolution, safety and security, and current policy issues. Topics also include sales negotiation, price quotations, landed cost, standard international commercial terms, commercial financing, trade documentation, global e-commerce, transportation logistics, and compliance with import and export regulations. Students may receive credit for only one of the following courses: BMGT 407 or BMGT 498S.

BMGT 411 Business Performance (3)

Presentation of analytical approaches to comprehend and solve business performance problems. Focus is on powerful techniques for solving problems of managing people and for understanding their behavior in organizations. Topics include how to recognize, pinpoint, analyze, develop, and make decisions. Complex real-world situations that confront managers and supervisors in a business environment or organization are considered. Discussion covers techniques for identifying and choosing among goals and strategies, resolving operational and structural difficulties, and making decisions based on knowns and unknowns and pros and cons using a practical approach toward problems. The techniques provided are applicable to knowledge-, manufacturing-, service-, or government-based organizations. Students may receive credit for only one of the following courses: BMGT 411 or TMGT 411.

BMGT 412 Managing for Organizational Effectiveness (3)

An overview of management techniques and methodologies that are used to develop and adapt business processes for competitive advantage in dynamic and rapidly changing environments. Assessment tools for achieving desired organizational capabilities, such as the Baldrige Criteria for Performance Excellence, ISO 9000, and CMMI (Capability Maturity Model Integration), are examined. Discussion also covers specific approaches—such as customer relationship management, supply chain management, Six Sigma methodology, and other process improvement tools—that contribute to high performance and organizational effectiveness. Successful applications of these strategies and approaches are illustrated. Students may receive credit for only one of the following courses: BMGT 412 or TMGT 412.

BMGT 428 Legal Aspects of Technology Management (3)

(Formerly BMGT 498J.) An examination and analysis of legal and policy issues involving the development, acquisition, application, and use of technology and their impact on business and management in the domestic and global environments. Topics include intellectual property issues encompassing patent, copyright, and trademark protections in information and biotechnology; privacy and security concerns; domain names; government regulation and antitrust; software licensing; tort and computer crimes, and consumer protection. The role of global institutions is also explored. Students may receive credit for only one of the following courses: BMGT 428 or BMGT 498J.

BMGT 437 International Business Law (3)

(Formerly BMGT 498P.) Prerequisite: BMGT 380. A conceptual and functional analysis and application of transnational legal principles relevant to the conduct and understanding of global business and economic transactions. Topics include the international legal environment and process; transactional dimensions, including business forms and foreign investments; international and regional organizations; international contracts and sales; the regulation of international trade; national and international economic controls; legal aspects of management, marketing, and finance that focus on global issues related to employment, the environment, technology transfer, and trade financing; and dispute resolution. Students may receive credit for only one of the following courses: BMGT 437 or BMGT 498P.

BMGT 454 Global Business and Public-Policy Regimes (3)

(Formerly BMGT 498O.) Prerequisite: BMGT 392. Examination and analysis of the institutional dimensions of public policy in the international arena and their strategic impact on the decisions of the global manager. Focus is on the conceptual and functional definition and application of global public policy, including the role of nongovernmental organizations (NGOs) in the context of leadership and ethical responsibilities across national borders and cultures and the transnational policy implications of global regimes spanning the relevant areas of business and global governance. Students may receive credit for only one of the following courses: BMGT 454, BMGT 498O, or MGMT 498O.

BMGT 456 Multinational Management (3)

(Formerly BMGT 498R.) An examination and analysis of multinational management functions and processes (including planning, organizing, leading, and negotiating) across national cultures and borders and in globally diverse transnational environments and organizations. Topics include cross-cultural strategic planning; organizational design and structures; global leadership; cross-cultural communication, decision making, motivation, and negotiations; and human resource management. The role of the manager as a global leader in today's complex, cross-functional, multicultural economic and political environment is evaluated. Focus is on applying critical thinking and analytic skills in global management situations. Students may receive credit for only one of the following courses: BMGT 456 or BMGT 498R.

BMGT 464 Organizational Behavior (3)

Prerequisites: BMGT 110 (or at least two years of business and management experience) and 364. An examination of research and theory on the forces underlying the way members of an organization behave. Topics include the behavior of work groups and supervisors, intergroup relations, employees' goals and attitudes, problems in communication, the circumstances of change in an organization, and the goals and design of an organization.

BMGT 465 Organization Development and Change (3)

Prerequisite: BMGT 364. An introduction to a method of making organizations and individuals more adaptive and productive. The objective is to help organizations cope with change. Techniques of intervention (such as team building, process consultation, feedback, and conflict resolution) are introduced and explained. Students may receive credit for only one of the following courses: BMGT 465, MGMT 398K, MGMT 465, or TMGT 350.

BMGT 482 Business and Government (3)

Prerequisite: BMGT 110 (or at least two years of business and management experience). A study of the role of government in the modern economy and the intricate relationships between the public and private sectors in the domestic and global environments. Emphasis is on the regulatory and public policy dimensions of government intervention, the promotion of business, corporate responses to government action, and social responsibility and governance issues in the changing domestic and global marketplaces. Students may receive credit for only one of the following courses: BMGT 482 or TMGT 340.

BMGT 484 Managing Teams in Organizations (3)

Prerequisite: BMGT 364. An examination of how and why team development can be effective in organizations and when it is appropriate. Topics include group dynamics, stages of group development, team-building techniques, team goals and leadership, and interpersonal and individual skills to foster cohesion and effective performance. Students may receive credit for only one of the following courses: BMGT 484, BMGT 498H, or MGMT 498H.

BMGT 486A Internship in Business and Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in business and management. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to business and management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

BMGT 486B Internship in Business and Management Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in business and management. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to business and management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

BMGT 487 Project Management I (3)

(The first course in the two-course series BMGT 487–488.) Prerequisite: BMGT 364. An introduction to project management principles, concepts, and software applications and an exploration of project management applications in introductory project situations. Project management is examined in terms of practical applications and practices. Appropriate organizational structures, such as collegial and matrix types, are described and assessed. Discussion also covers the practical considerations of designing a project management system. Students may receive credit for only one of the following courses: BMGT 487, IFSM 438, or TMGT 430.

BMGT 488 Project Management II (3)

(The second course in the two-course series BMGT 487–488.) Prerequisite: BMGT 487. An exploration of project management applications beyond introductory projects. Emphasis is on the application of project management concepts and software applications. Assignments include designing a project management system from beginning to end. Projects depict real-world situations such as production in research, high-technology manufacturing, and engineering firms; information systems implementations; service business and e-commerce projects; and consulting practices. Students may receive credit for only one of the following courses: BMGT 488 or TMGT 430.

BMGT 491 Exploring the Future (3)

Prerequisite: BMGT 364. An examination of how to analyze and develop alternate ways of seeing the future. The interactions of population, technology, political and economic systems, values, and leadership are investigated. Discussion covers techniques futurists use, including scenario construction, trend analysis, the futures wheel, and environmental scanning. Techniques are applied in societal, professional, and personal settings. Students may receive credit for only one of the following courses: BEHS 480, BMGT 491, MGMT 398H, TMGT 401, or TMGT 480.

BMGT 495 Strategic Management (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: FINC 330 (or BMGT 340), BMGT 364, and MRKT 310. A study of strategic management that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in business management are considered. Focus is on the continuous, systematic process of managerial planning, including environmental scanning and the development of plans and strategies to gain competitive advantage. Tactical and strategic management issues are highlighted by means of case studies, projects, and discussion. Access to spreadsheet software is recommended to analyze case studies and develop strategic planning information, charts, and graphs. Students may receive credit for only one of the following courses: BMGT 495, HMGT 430, MGMT 495, or TMGT 380.

BMGT 496 Business Ethics (3)

A study of the relationship of business ethics and social responsibility in both domestic and global settings. Ethical and moral considerations of corporate conduct, social responsibilities, policies, and strategies are explored. Emphasis is on the definition, scope, application, and analysis of ethical values as they relate to issues of public consequence in the context of the functional areas of business at both the domestic and global levels.

BMGT 510 The Manager in Organizations and Society (6)

(For business administration majors only. May also be applied to the MBA program at UMUC as equivalent to AMBA 610, if completed with a grade of B or better; in such a case, prerequisite course for MBA program is waived.) Prerequisites: 24 credits of business administration coursework, including BMGT 495, and a minimum GPA of 3.0 in the major at UMUC. An exploration of the responsibilities and influence that 21st-century managers have within their organizations and the global society. Essential concepts and theories that provide a foundation for the study of business administration and management—including systems thinking, critical thinking, ethical decision making and leadership, legal concepts, corporate social responsibility, and organizational theory and design—are examined.

Career Planning

Courses in career planning (designated CAPL) may be applied toward

- electives.

UMUC offers only a limited number of courses each session in this discipline.

CAPL 398A Career Planning Management (1)

A survey of strategies for managing career change. Strategies focus on identifying and evaluating skills, self-marketing, and tapping into the hidden job market. Topics include résumé development, informational interviewing, salary negotiation, tips for career success, and the complicated federal hiring process.

Chemistry

Courses in chemistry (designated CHEM) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the physical and biological sciences;
- a major in investigative forensics;
- a minor in natural science; and
- electives.

A description of the curriculum for the investigative forensics major begins on p. 61.

CHEM 121 Chemistry in the Modern World (3)

(For students not majoring or minoring in science.) An exploration of the effects and applications of chemistry on human life and activities. The chemistry of the universe, living organisms, the brain, food and drugs, consumer goods, metals, plastics, and fibers are discussed. Students may receive credit for only one of the following courses: CHEM 102, CHEM 103, CHEM 104, CHEM 107, CHEM 121, or GNSC 140.

Chinese

Courses in Chinese (designated CHIN) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in Asian studies; and
- electives.

UMUC offers a limited number of foreign language courses each session.

A description of the curriculum for the humanities major and minor begins on p. 55.

CHIN 111 Elementary Chinese I (3)

(Not open to native speakers of Chinese: assumes no prior knowledge of Chinese.) An elementary study of Mandarin Chinese. Emphasis is on oral communication skills as a foundation for building balanced proficiency in the four communication skills of listening, speaking, reading, and writing. Topics include basic structures, vocabulary, pronunciation, and writing, as well as elements of culture, history, and geography. Authentic text from native speakers is used as much as possible.

CHIN 112 Elementary Chinese II (3)

(Not open to native speakers of Chinese.) Prerequisite: CHIN 111. Continued basic study of Chinese, emphasizing oral communication as a foundation for balanced proficiency in the four communication skills of listening, speaking, reading, and writing. Topics include basic structures, vocabulary, pronunciation, and writing, as well as further elements of culture, history, and geography. Oral and written authentic text from native speakers is used as much as possible.

CHIN 114 Elementary Chinese III (3)

(Not open to native speakers of Chinese.) Prerequisite: CHIN 112. Further development of skills in listening, speaking, reading, and writing in Chinese. Chinese culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, character recognition and writing, and composition. Focus is on acquiring the skills necessary to communicate with native Chinese speakers orally and in writing at an advanced elementary level. Oral and written authentic text is used as much as possible.

CHIN 115 Elementary Chinese IV (3)

(Not open to native speakers of Chinese.) Prerequisite: CHIN 114. Improvement of skills in listening, speaking, reading, and writing in Chinese. Chinese culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, character recognition and writing, and composition. Focus is on acquiring the skills necessary to communicate with native Chinese speakers orally and in writing at a basic intermediate level. Oral and written authentic text is used as much as possible.

Communication Studies

Courses in communication studies (designated COMM) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in communications;
- a major in communication studies or graphic communication;
- a minor in communication studies, journalism, or speech communication; and
- electives.

A description of the curriculum for the communication studies major and minor begins on p. 22. Descriptions of related curricula may be found on the following pages: graphic communication (p. 49), journalism (p. 62), and speech communication (p. 76).

COMM 200 Military Communication and Writing (3)

(Fulfills the general education requirement in communication.) A study of the management of business communication in a military context. Topics include communication theories, research methods, organization of information, formats, writing and editing strategies, guiding subordinate communication, interviews, and meeting management. Assignments may include speech presentations; classroom instruction; interviewing; meeting management; and the writing and editing of reports, letters, e-mails, proposals, and personnel evaluations.

COMM 300 Communication Theory (3)

(Fulfills the general education requirement in communications, but is not a writing course.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An introduction to the study of communication theory. The basic theories of human communication, mass communication, and new media and technology are explored. Focus is on the relationships among communication theory, research, and practice. General themes include intra- and interpersonal communication, public communication, mass media, and contemporary issues associated with mediated communication.

COMM 302 Critical Perspectives in Mass Communication (3)

(Formerly COMM 379A. Fulfills the general education requirement in communications, but is not a writing course.) Prerequisite: WRTG 101/101X or ENGL 101/101X. A survey of mass communication with the goal of enhancing media literacy. Topics include media industries and the impact of the media, as well as regulation, policy, and ethical issues. Emphasis is on critical thinking and analysis of vital aspects of pervasive elements of popular culture, such as news, advertising, children's entertainment, and a free press. Students may receive credit for only one of the following courses: COMM 379A or COMM 302.

COMM 380 Language in Social Contexts (3)

(Fulfills the general education requirement in communications, but is not a writing course.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of the linguistic components of languages, with special emphasis on the English language, its origins, continued development, and use in speaking and writing. Categories of speech and methods of written communication are examined from the perspective of regional and social variation. Discussion covers cultural, gender, and racial variations as well as underlying perspectives and assumptions.

COMM 400 Communication and the Law (3)

(No previous study of law required. Fulfills the general education requirement in communications, but is not a writing course.) Prerequisite: JOUR 201 or a 300-level COMM course. An examination of the important legal issues that affect professional communicators. Topics include copyright, intellectual property, fair use, privacy, freedom of information, freedom of speech, and freedom of the press, as well as issues raised by the growth of the Internet, the use of digital technologies, and the creation of media content. Students may receive credit for only one of the following courses: COMM 400 or JOUR 400.

COMM 486A Internship in Communication Studies Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in communication studies. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to communication studies and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

COMM 486B Internship in Communication Studies Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in communication studies. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to communication studies and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

COMM 493 Strategies for Visual Communications (3)

(Fulfills the general education requirement in communications, but is not a writing course. Access to a desktop publishing program, such as Microsoft Publisher, is recommended; instruction on software is not provided.) Prerequisite: WRTG 101/101X or ENGL 101/101X. Recommended: A course in desktop publishing. An introduction to graphic design theory that explores the integration of text and graphics in formal and practical design. Topics include organizing information, developing strategic design solutions to enhance communication, and applying critical and creative processes to produce and evaluate design.

COMM 495 Seminar in Workplace Communication (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits. Primarily for students planning careers as communication professionals, but useful for managers and other professionals. Fulfills the general education requirement in communications.) Prerequisites: COMM 300 and either WRTG 393, WRTG 394, COMM 393, or COMM 394. Recommended: JOUR 201. A study of workplace communication that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in public relations are considered. Emphasis is on enhancing advanced-level writing skills and developing flexibility in changing writing tone from piece to piece. Topics include how to produce various communications (such as press releases, feature stories, fact sheets, and executive speeches) and the elements of document design.

Computer and Information Science

Courses in computer and information science (designated CMIS) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing;
- a major in computer and information science, computer information technology, or computer studies;
- a minor in computing;
- a certificate in Database Design and Implementation, Game Development, Object-Oriented Design and Programming, or UNIX System Administration; and
- electives.

Students without recent experience in problem solving with computers must take CMIS 102. It is recommended that for the first two academic sessions students should not take two (or more) courses that involve programming.

A description of the curriculum for the computer and information science major begins on p. 24. Descriptions of other computer-related curricula may be found on the following pages: computer information technology (p. 26), computer science (p. 27), computer studies (p. 29), computing (p. 31), cybersecurity (p. 33), and information systems management (p. 59).

CMIS 102 Introduction to Problem Solving and Algorithm Design (3)

A study of techniques for finding solutions to problems through structured programming and step-wise refinement. Topics include principles of programming, the logic of constructing a computer program, and the practical aspects of integrating program modules into a cohesive whole. Algorithms are used to demonstrate programming as an approach to problem solving, and basic features of a modern object-oriented language are illustrated. Students may receive credit for only one of the following courses: CMIS 102, CMIS 102A, or CMSC 101.

CMIS 141 Introductory Programming (3)

(Not open to students who have taken CMIS 340. The first in a sequence of courses in Java.) Prerequisite: CMIS 102 or prior programming experience. Recommended: MATH 107. A study of structured and object-oriented programming using the Java language. Discussion covers the discipline, methodologies, and techniques of software development. Algorithms and simple data structures are developed and implemented in Java; object-oriented concepts are applied. Students may receive credit for only one of the following courses: CMIS 141, CMIS 141A, or CMSC 130.

CMIS 170 Introduction to XML (3)

Prerequisite: CMIS 102. A study of the principles and use of Extensible Markup Language (XML). Discussion covers the structure, transformation, presentation, and implementation of XML technologies, including document type definitions (DTDs), Extensible Style Language for Transformation (XSLT), and schemas. Hands-on projects and exercises are provided.

CMIS 242 Intermediate Programming (3)

Prerequisite: CMIS 141. Further study of the Java programming language. Topics include inheritance, interfaces (such as graphical user interfaces), exceptions, arrays, and collections. Emphasis is on using existing Java classes to build and document applications.

CMIS 310 Computer Systems and Architecture (3)

(Not open to students who have completed CMSC 311.) Prerequisite: CMIS 102. A study of the fundamental concepts of computer architecture and factors that influence the performance of a system. Topics include data representation and the design and analysis of combinational and sequential circuits. Focus is on how basic hardware components (multiplexers, decoders, memories, arithmetic-logic units, etc.) are built. Discussion covers hard-wired and microprogrammed design of control units and concepts such as pipelining and memory hierarchy. Students may receive credit for only one of the following courses: CMIS 270, CMIS 310, CMSC 311, or IFSM 310.

CMIS 315 Programming and Application in C++ (3)

Prerequisite: CMIS 102. A one-semester study of the important features of the C++ programming language. Programming projects in C++ are included. Students may receive credit for only one of the following courses: CMIS 240 or CMIS 315.

CMIS 320 Relational Databases (3)

Prerequisite: CMIS 102. A study of the functions and underlying concepts of relationally organized database systems. Discussion covers data models and their application to database systems. The entity/relationship (E/R) model and Codd's relational theory—including relational algebra, normalization and integrity constraints, and the Structured Query Language (SQL)—are emphasized. Physical design and data administration issues are addressed. Projects include hands-on work with E/R and relational models (using industry standard database software). Students may receive credit for only one of the following courses: CMIS 320 or IFSM 410.

CMIS 325 UNIX with Shell Programming (3)

Prerequisite: CMIS 102. A study of the UNIX operating system. Topics include file structures, editors, pattern-matching facilities, shell commands, and shell scripts. Shell programming is presented and practiced to interrelate system components. Projects give practical experience with the system.

CMIS 330 Software Engineering Principles and Techniques (3)

Prerequisite: CMIS 141, CMIS 315, or CMIS 340. A study of the process of software engineering from initial concept through design, development testing, and maintenance to retirement of the product. Development life-cycle models are presented. Topics include issues in configuration management, integration and testing, software quality, quality assurance, security, fault tolerance, project economics, operations, human factors, and organizational structures. Students may receive credit for only one of the following courses: CMIS 330 or CMIS 388A.

CMIS 345 Object-Oriented Design and Programming (3)

Prerequisite: CMIS 242 or CMIS 340. An examination of the principles, practices, and applications of programming in an object-oriented environment. Assignments include programming projects in Java that implement techniques of object-oriented design.

CMIS 355 Database Forms (3)

(Formerly CMIS 398F.) Prerequisite: CMIS 320. A comprehensive study of the design and development of graphical user interface forms for modern relational databases in the client/server environment. Focus is on developing a hierarchy of form applications using both Microsoft Access and Oracle. Topics include the construction of simple forms using drop-and-drag components and advanced features of vendor form-building products. Some Visual Basic and PL/SQL programming is used to provide robust functionality to the forms. Accurate display and processing of data and user friendliness are stressed. Students may receive credit for only one of the following courses: CMIS 355 or CMIS 398F.

CMIS 370 Data Communications (3)

Prerequisite: CMIS 310. Investigation of the effects of communication technology on information systems. Topics include components of communication systems, architectures and protocols of networks, security measures, regulatory issues, and the design of network systems. Discussion also covers issues and applications in local area networks and communication services. Students may receive credit for only one of the following courses: CMIS 370, CMSC 370, CSIA 302, or IFSM 450.

CMIS 375 Programming in Perl (3)

Prerequisite: CMIS 102. An introduction to the Perl scripting language. Focus is on the basic features of Perl (including data and variable types, operators, statements, regular expressions, functions, and input/output). Topics include object-oriented programming and Common Gateway Interface (CGI) programming. Assignments include writing Perl scripts. Students may receive credit for only one of the following courses: CMIS 375 or CMIS 398P.

CMIS 398A Programming in C# (3)

Prerequisite: CMIS 242, CMIS 340, or CMIS 315. An examination of the features of the C# programming language. Topics include design of classes, class libraries, exception handling, input and output, and Windows forms and Web forms programming. Assignments include programming in C#.

CMIS 415 Advanced UNIX and C (3)

Prerequisites: CMIS 141 (or CMIS 315 or CMIS 340) and 325. An investigation of the interaction between the UNIX operating system and the C programming language. The features of UNIX that support C (including library and system calls, UNIX utilities, debuggers, graphics, and file structure) are presented. Assignments include programming projects in C that implement UNIX command features.

CMIS 420 Advanced Relational Databases (3)

Prerequisite: CMIS 320. A study of advanced logical and physical design features and techniques of relational databases appropriate to the advanced end user, database designer, or database administrator. Topics include object-relational concepts, data modeling, challenge areas, physical design in relation to performance, and relational algebra as a basis of optimizer strategies. Future trends, advanced concurrency control mechanisms, and maintenance issues such as schema restructuring are addressed. Projects include hands-on work (using industry-standard database software) in designing and implementing a small database, creating triggers, loading through forms and utility, querying through interactive and embedded Structured Query Language (SQL), restructuring schema, and analyzing performance. Students may receive credit for only one of the following courses: CMIS 420, IFSM 411, or IFSM 498I.

CMIS 435 Computer Networking (3)

Prerequisite: CMIS 370. An overview of communications topics such as signaling conventions, encoding schemes, and error detection and correction. Emphasis is on routing protocols for messages within various kinds of networks, as well as on methods that network entities use to learn the status of the entire network. Students may receive credit for only one of the following courses: CMIS 435 or CMSC 440.

CMIS 440 Advanced Programming in Java (3)

Prerequisite: CMIS 242 or CMIS 340. An exploration of advanced Java Enterprise applications. Topics include Java server pages, servlets, Java database connectivity, and Enterprise JavaBeans. Students may receive credit for only one of the following courses: CMIS 440 or CMIS 498A.

CMIS 445 Distributed Systems (3)

Prerequisites: CMIS 141, CMIS 315, or CMIS 340. Recommended: CMIS 325. An examination of the concepts and design principles of distributed computer systems. Topics include communications, operating systems, interprocess communications, distributed objects, simple object access protocol (SOAP), Web services, distributed file systems, name services, time services, distributed multimedia systems, security, transactions, and replication (as they relate to the distributed system environment). Discussion also covers standards for distributed object-oriented programming. A distributed programming project in Java illustrates many of the concepts. Students may receive credit for only one of the following courses: CMIS 445 or CMSC 445.

CMIS 455 Requirements Development (3)

Prerequisite: CMIS 330. A study of concepts and techniques for planning and developing high-quality software products. Fundamentals of specification (including formal models and representations, documents, and standards) are examined. Discussion also covers methods of specifying and developing requirements for generating software. Projects using these techniques are included. Students may receive credit only once under this course number.

CMIS 460 Software Design and Development (3)

Prerequisite: CMIS 330. An in-depth treatment of the concepts and techniques for designing and developing software for large projects. Discussion covers design strategies, principles, methodologies, and paradigms, as well as evaluation and representation. Topics also include architectural models and idioms, development tools and environments, implementation guidelines and documentation, and organization of design and development functions. Issues of program quality, program correctness, and system integration are addressed. Project work incorporates principles and techniques of software design and development.

CMIS 485 Web Database Development (3)

(Formerly CMIS 498B.) Prerequisite: CMIS 320, knowledge of relational database design and SQL, and programming language experience. Recommended: CMIS 340. An exploration of an assortment of current Web technologies and programming language options used to interface a relational database to a Web server. Technologies such as CGI/Perl, Active Server Pages, and Java are utilized in the lab. The three-tiered architecture is studied in depth via a number of hands-on activities and projects. Students may receive credit for only one of the following courses: CMIS 485 or CMIS 398B.

CMIS 486A Internship in Computer Information Science Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in computer and information science. At least 12 hours per week must be devoted to new tasks for a total of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer and information science and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMIS 486B Internship in Computer Information Science Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in computer and information science. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer and information science and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMIS 498 Special Topics in Computer and Information Science (3)

Prerequisites: Vary according to topic. A seminar on topics in computer and information science. May be repeated to a maximum of 6 credits when topics differ.

Computer Information Technology

Courses in computer information technology (designated CMIT) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing;
- a major in computer information technology, computer and information science, or computer studies;
- a minor in computing;
- a certificate in Computer Networking or UNIX System Administration; and
- electives.

A description of the curriculum for the computer information technology major begins on p. 26. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 24), computer science (p. 27), computer studies (p. 29), computing (p. 31), cybersecurity (p. 33), and information systems management (p. 59).

CMIT 261 Introduction to Oracle (3)

(Formerly CMIT 261O.) An introduction to Oracle and Structured Query Language (SQL) The syntax and function of the American National Standards Institute's standard SQL are examined. SQL's data definition language is used to create tables, including constraints, and SQL's data manipulation language is used to insert, update, and delete data. Emphasis is on learning queries, ranging from the simple to the complex. Additional database objects (such as views, sequences, synonyms, aliases, and indexes) and SQL built-in functions are explored. Topics also include using the Oracle SQL command editor and the local system editor and creating simple reports with SQL Loader and SQL Plus. Students may receive credit for only one of the following courses: CMIT 261 or CMIT 261O.

CMIT 265 Networking Essentials (3)

An introduction to networking technologies for individual workstations, local area networks, wide area networks, and the Internet, with emphasis on the OSI (open system connectivity) model, security, and networking protocols. A general review of several industry-standard network operating systems is provided. Topics covered should be useful in preparing for the Network+ certification exam. Students may receive credit for only one of the following courses: CMIT 265 or CMIT 265M.

CMIT 320 Network Security (3)

Prerequisite: CMIT 265 with grade of C or better or CompTIA Network+ certification. A study of the fundamental concepts of computer network security and their implementation. Topics include authentication, remote access, Web security, intrusion detection, basic cryptography, physical security, and disaster recovery. Opportunities for hands-on exercises are provided. Course material relates to topics covered on the vendor-neutral CompTIA Security+ Certification examination, which is recognized worldwide as the standard of competency for entry-level network security professionals.

CMIT 321 Ethical Practice of Intrusion Prevention and Detection (3)

(Formerly CMIT 398E.) Prerequisite: CMIT 265 or CSIA 302. Development of a structured knowledge base that enables network security professionals to discover vulnerabilities and recommend solutions for tightening network security and protecting data from potential attackers. Focus is on penetration-testing tools and techniques that security testers and ethical hackers use to protect computer networks. Course material should prove useful in preparing for the certified ethical hacker examination. Students may receive credit for only one of the following courses: CMIT 398E or CMIT 321.

CMIT 331 Wireless Network Administration (3)

(Formerly CMIT 499W.) Prerequisite: CMIT 265. A comprehensive review of available options in transmissions over wireless technologies. Emphasis is on design and implementation of wireless networks. Topics include FDMA, TDMA, and CDMA (frequency-, time-, and code-division multiple access) and other third generation (3G) concepts. The benefits of wireless technologies and wireless security are explored using real-world challenges and solutions. Students may receive credit for only one of the following courses: CMIT 331 and CMIT 499W.

CMIT 350 Interconnecting Cisco Devices (3)

(Designed to help students prepare for the Cisco Certified Network Associate Examination 640-802.) Prerequisite or corequisite: CMIT 265. Presentation of and practice in the concepts and commands required to configure Cisco switches and routers in multiprotocol internetworks. Discussion covers routing and switching concepts (Layer 2 and Layer 3 technologies) using Cisco switches and Cisco routers. Focus is on developing the skills necessary to install, configure, and operate Cisco routers and switches within LAN and WAN environments including VoIP and wireless networks. Projects include configuring various protocols, including IP, RIP, IGRP, EIGRP, OSPF, RSTP, and Frame Relay. Students may receive credit for only one of the following courses: CAPP 498E, CMIT 350, or CMIT 499D.

CMIT 361 Developing PL/SQL Applications (3)

Prerequisite: CMIT 261. An in-depth study of the use of PL/SQL to develop enterprise-level database applications in industry. Topics include application programs and standard third-generation language (3GL) programming constructs (such as if-then-else statements, loops, record-at-a-time processing, and error handling). Students may receive credit for only one of the following courses: CMIT 361 or IFSM 498O.

CMIT 363 Windows Vista (3)

(Formerly CMIT 399V.) Prerequisite: CMIT 265. An overview of Windows Vista. Focus is on developing the knowledge and skills necessary to perform troubleshooting on client computers within an organization. Topics include the operating system, hardware support, networking, security, and applications. Discussion also covers monitoring and maintaining Windows Vista client computers, as well as system image and application package deployment. Hands-on exercises are provided. Students may receive credit for only one of the following courses: CMIT 399V or CMIT 363.

CMIT 364 Windows Desktop Operating System (3)

Prerequisite: CMIT 265. An introduction to the current Windows desktop operating system. Focus is on developing the skills necessary to install, configure, and support Windows as a desktop operating system in a generic operating environment. Topics include review of operating systems, administration, security, transmission control protocol/Internet protocol, and troubleshooting Windows. Hands-on exercises are included. Students may receive credit for only one of the following courses: CMIT 364 or CMIT 499X.

CMIT 368 Windows Server (3)

Prerequisite: CMIT 265. A study of Windows Server installation and administration. Focus is on developing the skills necessary to install and configure Windows Server operating system. Topics include support, connectivity, creation and management of user accounts, management of access to resources, the NT file system, and configuration and management of disks. Hands-on exercises are included.

CMIT 374 Exchange Server (3)

(Formerly CMIT 499M.) Prerequisite: CMIT 368. Development of the knowledge and skills needed to update and support a reliable, secure infrastructure for creating, storing, and sharing information using Microsoft Exchange Server in a medium to large (250 to 5,000 seats) electronic messaging environment. Hands-on practice is provided. Students may receive credit for only one of the following courses: CMIT 374 or CMIT 499M.

CMIT 376 Windows Network Infrastructure (3)

(Formerly CMIT 376M.) Prerequisite: CMIT 368. The development of the knowledge and skills necessary to install, configure, manage, and support the Windows network infrastructure. Topics include automating Internet protocol address assignment using dynamic host configuration protocol, implementing name resolution using domain name service and Windows Internet naming service, setting up and supporting remote access to a network, configuring network security using public key infrastructure, integrating network services, and deploying Windows 2000 Professional using remote installation services. Hands-on exercises are included. Students may receive credit for only one of the following courses: CMIT 376 or CMIT 376M.

CMIT 377 Windows Directory Services Infrastructure (3)

Prerequisite: CMIT 368. The development of the knowledge and skills necessary to install, configure, manage, and support the Windows Active Directory service. Topics include understanding the logical and physical structure of Active Directory, configuring the domain name service to support Active Directory, creating and administering user accounts and group resources, controlling Active Directory objects, implementing and using group policy, managing replication of Active Directory, and maintaining and restoring the Active Directory database. Hands-on exercises are included. Students may receive credit for only one of the following courses: CMIT 377 or CMIT 377M.

CMIT 381 Oracle Database Administration (3)

Prerequisite: CMIT 261. A foundation in basic database administration tasks. Focus is on gaining a conceptual understanding of the Oracle database architecture and how the architectural structures work and interact with one another. Topics include how to create an operational database and properly manage the various structures in an effective and efficient manner. Hands-on exercises include configuring network parameters so that database clients and tools can communicate with an Oracle database server. Backup and recovery techniques are introduced, and various backup, failure, and restoration and recovery scenarios are examined. Students may receive credit for only one of the following courses: CMIT 381 or CMIT 381O.

CMIT 391 UNIX/Linux System Administration (3)

Prerequisite: CMIS 325. A study of the UNIX/Linux operating system, combining theory and lab work. Discussion covers document processing, file system administration, and the boot-up/shutdown process. Topics include disk partitioning schemes, software RAID (redundant array of independent disks), and LVM (logical volume manager) configuration. Review also covers user administration, disk quotas, group restrictions, and password aging. Process management and automation are examined through "cron" and "at" commands. Practice in configuring the X Window System and client networking is provided. Network security is addressed through the use of IP tables to construct firewall rules. Students may receive credit for only one of the following courses: CMIS 390, CMIT 391, or CMIS 398U.

CMIT 392 Implementing and Maintaining Databases with SQL Server (3)

(Assumes prior understanding of relational database concepts.) The development of the knowledge and skills necessary to implement and maintain databases with SQL Server. Topics include developing a logical data model, deriving the physical design, devising data services, creating and executing stored procedures, and constructing and maintaining a physical database. Hands-on exercises are included. Students may receive credit for only one of the following courses: CMIT 392 or CMIT 392M.

CMIT 425 Advanced Network Security (3)

(Formerly CMIT 499S.) Prerequisites: CompTIA Network+ certification (or CMIT 265 or equivalent knowledge) and CompTIA Security+ certification (or CMIT 320 or equivalent knowledge). A comprehensive study of information security. Course material is based on the vendor-neutral $(ISC)^2$ Certified Information System Security Professional (CISSP) Certification Exam, which is the capstone standard of competency for experienced security professionals. Students may receive credit for only one of the following courses: CMIT 499S or CMIT 425.

CMIT 450 Designing Cisco Networks (3)

(Designed to help students prepare for the Cisco Certified Design Associate Examination 640-863.) Prerequisite or corequisite: CMIT 350. The development of the knowledge and skills necessary for network design using Cisco Systems technologies. Fundamentals of small- and medium-size network design are introduced. Focus is on developing the skills to identify the Cisco products, Local- and wide area network (LAN and WAN) technologies, routing and bridging protocols, and Cisco IOS software features that meet a customer's requirements for performance, capacity, and scalability in small- to medium-sized networks. Projects include designing simple routed LAN, routed WAN, switched LAN, and ATM (asynchronous transfer mode) LAN networks. Students may receive credit for only one of the following courses: CAPP 398C, CMIT 450, or CMIT 499C.

CMIT 480 Designing Security for a Windows Network (3)

Prerequisite: CMIT 320 or CMIT 368. The development of the knowledge and skills necessary to design a security framework for small, medium, and enterprise networks using Windows technologies. Topics include providing secure access to local network users, partners, remote users, and remote offices and between private and public networks. Students may receive credit for only one of the following courses: CMIT 480 or CMIT 480M.

CMIT 486A Internship in Computer Information Technology Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in computer information technology. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer information technology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMIT 486B Internship in Computer Information Technology Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in computer information technology. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer information technology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMIT 491 Advanced UNIX/Linux System Administration (3)

Prerequisite: CMIT 391. A review of DNS (domain name system) servers and the Apache Web server. An introduction to LDAP (lightweight directory access protocol) directory queries and authentication is provided. The administration and configuration of server-side programming tools (such as CGI, mod_perl, PHP, JSP, Jakarta Tomcat, and Java SDK) are demonstrated via extensive lab work. SAMBA, FTP, Telnet, and SQUID proxy servers are configured. SMTP (simple mail transfer protocol) theory is discussed and implemented via sendmail and postfix e-mail systems. E-mail protocols such as IMAP and POP are configured; spam filtering techniques are discussed. Students may receive credit for only one of the following courses: CMIS 490, CMIT 491, or CMIS 498U.

CMIT 499 Special Topics in Computer Technology (1–5)

An inquiry into special topics in computer information technology that reflect the changing field. May be repeated when topics differ.

CMIT 499E Building Scalable Cisco Networks (3)

Prerequisite: CMIT 350. A study of techniques for selecting and configuring Cisco router services in LANs and WANs typically found at medium to large network sites. Focus is on selecting and implementing appropriate Cisco services to build a scalable, routed network. Part of the recommended curriculum for the Cisco Certified Network Professional (CCNP) and Cisco Certified Design Professional (CCDP) certificates is covered.

CMIT 499F Building Cisco Switched Networks (3)

Prerequisite: CMIT 350. A study of concepts and techniques for building networks using multilayer switching technologies over high-speed Ethernet connections. Topics include both routing and switching concepts and cover both Layer 2 and Layer 3 technologies.

Computer Science

Courses in computer science (designated CMSC) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing;
- a major in computer science, computer information technology, computer studies, or information systems management;
- a minor in computing;
- a certificate in Game Development; and
- electives.

A description of the curriculum for the computer science major begins on p. 27. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 24), computer information technology (p. 26), computer studies (p. 29), computing (p. 31), cybersecurity (p. 33), and information systems management (p. 59).

CMSC 101 Introductory Computer Science (3)

A study of fundamental programming concepts and constructs within an abstract (language-independent) framework. Topics include basic and structured data types, variables, and the structure of expressions. Pseudocode is used to explore the syntax and semantics of structured programming statements, functions, and the use of parameters. Programming assignments include the creation, compilation, and execution of computer programs in a modern programming language that implements these abstract concepts. The history of computing and computing ethics are also discussed. Students may receive credit for only one of the following courses: CMIS 102, CMIS 102A, or CMSC 101.

CMSC 130 Computer Science I (3)

(For students majoring in computer science. Taking CMSC 130 and CMSC 230 in consecutive terms is recommended.) Prerequisite: CMSC 101 or equivalent experience. Recommended: CMSC 150. A study of fundamental concepts that underlie object-oriented programming. Topics include the study and use of primitive and object data types and the process of creating well-designed computer programs to solve specified problems. Programming projects in Java are included. Students may receive credit for only one of the following courses: CMIS 141 or CMIS 141A or CMSC 130.

CMSC 150 Introduction to Discrete Structures (3)

Prerequisite or corequisite: MATH 140. A survey of fundamental mathematical concepts involved in computer science. Functions, relations, finite and infinite sets, and propositional logic are explored. Proof techniques presented are those used for modeling and solving problems in computer science. Combinations, permutations, graphs, and trees are introduced, along with selected applications. Students may receive credit for only one of the following courses: CMSC 150 or CMSC 250.

CMSC 230 Computer Science II (3)

(For students majoring in computer science. Taking CMSC 130 and 230 in consecutive terms is recommended.) Prerequisites: CMSC 130 and 150. A study of the fundamental data structures in computer science. Topics include linked lists, stacks, queues, arrays, dictionaries, vectors, and trees. Algorithms that perform sorting and searching are discussed and analyzed. Programming projects in Java are included.

CMSC 311 Computer Organization (3)

Prerequisite: CMSC 130. A study of the organization of memory, input/output, and central processing units, including instruction sets, register transfer operations, control microprogramming, data representation, and arithmetic algorithms. Assembly language and digital logic circuit design are introduced. Students may receive credit for only one of the following courses: CMIS 270, CMIS 310, CMSC 311, or IFSM 310.

CMSC 325 Game Design and Development (3)

Prerequisite: CMSC 230. A project-driven study of the theory and practice of game design and development. Discussion covers critical mathematical concepts and real-time game physics necessary to build realistic graphical 3-D worlds, animate characters, and add special effects to games. Projects include collaborative development of interactive games.

CMSC 330 Advanced Programming Languages (3)

Prerequisite: CMSC 230 or CMSC 305. A comparative study of programming languages. Topics covered include the syntax and semantics of programming languages, and run-time support required for various programming languages. Programming projects using selected languages are required.

CMSC 335 Object-Oriented and Concurrent Programming (3)

Prerequisite: CMSC 230 or CMSC 305. A study of object-oriented and concurrent programming using features of Java. Concepts of object-oriented programming (such as composition, classification, and polymorphism) are explored. Topics include the principles of concurrent programming (such as task synchronization, race conditions, deadlock, and threads). Programming projects are implemented in Java. Students may receive credit for only one of the following courses: CMSC 300 or CMSC 335.

CMSC 411 Computer System Architecture (3)

Prerequisite: CMSC 311. A discussion of input/output processors and techniques, covering their relation to intrasystem communication, including buses and caches. Discussion covers addressing and memory hierarchies, microprogramming, parallelism, and pipelining.

CMSC 412 Operating Systems (3)

Prerequisite: CMSC 311. A study of the fundamental principles underlying modern operating systems. The essential components of a typical operating system and the interactions among them are described. Methods of managing processes and resources in computer systems are discussed in detail. Programming projects that implement parts of an operating system are required.

CMSC 415 UML and Design Patterns (3)

(Designed for software engineers, systems analysts, designers, and programmers.) Prerequisite: CMSC 335. A comprehensive study of fundamental concepts of object-oriented analysis and design focusing on Unified Modeling Language (UML) and its application to the system architectural design using selected patterns as guiding models. Activities include creation of detailed object models, in conjunction with UML views and design from system requirements, using use-case models and proven patterns to refine analysis and design models. Emphasis is on expansion of the analysis into a design that is ready for implementation, with artifacts that are testable, and that exhibits scalability to easily evolve in response to changes in a given problem domain.

CMSC 420 Advanced Data Structures and Analysis (3)

Prerequisite: CMSC 230. A study of data structures (including lists and trees) in terms of their descriptions, properties, and storage allocations. Algorithms are used to manipulate structures. Applications are drawn from the areas of information retrieval, symbolic manipulation, and operating systems.

CMSC 424 Database Design (3)

Prerequisite: CMSC 130. A study of the applicability of the database approach as a mechanism for modeling the real world. Review covers the three popular data models (hierarchical, relational, and network). Permissible structures, integrity constraints, storage strategies, and query facilities are compared. The theoretical foundations of the logic used in designing a database are presented.

CMSC 425 Building Applications for Mobile Devices (3)

Prerequisites: CMSC 311 (or CMIS 310) and 230 (or CMIS 241 or CMIS 242). A hands-on, project-based introduction to the development of applications for wireless devices such as mobile phones. Integrated development environments and tools from leading companies in the industry are used to design, develop, and test wireless solutions for video gaming, wireless messaging, multimedia, and other business applications.

CMSC 430 Theory of Language Translation (3)

Prerequisites: CMSC 330 and programming experience in C or C++. An examination of the formal translation of programming languages, syntax, and semantics. Highlights include evaluation of finite-state grammars and recognizers; context-free parsing techniques such as recursive descent, precedence, LL(K), LR(K), and SLR(K); and improvement and generation of machine-independent code and syntax-directed translation schema. Programming projects that implement parts of a compiler are required.

CMSC 451 Design and Analysis of Computer Algorithms (3)

Prerequisites: CMSC 150 and 230. Presentation of fundamental techniques for designing and analyzing computer algorithms. Basic methods include divide-and-conquer techniques, search and traversal techniques, dynamic programming, greedy methods, and induction.

CMSC 480 Advanced Programming in Java (3)

Prerequisite: CMSC 335. An examination of the principles, techniques, and applications of programming in Java in the Internet environment. Topics include threads, packages, interfaces, and exceptions. Java applets are created and incorporated into Web pages. Visual development tools are reviewed. Students may receive credit for only one of the following courses: CMIS 498J, CMSC 480, or CMSC 498J.

CMSC 486A Internship in Computer Science Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in computer science. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer science and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMSC 486B Internship in Computer Science Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in computer science. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer science and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMSC 495 Current Trends and Projects in Computer Science (3)

(Intended as a final, capstone course to be taken in a student's last 9 credits.) Prerequisites: CMSC 330 and 335. An overview of computer science, with emphasis on integration of concepts, practical application, and critical thinking. Analysis covers innovative and emerging issues in computer science. Projects use techniques and approaches previously studied; they may focus on software design and architecture, systems and application security, mobile applications, database design and implementation, concurrent programming, signal processing, algorithm performance optimization, or current issues. Assignments include working in teams throughout the analysis, design, development, implementation, testing, and documentation phases of the projects.

CMSC 498 Special Topics in Computer Science (1–3)

Prerequisites: Vary according to topic. A seminar on topics in computer science. May be repeated to a maximum of 6 credits when topics differ.

Computer Studies

Courses in computer studies (designated CMST) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing;
- a major in computer studies, computer and information science, computer information technology, graphic communication, or information systems management;
- a minor in computing;
- a certificate in Internet Technologies, Visual Basic Programming, or Web Design; and
- electives.

A description of the curriculum for the computer studies major begins on p. 29. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 24), computer information technology (p. 26), computer science (p. 27), computing (p. 31), cybersecurity (p. 33), and information systems management (p. 59).

CMST 100B Word Processing (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to word processing as one of the many applications of microcomputers. The characteristics of word processing are analyzed. Topics include typical features, as well as costs and trends of available software. Hands-on practice with typical word-processing software is provided. Students may receive credit for only one of the following courses: CAPP 100B, CAPP 103, CMST 100B, or CMST 103.

CMST 100D Presentation Graphics (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to the principles of presentation graphics. Topics include text and analytical charts, free-form graphics and clip art, and animation and slide shows. Hands-on practice with typical presentation graphics software is provided. Students may receive credit for only one of the following courses: CAPP 100D or CMST 100D.

CMST 100E Networks and Communication (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to the use of computer networks to interconnect microcomputers and to the current hardware, software, and communication standards and protocols that make networking possible. Hands-on practice with typical communications software and network configuration is provided. Students may receive credit for only one of the following courses: CAPP 100E or CMST 100E.

CMST 100F Databases (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to database systems, including terminology and principles of database management systems. Focus is on how best to organize, manage, and access stored data; how to protect databases; and how to extract useful information. Hands-on practice with typical database software is provided. Students may receive credit for only one of the following courses: CAPP 100F, CAPP 103, CMST 100F, or CMST 103.

CMST 100G Spreadsheets (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to the use of electronic worksheets to analyze numerical data, including basic terminology, formats, and other applications. Hands-on practice with typical spreadsheet software is provided. Students may receive credit for only one of the following courses: CAPP 100G, CAPP 103, CMST 100G, or CMST 103.

CMST 100J Security (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to computer security. Topics include both physical and software security and the types of computer viruses that afflict modern information systems. Discussion covers the use of the operating system and antiviral software tools to protect, detect, and recover from viral attacks. Hands-on practice in applying these tools is provided. Students may receive credit for only one of the following courses: CAPP 100J or CMST 100J.

CMST 100K Accessing Information via Internet (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to the Internet and the wealth of information it contains. Focus is on practical and efficient means for gaining access to information through the use of browsers on a home computer system and search engines on the Internet. Topics include mechanisms by which the Internet operates, security issues on the Internet, intellectual property right issues, and the ethics of the Internet, as well as other current topics involving the interface between the Internet and the citizen. Students who have already earned credit for CAPP 385, CAPP 386, CMST 385, or CMST 386 cannot earn credit for CMST 100K. Students may receive credit for only one of the following courses: CAPP 100K, CAPP 101C, or CMST 100K.

CMST 100L Web Page Design (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to Web page design and site management. The characteristics of Web page design and navigation structures are analyzed, and typical features of current commercial software are presented. Hands-on practice with typical Web page design and site management software is provided. Students may receive credit for only one of the following courses: CAPP 100L or CMST 100L.

CMST 100M HTML (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to the use of HTML to create basic and advanced World Wide Web-enabled documents. Topics include creating and editing Web pages, placing HTML documents on the Web, designing Web pages with tables, and using frames in Web pages. Assignments include designing and implementing Web pages using HTML. Students may receive credit for only one of the following courses: CAPP 100M, CAPP 101H, or CMST 100M.

CMST 100N Desktop Operating Systems (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to the use and configuration of graphical user interfaces, focusing on Microsoft Windows operating systems. Topics include working with Windows programs, managing files and folders using Windows Explorer, customizing Windows using the Control Panel, using Internet services in Windows, and managing shared files and resources. Students may receive credit for only one of the following courses: CAPP 100N, CAPP 101M, CAPP 101T, or CMST 100N.

CMST 100P Using UNIX/Linux (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to configuring and using UNIX and Linux on microcomputers and workstations. Hands-on experience in configuring the desktop environment of a Linux operating system is provided. Topics include UNIX commands, file management, the X-Window graphical user interface, and window managers such as Gnome and KDE. Students may receive credit for only one of the following courses: CAPP 100P or CMST 100P.

CMST 100Q Personal Digital Assistants (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to personal digital assistants (PDAs). Focus is on the two major operating systems for PDAs: Palm Pilot and Pocket PC. Topics include understanding the functions of PDAs, comparing the two operating systems, using built-in and typical third-party applications, and connecting and exchanging information with desktop computers. Students are encouraged to bring their own PDAs to class. Students may receive credit for only one of the following courses: CMST 100Q or CMST 198Q.

CMST 103 Application Software (3)

An introduction to microcomputers and application (enterprise) software. Hands-on experience with software packages (including word processing, spreadsheets, and databases) is provided. Focus is on concepts, features, and business applications of those facilities. Students who have received credit for CMST 100B, CMST 100F, or CMST 100G may not receive credit for CMST 103. Students may receive credit for only one of the following courses: CAPP 103 or CMST 103.

CMST 303 Advanced Application Software (3)

Prerequisite: CMST 103 or extensive experience with application software including word processing, spreadsheets, and databases. A presentation of application software packages that includes advanced features of word processing, spreadsheets, database management, and electronic information exchange for business applications. Presentation software is introduced. Students may receive credit for only one of the following courses: CAPP 303 or CMST 303.

CMST 306 Introduction to Visual Basic Programming (3)

Prerequisite: CMIS 102 or CMIS 102A. A structured approach to developing programs using the Visual Basic programming language. Hands-on experience in implementing features of this visual interface for program design is provided. Assignments include programming projects in Visual Basic.

CMST 310 Electronic Publishing (3)

Prerequisite: CMST 103 or IFSM 201. An introduction to concepts and methods of electronic (desktop) publishing. Highlights include the design and layout of a publication, the choice of computer hardware and software, the integration of computer graphics, the drafting and editing of a publication, and methods of interfacing with high-level printing equipment to produce a final document. Students may receive credit for only one of the following courses: CAPP 310, CAPP 398B, or CMST 310.

CMST 311 Advanced Electronic Publishing (3)

Prerequisite: CMST 310. A project-oriented study of the advanced concepts and methods of electronic (desktop) publishing. Emphasis in on effective transfer of electronic files to service bureaus and printers. Features essential to multimedia presentations are integrated with techniques for capturing and editing photos to produce business publications. Topics include publishing printed documents on a Web site. Students may receive credit for only one of the following courses: CAPP 311 or CMST 311.

CMST 340 Computer Applications in Management (3)

Prerequisite: CMIS 102, CMIS 102A, CMST 103, or IFSM 201. An overview of computer-based information-system concepts and operations and how these capabilities are applied by management to improve the work processes of business, government, and academic organizations. Topics include management planning at the strategic, tactical, and operational levels necessary to effect continuous improvements. The interchange of electronic information and the application of various computing tools such as spreadsheet programs are introduced. Students may receive credit for only one of the following courses: CAPP 340, CMIS 350, or CMST 340.

CMST 385 Internet and Web Design (3)

Prerequisite: CMIS 102, CMIS 102A, CMST 103, or IFSM 201. A study of HTML and Web page design, including Internet security measures and social, ethical, and legal issues related to the growth of the Internet. Topics include basic principles and protocols of the Internet, configuration and use of graphical Web browsers, application programs such as e-mail and searching and retrieving information on the World Wide Web, and the use of portals. Assignments include designing and publishing a Web page. Students may receive credit for only one of the following courses: CAPP 385 or CMST 385.

CMST 386 Advanced Internet and Web Design (3)

Prerequisite: CMST 385. A study of modern methods for the design of Web sites. Focus is on Web page design, including features such as cascading style sheets and programming using JavaScript and PHP. Discussion covers the movement toward XML and writing XHTML-compliant Web pages. Assignments include publishing World Wide Web Consortium–validated Web pages. Students may receive credit for only one of the following courses: CAPP 386 or CMST 386.

CMST 416 Advanced Visual Basic Programming (3)

Prerequisite: CMST 306. An investigation of advanced Visual Basic programming concepts, tools, and methods. Emphasis is on application design and development. Practical opportunities to design and develop complete applications integrating multiple features of the Visual Basic programming language are provided.

CMST 430 Web Site Management (3)

Prerequisite: CMST 386. An in-depth survey of Web site maintenance for small businesses. Topics include Web tools, including scripting, servers, editors, image manipulation tools, utilities, and traffic analysis. Focus is on Internet security and e-commerce issues. Students may receive credit for only one of the following courses: CAPP 498C or CMST 430.

CMST 450 Web Design with XML (3)

Prerequisite: CMST 386. An in-depth survey of the design and delivery of professional Web content. Focus is on using comprehensive tools and the latest technologies such as XML to enhance the Web presence of a business. Topics include multimedia and interactivity, online commerce, and Internet security issues. Assignments include a comprehensive project. Students may receive credit for only one of the following courses: CAPP 498D or CMST 450.

CMST 460 Web Application Development Using ColdFusion (3)

(Formerly CMST 498F.) Prerequisite: CMST 386. A structured approach to building and maintaining dynamic and interactive Web applications. Emphasis is on application design and development. Hands-on practice in using ColdFusion is provided. Students may receive credit for only one of the following courses: CMST 460 or CMST 498F.

CMST 486A Internship in Computer Studies Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in computer studies. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer studies and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMST 486B Internship in Computer Studies Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in computer studies. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer studies and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMST 498P Web Development for ASP (3)

The development of the knowledge and skills necessary to create and maintain active server pages (ASP) Web applications in an integrated development environment. Practical experience using Web forms to create data-bound applications with custom controls is provided. Discussion covers data validation, DataGrid usage, and advanced Web form controls. Information security issues are also introduced.

Cooperative Education

Cooperative Education (Co-op) extends education beyond the traditional classroom by integrating career-related work opportunities with the student's field of study.

Cooperative Education courses carry the designator of the appropriate academic discipline and the number 486A or 486B. Co-op courses may not be applied toward any general education requirements or some majors and minors. Students are responsible for consulting their advisor about applying Co-op credit to their degree program.

More details and contact information for Cooperative Education are available on p. 233. Details are also available on the Web at *www.umuc.edu/coop.*

Criminology/ Criminal Justice

Courses in criminology/criminal justice (designated CCJS) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences (**Note:** Only CCJS 105, 350, 360, 432, 453, 454, and 461 apply);
- a major in criminal justice, cybersecurity, homeland security, investigative forensics, legal studies, or social science;
- a minor in criminal justice, forensics, or sociology;
- a certificate in Criminal Justice Intelligence or Fraud Investigation; and
- electives.

Students who previously received credit for courses in the disciplines of criminology (courses designated CRIM) or criminal justice (courses designated CJUS) may not receive credit for comparable courses designated CCJS.

A description of the curriculum for the criminal justice major and minor begins on p. 31. Descriptions of related curricula may be found on the following pages: forensics (p. 45), homeland security (p. 53), investigative forensics (p. 61), legal studies (p. 64), and sociology (p. 76).

CCJS 100 Introduction to Criminal Justice (3)

(Fulfills the general education requirement in behavioral and social sciences.) An introduction to the administration of criminal justice in a democratic society, emphasizing the history and theories of law enforcement. Discussion covers the principles of organization and administration in law enforcement, including specific activities and functions (such as research and planning, public relations, personnel and training, inspection and control, and formulation and direction of policy). Students may receive credit for only one of the following courses: CCJS 100 or CJUS 100.

CCJS 105 Introduction to Criminology (3)

(Fulfills the general education requirement in behavioral and social sciences.) An overview of criminal behavior and the methods of studying it. Topics include causation; typologies of criminal acts and offenders; the practices and effects of punishments, correction, and incapacitation; and the prevention of crime. Students may receive credit for only one of the following courses: CCJS 105 or CRIM 220.

CCJS 230 Criminal Law in Action (3)

Recommended: CCJS 100 or CCJS 105. An exploration of law as a method of social control. The nature, sources, and types of criminal law are studied in relation to its history and theories. Topics include behavioral and legal aspects of criminal acts and the classification and analysis of selected criminal offenses. Students may receive credit for only one of the following courses: CCJS 230 or CJUS 230.

CCJS 234 Criminal Procedure and Evidence (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. A study of the general principles and theories of criminal procedure. Topics include due process, arrest, search and seizure, and the evaluation of evidence and proof. Recent developments in the field are discussed. Students may receive credit for only one of the following courses: CCJS 234, CJUS 234, LGST 320, or PLGL 320.

CCJS 320 Introduction to Criminalistics (3)

Prerequisite: CCJS 100 or CCJS 105. An introduction to modern methods used in detecting, investigating, and solving crimes. The practical analysis of evidence in a criminal investigation laboratory is covered. Topics include photography, fingerprints, and other impressions; ballistics, documents and handwriting, glass, and hair; drug analysis; and lie detection. Students may receive credit for only one of the following courses: CCJS 320 or CJUS 320.

CCJS 331 Contemporary Legal Policy Issues (3)

Prerequisite: CCJS 100 or CCJS 105. Thorough examination of selected topics: criminal responsibility, alternative sociolegal policies on deviance, law-enforcement procedures for civil law and similar legal problems, admissibility of evidence, and the indigent's right to counsel. Students may receive credit for only one of the following courses: CCJS 331 or CJUS 330.

CCJS 340 Law-Enforcement Administration (3)

Prerequisite: CCJS 100 or CCJS 105. An introduction to concepts of organization and management as they relate to law enforcement. Topics include principles of structure, process, policy and procedure, communication and authority, division of work and organizational controls, the human element in the organization, and informal interaction in the context of bureaucracy. Students may receive credit for only one of the following courses: CCJS 340 or CJUS 340.

CCJS 341 Criminal Investigation (3)

An introduction to the concepts and methodologies used by criminal investigators to prevent and suppress crime and aid in the apprehension of criminal suspects. Topics include crime scene search and recording; collection and preservation of physical evidence; use of scientific aids, modus operandi, and sources of information; interview and interrogation; follow-up; and case preparation. Emphasis is on leadership and management to enhance investigative efforts.

CCJS 345 Introduction to Security Management (3)

(Formerly CCJS 445.) Recommended: CCJS 100 or CCJS 105. A study of the concepts, principles, and methods of organizing and administering security management and loss-prevention activities in industry, business, and government. Emphasis is on both private and governmental protection of assets, personnel, and facilities. Students may receive credit for only one of the following courses: CCJS 345, CCJS 445, or CCJS 498G.

CCJS 350 Juvenile Delinquency (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. An examination of juvenile delinquency in relation to the general problem of crime. Topics include factors underlying juvenile delinquency, prevention of criminal acts by youths, and the treatment of delinquents. Students may receive credit for only one of the following courses: CCJS 350 or CRIM 450.

CCJS 351 Issues in Criminal Justice (6)

Prerequisite: CCJS 100 or CCJS 105. An interdisciplinary exploration of criminal justice. Topics include theories of the causes of crime; requisites of criminal liability; defenses; the rights guaranteed by the Fourth, Fifth, and Sixth Amendments to the U.S. Constitution; undercover investigation; special issues in juvenile justice; and the highly controversial issues of capital punishment and victimization. Students may receive credit for only one of the following courses: BEHS 351 or CCJS 351.

CCJS 352 Drugs and Crime (3)

Prerequisite: CCJS 100 or CCJS 105. An analysis of the role of criminal justice in controlling the use and abuse of drugs. Students may receive credit for only one of the following courses: CCJS 352 or CJUS 352.

CCJS 357 Industrial and Retail Security Administration (3)

Recommended: CCJS 100 or CCJS 105. An exploration of the origins of contemporary private security systems. The organization and management of protective units (industrial and retail) are examined. Students may receive credit for only one of the following courses: CCJS 357 or CJUS 360.

CCJS 360 Victimology (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. An overview of the history and theory of victimology in which patterns of victimization are analyzed, with emphasis on types of victims and of crimes. The interaction between victims of crime and the system of criminal justice is considered in terms of the role of the victim and the services that the victim is offered. Students may receive credit for only one of the following courses: CCJS 360 or CRIM 360.

CCJS 370 Race, Crime, and Criminal Justice (3)

Prerequisite: CCJS 100 or CCJS 105. A historical and theoretical study of the role and treatment of racial/ethnic minorities in the criminal justice system.

CCJS 380 Ethical Behavior in Criminal Justice (3)

A survey of basic principles relating to the standards for ethical behavior that guide criminal justice professionals in different roles and responsibilities. Rules, laws, and codes of conduct are explored as a foundation for discussing individual ethical responsibilities.

CCJS 398D The Death Penalty (3)

Prerequisite: CCJS 100 or CCJS 105. An overview of the history of the death penalty as part of the criminal justice system. Topics include the theory and legal foundation behind use of the death penalty, current practices, and its application. Arguments for and against the death penalty in the United States are examined. International law and American exceptionalism are also explored.

CCJS 400 Criminal Courts (3)

Prerequisite: CCJS 100 or CCJS 105. An examination of criminal courts in the United States at all levels. Topics include the roles of judges, prosecutors, defenders, clerks, and court administrators and the nature of their jobs; problems of administration, as well as those facing courts and prosecutors; and reform. Students may receive credit for only one of the following courses: CCJS 400 or CJUS 400.

CCJS 411 History of Intelligence and the U.S. National Intelligence Community (3)

A study of the role that intelligence gathering has played throughout history. Focus is on the U.S. national intelligence agencies and their individual and collective responsibilities with regard to intelligence. Topics include how and why the structure of the intelligence community failed in the days before the terrorist attacks of September 11, 2001, and whether the problems have been fixed.

CCJS 412 The Intelligence Cycle (3)

An exploration of the collection, evaluation, collation, analysis, and dissemination processes in the intelligence cycle. A wide array of intelligence software tools are introduced. Topics include developing intelligence products.

CCJS 413 Legal and Ethical Issues in Intelligence (3)

An examination of ethical issues related to intelligence collection, the analytical process, and the use of force. Laws affecting the intelligence field are examined. Discussion also explores the strain of balancing the need for secrecy regarding intelligence activities with the need for oversight and the public's access to information.

CCJS 414 Intelligence Analysis (3)

An exploration of the U.S. intelligence process and the use of intelligence throughout the criminal justice system. Information is collected and evaluated, and reports are created within realistic scenarios. Hands-on practice in using innovative software and analyst tools to conduct link analysis is provided.

CCJS 415 Advanced Intelligence Analysis (3)

An advanced examination of intelligence analysis for national, homeland security, and law enforcement applications. The causes of analytical failures (such as those that resulted in Pearl Harbor and 9/11) are explored. Practice in using critical thinking techniques—including target-centric modeling, decomposition of complex problems, hypothesis testing, and structuring an analysis—is provided. Discussion also covers the evaluation of sources of information, the influence of group dynamics and bias, effective communication of analytical results, and data mining and visualization techniques.

CCJS 420 Medical and Legal Investigations of Death (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 320. An intensive look at medical and legal investigations into causes of death. Topics include the difference between the medical (or pathological) and legal (or criminal) components of investigations into causes of death, medical and investigative terminology, and the impact of ethics on prosecutions and convictions. Case studies illustrate practical applications of various forms of forensic styles and parameters.

CCJS 421 Computer Forensics (3)

Prerequisites: CCJS 100 (or CCJS 105) and IFSM 201. A study of the investigation of computer crime from both a legal and technical perspective. Focus is on acquiring the skills to efficiently and effectively collect all of the available data in connection with a computer crime. Topics include developing and executing investigative and data collection plans, collecting data from a variety of computer and network hardware components, conducting appropriate analyses, and writing forensic reports. Intrusion detection techniques are also examined. Case studies are used to develop an understanding of what happens when computer systems are compromised.

CCJS 425 Forensics Lab (3)

Prerequisites: CCJS 100 (or CCJS 105) and 320. A hands-on investigation of the laboratory methods used in detecting, investigating, and solving crimes. The practical analysis of evidence in a criminal investigation laboratory is covered. Topics include fingerprints and other impressions, documents and handwriting, footwear impressions, blood pattern analysis, and forensic anthropology.

CCJS 430 Legal and Ethical Issues in Security Management (3)

Recommended: CCJS 100 (or CCJS 105) and 345 (or CCJS 445). An examination of current problems facing the security professional. Topics include legal liabilities, compliance issues, and ethical standards of organizations. Students may receive credit for only one of the following courses: CCJS 430 or CCJS 498F.

CCJS 431 Legal and Ethical Issues in Corrections (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 497. An examination of problems associated with managing staff and inmates in correctional communities. Topics include constitutional rights of inmates, inmate litigation and case law, workplace ethics and principles, and employee rights and protections.

CCJS 432 Law of Corrections (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 497. A review of the law of criminal corrections, from sentencing to final release or release on parole. Topics include probation, punishments, special treatments for special offenders, parole and pardon, and the prisoner's civil rights. Students may receive credit for only one of the following courses: CCJS 432 or CRIM 432.

CCJS 433 Communicating in the Correctional Culture (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 497. A study of effective management and communicating models applicable to correctional communities. Correctional climate and culture, information flow, inter- and intra-personal relationships are major themes. Topics include formal and informal communication; verbal and nonverbal cues; and dissemination of rules, policies, and procedures.

CCJS 434 Reentry and Transition Issues in Corrections (3)

An examination of current programmatic and offender supervision philosophies within community correction programs, jail and prison reentry programs, parole and probation agencies, and pretrial supervision environments. Discussion covers comprehensive case management approaches intended to assist offenders while they are supervised in the community. Topics include the unique reentry characteristics and social service needs facing criminal offenders when they are close to release.

CCJS 453 White-Collar and Organized Crime (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. An overview of the definition, detection, prosecution, sentencing, and impact of white-collar and organized crime. Special consideration is given to the role of federal law and enforcement practices.

CCJS 454 Contemporary Criminological Theory (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. A brief historical overview of criminological theory. Topics include deviance, labeling, and typologies, as well as the most recent research on criminalistic subcultures and on middle-class delinquency. Various recent proposals for decriminalization are discussed. Students may receive credit for only one of the following courses: CCJS 454 or CRIM 454.

CCJS 455 Theory and Principles of Executive Protection (3)

Prerequisite: CCJS 100 or CCJS 105. A study of concepts, principles, and methods of organizing and administering a successful protective security program for corporate executives, professional athletes, entertainment celebrities, and political personalities and families who are vulnerable and at risk for harassment, stalking, assault, kidnapping, or assassination at home, in the work environment, or while traveling. The philosophy and principles of protection and the use of both physical security techniques and electronic countermeasures are examined.

CCJS 461 Psychology of Criminal Behavior (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. An overview of the biological, environmental, and psychological factors that underlie criminal behavior. Characteristics of criminal behavior are reviewed. The influence of biophysiology and stress on the commission of various crimes is examined. Topics include patterns of maladjustment, disorders of the personality, psychoses, the connection between aggression and violent crime, sexual deviations and crimes that are sexually motivated, and the abuse of alcohol and drugs. Students may receive credit for only one of the following courses: CCJS 461 or CRIM 455.

CCJS 462 Protection of Business Assets (3)

Recommended: CCJS 100 (or CCJS 105) and 345 (or CCJS 445). An examination of the application of security knowledge and techniques for the protection of business assets. Topics include security planning methods, risk analysis, security surveys, and decision making for the development of security programs and countermeasures. Students may receive credit for only one of the following courses: CCJS 462 or CCJS 498H.

CCJS 463 Security: A Management Perspective (3)

Recommended: CCJS 100 (or CCJS 105) and 345 (or CCJS 445). An examination of concepts, strategies, and skills needed to manage security-related operations and activities. Focus is on employee/employer security. Students may receive credit for only one of the following courses: CCJS 463 or CCJS 498K.

CCJS 470 Leadership and Time Management (4)

(Designed to enhance the skills of mid- to senior-level criminal justice practitioners.) A study of leadership and time management and their application within the criminal justice system. Discussion covers major leadership theories, including trait, behavioral, and situational power/influence (motivation). Topics also include time-management techniques, such as minimizing "time robbers," personal planning, multitasking, holding effective meetings, and delegating responsibility.

CCJS 472 Organizational Problem-Solving (4)

A study of human behavior and interactions as they relate to identifying and solving problems of employee efficiency and effectiveness within the criminal justice system. Topics include methods of distinguishing symptoms from problems, prioritizing, implementation and sustainment techniques, ethics, and decision making. Discussion also covers diversity, cynicism, personality traits, teamwork, groupthink, communication, and relationship building.

CCJS 474 Strategic Planning for Managers (4)

A study of strategic planning in the field of criminal justice, including various planning styles and the effect of the dynamic of change on the planning process. Discussion explores how to identify subtle changes with an organization, successfully implement change, and recover from efforts that fail. Topics also include techniques to minimize employee resistance.

CCJS 476 Management Efficiency and Effectiveness (4)

An in-depth analysis of efficiency and effectiveness in criminal justice departments. Emphasis is on sustainment strategies, task alignment, waste and reallocation techniques, and report writing. Topics include reasons why programs fail, methodologies of evaluation, performance management, tracking and measuring, establishing goals and objectives, and distinguishing outputs and outcomes. Discussion also covers how to perform a needs assessment for an organization, develop an implementation plan, and identify resources. Assignments include researching and analyzing examples of efficiency and effectiveness within one's own organization.

CCJS 486A Internship in Criminal Justice Through Co-op (3)

Prerequisites: CCJS 100 or CCJS 105, 9 credits in criminal justice, and formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in criminal justice. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to criminal justice and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CCJS 486B Internship in Criminal Justice Through Co-op (6)

Prerequisites: CCJS 100 or CCJS 105; 9 credits in criminal justice; and formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in criminal justice. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to criminal justice and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CCJS 491 Institutional Security (3)

Recommended: CCJS 100 (or CCJS 105) and 345 (or CCJS 445). A survey of the security needs, methods, and technology of military, medical, academic, and other professional institutions. The integration of security concerns with other aspects of management is examined. Students may receive credit for only one of the following courses: CCJS 491 or CCJS 498E.

CCJS 496 Cyber Crime and Security (3)

Prerequisites: CCJS 100 (or CCJS 105) and IFSM 201. An examination of crimes involving the use of computers. Topics include federal and state laws and investigative and preventive methods used to secure computers. Case studies emphasize security. Students may receive credit for only one of the following courses: CCJS 496 or CCJS 498C.

CCJS 497 Correctional Administration (3)

Prerequisite: CCJS 100 or CCJS 105. An introduction to concepts of organization and management as they relate to the field of corrections. Topics include the history of corrections, institutional structure and classification, policy and procedures, communication and authority, division of work, inmate discipline and due process, organizational culture, security, technology changes, and relationships with other components of the criminal justice system. Students may receive credit for only one of the following courses: CCJS 497 or CCJS 498D.

CCJS 498B Forensics and Psychology (1)

A survey of psychological research and theory dealing with behavior in the criminal trial process. Topics include jury selection, criminal profiling, eyewitness testimony, prediction of violent behavior, and mental competency of the accused. Students may receive credit for only one of the following courses: CCJS 498B or PSYC 309E.

CCJS 498J Criminal Justice and the Media (1)

An in-depth analysis of the effect of the news media on crime levels and public fear of crime. The relationship between media coverage and public perception is explored as well as the media's role in crime prevention.

Cybersecurity

Courses in cybersecurity (designated CSIA) may be applied as appropriate (according to individual program requirements) toward

- a major in cybersecurity, computer information technology, computer studies, emergency management, homeland security, or information systems management;
- a minor in computing;
- a certificate in Information Assurance, Information Management, or Project Management for IT Professionals;
- certain UMUC graduate degree programs, where recognized as equivalent coursework; and
- electives.

A description of the curriculum for the cybersecurity major begins on p. 33. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 24), computer information technology (p. 26), computer science (p. 27), computer studies (p. 29), computing (p. 31), and information systems management (p. 59).

CSIA 301 Information System Architecture (3)

Prerequisite: CMIS 102. A comprehensive introduction to the architectural implications of protecting business information and the systems that support business processes. Emphasis is on the inter-relationships between system architecture, system hardware, system software, and application software, as applied to both physical and cyber-based assets.

CSIA 302 Telecommunications in Information Systems (3)

(Formerly IFSM 450.) Prerequisite: CSIA 301 or IFSM 300. An analysis of technical and managerial perspectives on basic concepts and applications in telecommunication systems. An overview of data communication protocols and standards; local area networks, wide area networks, and internetworks; and trends in telecommunications is provided. The implications of the regulatory environment and communications standards on transmission of voice, data, and image are examined. Students may receive credit for only one of the following courses: CSIA 302, CMIS 370, CMSC 370, or IFSM 450.

CSIA 303 Foundations of Information System Security (3)

(Formerly IFSM 430.) Prerequisite: CSIA 301 or IFSM 300. A survey of various aspects of establishing and maintaining a practical cyber and information security program designed to protect key assets. Topics include physical and logical security mechanisms; security issues involving databases, telecommunication systems, and software; and techniques used to assess risks and discover abuses of systems. Students may receive credit for only one of the following courses: CSIA 303 or IFSM 430.

CSIA 412 Senior System Managers and Security (3)

Prerequisite: CSIA 303. A study of information assurance (IA) policy planning in an organizational context. Discussion covers the impact of current legislation and government regulations directing the focus of policy formulation. Key analysis procedures, such as security requirements analysis and risk assessments, are examined to determine their role in policy formation. The role of the senior system manager in determining approval to operate accreditation, compliance, and acquisition activities is explored in detail. Projects include generating an information security program for an organization.

CSIA 413 System Administrators and Information Security (3)

Prerequisite: CSIA 303. A study of the information security (IS) performance standards for IS system administrators. Topics include contents of a security policy, general procedures related to secure use of data, general awareness, training and education plans, and general countermeasures and safeguards, including access controls, auditing, management oversight, and configuration management.

CSIA 454 Information System Security Mechanisms (3)

(Formerly IFSM 454.) Prerequisite: CSIA 302. Recommended: CSIA 303. A hands-on technical examination of areas of security—such as authentication, authorization and access control, confidentiality, availability, data integrity (encryption), and nonrepudiation—that are vital to any organization. Topics include firewalls, intrusion detection systems (IDSs), vulnerability software, public key infrastructure (PKI), IP security (IPSec), virtual private networks (VPNs), and Web server lockdown procedures. Review also covers the types of attacks. Students may receive credit for only one of the following courses: CSIA 454 or IFSM 454.

CSIA 457 Cyber Crime and Cyber Terrorism (3)

(Formerly IFSM 457 and 497C.) Prerequisite: CSIA 303. An overview of cyber terrorism, including low-level threats (attacks that vandalize Web pages or launch denial of service), middle-tier threats (online fraud and industrial espionage by companies, organized crime, and nation states), and high-end threats from nation states and terrorist groups. Socioeconomic motivations and the "hacker mentality" are explored. Review also covers common network and security loopholes, the concept of social engineering and its impact on IT security, existing government regulations, and the National IT Security Plan. Students may receive credit for only one of the following courses: CSIA 457, IFSM 457, or IFSM 497C.

CSIA 459 Security Issues and Emerging Technologies (3)

(Formerly IFSM 459.) Prerequisite: CSIA 302. Recommended: CSIA 303. A detailed overview of various emerging network technologies such as wireless networks based on IEEE 802.11 standards, Mobile Ad Hoc Networks (MANET), and wireless packet data networks like GPRS and CDMA 2000. Discussion covers the various applications based on these technologies (such as wireless and mobile Internet access, voice over IP, location-based services, etc.) and the security issues involved in supporting these applications. Existing solutions and mechanisms for addressing the security requirements for these applications are examined, and the impact of the solutions on the quality of service is analyzed. The emerging security standards and best practices for these new technologies are also described, along with their salient strengths and weaknesses. Students may receive credit for only one of the following courses: CSIA 459 or IFSM 459.

CSIA 485 Trends and Projects in Cybersecurity and Information Assurance (3)

Prerequisites: CSIA 412 and 413. To be taken in the last 15 credits of coursework. A study of cybersecurity and information assurance that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in cybersecurity and information assurance are considered.

CSIA 486A Internship in Cybersecurity Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in cybersecurity. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to cybersecurity and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CSIA 486B Internship in Cybersecurity Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in cybersecurity. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to cybersecurity and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CSIA 510 Cyberspace and Cybersecurity (6)

(For cybersecurity and information assurance majors only. May also be applied to the Master of Science in cybersecurity at UMUC as equivalent to CSEC 610, if completed with a grade of B or better.) Prerequisites: 24 credits of coursework in the major, including CSIA 485 or IFSM 485, and a minimum GPA of 3.0 in the major at UMUC. A study of the fundamentals in cyberspace and cybersecurity. Topics include cyber architecture, cyber services, protocols, algorithms, hardware components, software components, programming languages, various cybersecurity mechanisms, business continuity planning, security management practices, security architecture, operations security, physical security, cyber terrorism, and national security.

Economics

Courses in economics (designated ECON) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences;
- a major in finance, global business and public policy, homeland security, or social science;
- a minor in economics;
- a certificate in Financial Management;
- related requirements for most business-related majors and minors; and
- electives.

A description of the curriculum for the economics minor begins on p. 35. Descriptions of related majors may be found on the following pages: finance (p. 41), global business and public policy (p. 47), homeland security (p. 53), and social science (p. 74).

ECON 201 Principles of Macroeconomics (3)

An introduction to the problems of unemployment, inflation, and economic growth. Emphasis is on the roles of monetary policy and fiscal policy in determining macroeconomic policy. The efficacy of controlling wages and prices is analyzed. Students may receive credit for only one of the following courses: ECON 201 or ECON 205.

ECON 203 Principles of Microeconomics (3)

Analysis of the principles underlying the behavior of individual consumers and business firms. Topics include problems of international trade and finance, distribution of income, policies for eliminating poverty and discrimination, problems of environmental pollution, and effects of various market structures on economic activity.

ECON 301 Current Issues in American Economic Policy (3)

Prerequisites: ECON 201 and 203. Analysis of current economic problems and public policies. Topics include market power, federal budget and tax policy, governmental regulation, inflation, unemployment, poverty and distribution of income, and environmental issues.

ECON 305 Intermediate Macroeconomic Theory and Policy (3)

Prerequisite: ECON 201. Analysis of forces that determine a nation's income, employment, and price levels. Topics include consumption, investment, inflation, and governmental fiscal and monetary policy. Students may receive credit for only one of the following courses: ECON 305, ECON 403, or ECON 405.

ECON 306 Intermediate Microeconomic Theory (3)

Prerequisite: ECON 203. Analysis of the principles underlying the behavior of individual consumers and business firms. Theories of marketing systems, distribution, and the roles of externalities are covered. Students may receive credit for only one of the following courses: ECON 306 or ECON 403.

ECON 380 Comparative Economic Systems (3)

Prerequisites: ECON 201 and 203. A comparative analysis of the theory and practice of various types of economic systems, especially the economic systems of the United States, the former Soviet Union, the People's Republic of China, Western and Eastern Europe, and less-developed countries.

ECON 381 Environmental Economics (3)

Prerequisite: ECON 201. Application of economic theory to problems of environmental quality and management. The theory behind common-property resources, economic externalities, alternative pollution-control measures, and limits to economic growth is discussed.

ECON 422 Quantitative Methods in Economics I (3)

Prerequisites: ECON 201 and 203 and STAT 230. A study of the interaction between problems of economics and the assumptions of statistical theory. Formulation, estimation, and testing of economic models (including theory of identification, techniques of single-variable and multiple-variable regression, and issues of inference) are explained. Assignments include independent work relating the material in the course to an economic problem chosen by the student.

ECON 425 Mathematical Economics (3)

Prerequisites: ECON 201 and 203 and MATH 220. An explanation of the simpler aspects of mathematical economics. The types of calculus and algebra that are required for economic analysis are presented.

ECON 430 Money and Banking (3)

Prerequisites: ECON 201 and 203. An examination of the structure of financial institutions and their role in providing money and near-money. Institutions, processes, and correlations analyzed include the functions of the Federal Reserve System, the techniques of central banks, the control of the supply of financial assets as a mechanism of stabilization policy, and the relationship of money and credit to economic activity and prices. Students may receive credit for only one of the following courses: ECON 430 or ECON 431.

ECON 440 International Economics (3)

Prerequisites: ECON 201 and 203. A description of international trade and an analysis of international transactions, exchange rates, and balance of payments. Policies of protection, devaluation, and exchange-rate stabilization and their consequences are also analyzed. Students may receive credit for only one of the following courses: BEHS 440, ECON 440, or ECON 441.

ECON 450 Introduction to Public-Sector Economics (3)

Prerequisites: ECON 201 and 203. A study of public finance that examines the roles of federal, state, and local governments in meeting the demands of the public. Analysis covers theories of taxation, public expenditures, governmental budgeting, benefit/cost analysis, and redistribution of income, as well as their applications in public policy. Students may receive credit for only one of the following courses: ECON 450 or ECON 454.

ECON 490 Survey of Urban Economic Problems and Policies (3)

Prerequisites: ECON 201 and 203. An introduction to the study of urban economics by means of examining issues in current policy. Topics may include urban renewal, economic development in ghettos, problems concerning transportation, the development of new towns, and problems concerning provision of services (such as education and police protection).

Educational Principles

Courses in educational principles (designated EDCP) do not apply toward teacher-certification requirements.

Lower-level courses are intended to help students learn how to make the most of their college careers. They are recommended for students who have been away from school or who need to improve their academic skills.

EDCP 101/101X and 103/103X do not fulfill the general education requirement in communications; they may be used as elective credit only.

Other courses designed to help students succeed in school or on the job are included under career planning (courses designated CAPL) and library skills and information literacy (courses designated LIBS).

EDCP 100 Principles and Strategies of Successful Learning (3)

An introduction to knowledge and strategies designed to promote success in the university environment. Focus is on developing the study, interpersonal, and self-management skills and attitudes needed to achieve academic objectives. Topics include the university's mission, resources, and requirements. A series of self-assessments serve as tools to identify values and goals for individual life planning and educational success.

EDCP 103 Fundamentals of Writing and Grammar (3)

(Does not fulfill the general education requirement in communications. Recommended as preparation for WRTG 101 or upper-level writing courses.) A review of basic writing skills. Topics include parts of speech; proper use of subordinate clauses, independent clauses, and phrases; the writing process; strategies for developing academic paragraphs and essays; and strategies for developing writing and editing skills in grammar, punctuation, and mechanics. Frequent opportunities to practice and refine skills are provided. Students may receive credit for only one of the following courses: EDCP 103, EDCP 103X, or ENGL 100.

Education: Teacher Preparation

The course in education: teacher preparation (designated EDTP) may be applied only as an elective to the bachelor's degree. It is designed to articulate with UMUC's Master of Arts in Teaching (MAT) and is available only to majors consistent with the areas in which the MAT offers eligibility for Maryland state teacher certification.

EDTP 500 Professional Fundamentals of Teaching and Learning (6)

(Available to majors in accounting, biotechnology, computer science, computer and information science, cybersecurity, environmental management, English, finance, history, and social science, consistent with the areas in which UMUC's Master of Arts in Teaching offers eligibility for Maryland state teacher certification. May also be applied to the MAT program at UMUC as equivalent to EDTP 600, if completed with a grade of B or better.) Prerequisites: 24 credits of major coursework and a minimum GPA of 3.0 in the major. Preparation for effective entry into the classroom as a teacher. Topics include teaching in the contemporary school; human development; approaches to learning, diversity, and collaboration beyond the classroom; learners with exceptional needs; curriculum, instruction, and assessment; teaching in the content area; and synthesis and application. Course materials and assignments focus on documents created and/or typically utilized by school systems and incorporate current school district initiatives.

Emergency Management

Courses in emergency management (designated EMGT) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in emergency management;
- a major in homeland security; and
- electives.

A description of the curriculum for the emergency management major and minor begins on p. 35. Descriptions of related curricula may be found on the following pages: cybersecurity (p. 33) and homeland security (p. 53).

EMGT 302 Concepts of Emergency Management (3)

An introduction to emergency management at the global, national, regional, state, and local levels. Topics include preparedness, mitigation, response, and recovery. The history of emergency management is reviewed, and its future in government and industry is discussed.

EMGT 304 Emergency Response Preparedness and Planning (3)

A study of the planning process and format and response procedures for disasters and emergency events. Topics include risk assessment, modeling, hazard analysis, vulnerability assessment, and response capability assessment. Discussion also covers the evaluation of plans and the use of exercises to improve and implement plans.

EMGT 306 Political and Policy Issues in Emergency Management (3)

Prerequisite: EMGT 302 or EMGT 304. An examination of the legal and regulatory principles, policies, and issues that affect emergency management. Emphasis is on how emergency management policy and legislation is developed and maintained on the international, national, regional, state, and local levels.

EMGT 308 Exercise and Evaluation Programs (3)

Prerequisites: EMGT 302 (or EMGT 304) and 306. An examination of the role of disaster exercises in emergency management or business crisis management programs. Focus is on designing, conducting, and evaluating disaster exercises. Topics include the current federal focus on both response and intelligence exercises. Best practices are used to understand the application of "lessons learned" and after-action reports to support continuous improvement.

EMGT 310 Continuity of Operations Planning and Implementation (3)

An exploration of the process for developing, implementing, exercising, and evaluating continuity of operations for both government and industry. Emphasis is on being able to continue to supply services to constituents and customers while supporting staff and initiating recovery operations.

EMGT 312 Social Dimensions of Disaster (3)

Prerequisite: EMGT 302 or EMGT 304. An examination of the response of the public and individuals to disaster-related issues such as disaster warnings, evacuations, relocations, civil unrest, loss of family and property, and recovery activities. Emphasis is on preparing the community through effective programs and public information. Discussion also covers the impact of disasters on response organizations and personnel.

EMGT 404 Planning and Response for Catastrophic Disasters (3)

Prerequisites: EMGT 302 (or EMGT 304) and 306. An examination of the preparation for and the response to disasters beyond the capability of the available resources from geographical, international, national, or local perspectives. Recent case studies are used to determine the characteristics of a catastrophic disaster; the special issues of response and recovery; and preparation issues on an international, national, and local levels.

EMGT 486A Internship in Emergency Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in emergency management. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to emergency management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

EMGT 486B Internship in Emergency Management Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in emergency management. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to emergency management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

English

Courses in English (designated ENGL) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in English or humanities; and
- electives.

A description of the curriculum for the English major and minor begins on p. 37. A description of the curriculum for the humanities major and minor begins on p. 55.

ENGL 201 Western Literature from the Beginnings to the Renaissance (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A survey of classic writings from Greek, biblical, Roman, and medieval civilizations. Literary forms and the ways the works reflect the values of their cultures are discussed. Readings may include selections from the Bible and the writings of Homer, Sophocles, Virgil, Dante, and Chaucer. Selections may vary each semester.

ENGL 205 Introduction to Shakespeare (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of representative Shakespearean plays from each genre (comedy, history, tragedy, and romance).

ENGL 212 English Literature: 1800 to the Present (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A survey of the major literary movements of the 19th and 20th centuries, from Romantic to Victorian to Modern. Authors studied may include Wordsworth, Keats, the Brontës, Tennyson, Browning, Yeats, Joyce, and Woolf.

ENGL 240 Introduction to Fiction, Poetry, and Drama (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An introduction to fiction, poetry, drama, film, and the literary essay, with an emphasis on developing critical reading and writing skills. Study may be organized either by genre or by theme. Writers covered vary from term to term. Films may be included. Students may receive credit for only one of the following courses: ENGL 240 or ENGL 340.

ENGL 294 Introduction to Creative Writing (3)

(Fulfills the general education requirements in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An introductory survey and practical study of key areas of creative writing: formal poetry, free verse, creative nonfiction, short story, and drama or screenplay. Emphasis is on reading and thinking critically and analytically from a writer's perspective as a means to better understand the craft. Discussion may cover publishing. Peer review of manuscripts may be included.

ENGL 303 Critical Approaches to Literature (3)

(Fulfills the general education requirement in communications. Designed as a foundation for other upper-level literature courses.) Prerequisite: WRTG 101/101X or ENGL 101/101X. A study of the techniques of literary analysis, emphasizing close reading of texts. The goal is to better understand and appreciate literature and to be able to formulate concepts and express them in well-written, coherent prose.

ENGL 310 Medieval and Renaissance British Literature (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An exploration of the cultural attitudes and values that separate the Middle Ages from the Renaissance, highlighting the changing role and purpose of the writer. Major works and authors may include *Beowulf, Sir Gawain and the Green Knight,* Chaucer, Spenser, Marlowe, and Shakespeare.

ENGL 311 17th- and 18th-Century British Literature (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A study of the culture of 17th- and 18th-century Britain seen through detailed study of selected major texts. Readings cover drama, poetry, political writings, and early novels by men and women. Authors may include Donne, Milton, Jonson, Swift, Pope, Montagu, and Wollstonecraft.

ENGL 312 Romantic to Modern British Literature (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A study of representative authors and works in British literature from the early 19th century to the present, with emphasis on the novel. Some poetry and drama are also covered. The works of representative writers (such as Jane Austen, Charles Dickens, Thomas Hardy, P. D. James, and others) are explored.

ENGL 333 Business and Leadership in Literature (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An exploration of ethical dilemmas in business, leadership, and the workplace as described in various literary works. Topics include business success and the "American Dream," ethics in the workplace, leadership and management strategies, interpersonal conflict, occupation and personal identity, diversity issues, and power relationships. Discussion and analysis of short novels and stories, poems, plays, and essays by significant authors follow a case-study approach and make use of critical thinking skills.

ENGL 345 Modern Poetry (3)

(Not open to students who have already completed ENGL 446.) Prerequisite: WRTG 101/101X or ENGL 101/101X. A survey of British and American poetry from Yeats and Robinson to the present. Special emphasis is on Yeats, Pound, Eliot, Williams, Roethke, and Lowell.

ENGL 354 American Women Writers Since 1900 (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of the contributions of major American women writers since 1900 in the novel, short story, drama, and poetry.

ENGL 358 British Women Writers Since 1900 (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of the contributions of major British women writers since 1900 in the novel, short story, drama, and poetry.

ENGL 363 African American Authors to 1900 (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of the development, diversity, and quantity of African American literature, focusing on works composed before 1900. A broad range of African American writers is studied through some of their important but lesser-known works. Readings may include the writings of Phillis Wheatley, Frances Harper, Maria W. Stewart, David Walker, Frederick Douglass, William Wells Brown, Charles Chesnutt, and Paul Laurence Dunbar.

ENGL 364 African American Authors Since 1900 (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of the development and diversity of African American literatures since 1900. Readings may include works by James Weldon Johnson, Zora Neale Hurston, Richard Wright, James Baldwin, Ann Petry, Paule Marshall, Toni Morrison, Alice Walker and other African American authors. Students may receive credit for only one of the following courses: ENGL 364 or HUMN 364.

ENGL 389P Introduction of Film as Literature (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A study of film as a form of literature. The goal is to acquire an understanding of the particular language and grammar of film and develop a critical perspective. Genres of narrative film (including crime drama, film noir, the musical, reflexive film, science fiction, screwball comedy, war film, and the western) are examined. Discussion also covers a number of critical approaches to film auteurism, myth criticism, and genre criticism.

ENGL 406 Shakespeare: Power and Justice (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An intensive study of Shakespeare's dramatic masterpieces as illustrations of the concepts of power and justice both in a historically specific social and cultural context and as timeless concerns reflecting the human condition. Students may receive credit for only one of the following courses: ENGL 406 or HUMN 440.

ENGL 418 Major British Writers Before 1800 (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. Intensive study of one or two British writers from the period before 1800. Authors studied may include Chaucer, Spenser, Marlowe, Jonson, Milton, Defoe, Richardson, Pope, Swift, or Johnson.

ENGL 419 Major British Writers After 1800 (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. In-depth study of the lives and works of one or two major British writers from the period after 1800.

ENGL 425 Modern British Literature (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of representative authors and works in the development of British literature from the late 19th century to post–World War II, with special emphasis on writers from the 1920s through the 1940s.

ENGL 433 American Literature: 1914 to the Present (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A study of representative works—selected from drama, fiction, and poetry—that reflect significant trends in literary techniques and themes as well as shifts in cultural values.

ENGL 439 Major American Writers (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. In depth study of one or two major American writers, emphasizing subject matter, themes, and techniques. Representative writers may include Melville, Hawthorne, Dickenson, Whitman, Twain, Wharton, James, Fitzgerald, Hemingway, Faulkner, or Frost. Other authors may be included. May be repeated to a maximum of 6 credits when topics differ.

ENGL 441 The Novel in America Since 1914 (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A survey of the American novel since World War I. Cultural and philosophical contexts and technical developments in the genre are discussed. Authors studied may include Ernest Hemingway, Willa Cather, William Faulkner, Anne Tyler, and Toni Morrison.

ENGL 454 Modern World Drama (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of 20th-century theatre, with an emphasis on the social, cultural, and historical context of drama. Special attention is given to drama from around the globe. The works of major playwrights, such as Ibsen, Strindberg, Chekhov, Shaw, O'Neill, Miller, Williams, Brecht, Pirandello, Hansberry, Orton, Ionesco, Beckett, Pinter, Fugard, Albee, Stoppard, or Shepard, are studied.

ENGL 466 The Arthurian Legend (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A thematic exposition of the development of the Arthurian legend, traced from the fountainhead of the Arthurian romances, Monmouth's *History of the Kings of Britain,* to the greatest 20th-century Arthurian work, T. H. White's *The Once and Future King.* Works frequently included are *Sir Gawain and the Green Knight,* romances by Wolfram von Eschenbach, three medieval tales immortalizing the Lancelot/Guinevere love affair, and romances of Malory and Tennyson. The differences in the interpretations of a legend are explored. Works selected may vary.

ENGL 476 Modern Fantasy and Science Fiction (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An analysis of major works of fantasy and science fiction published since the middle of the 18th century. Emphasis is on the development of the genre, as well as on literary and cultural issues. Authors may include Jonathan Swift, Mary Shelley, Nikolai Gogol, Edgar Allan Poe, Mark Twain, Robert Louis Stevenson, H. G. Wells, Ray Bradbury, Isaac Asimov, Ursula LeGuin, T. H. White, Robert Heinlein, Philip Dick, Douglas Adams, and Marion Zimmer Bradley.

ENGL 481 Seminar in Writing Fiction and Nonfiction (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An overview of the scope, power, and techniques of narration, the oldest and most versatile form of writing. Topics include the applicability of narration to historic, dramatic, and business purposes. Focus is on identifying, analyzing, and practicing the following skills: freewriting, developing structure, delineating episodes, subdividing steps, improving pacing, writing purposeful sentences, controlling time, creating substance, heightening authenticity with voice, and providing interpretation. Students may receive credit for only one of the following courses: ENGL 479E or ENGL 481.

ENGL 485 Creative Writing: Poetry (3)

(Fulfills the general education requirement in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. A presentation of various ideas and techniques for writing poetry. Although professional poetry is discussed, the emphasis is on critiquing students' work. Weekly assignments are given. Students may receive credit for only one of the following courses: ENGL 485 or ENGL 498P.

ENGL 486A Internship in English Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in English. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to English and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ENGL 486B Internship in English Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in English. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to English and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ENGL 499 Independent Study in English (1–6)

Prerequisite: 6 credits in upper-level ENGL courses. Directed independent study of topics of special interest not covered by regularly scheduled courses in English. May be repeated to a maximum of 6 credits when topics differ.

Environmental Management

Courses in environmental management (designated ENMT) may be applied as appropriate (according to individual program requirements) toward

- a major in environmental management, emergency management, homeland security, laboratory management, or management studies;
- a minor in environmental management or management studies;
- a certificate in Terrorism and Institutions: Prevention and Response; and
- electives.

Courses in environmental management require a basic scientific foundation. Before enrolling, students are recommended to complete the related requirements in math and science and should consult an advisor.

A description of the curriculum for the environmental management major and minor begins on p. 39. Descriptions of related curricula may be found on the following pages: emergency management (p. 35), homeland security (p. 53), laboratory management (p. 63), and management studies (p. 66).

ENMT 301 Environment and Ecosystems Management (3)

Prerequisite: NSCI 100. An overview of the scientific principles governing ecosystems, particularly as they relate to the environmental consequences of resource development and industrial processes. Earth's ecosphere, atmosphere, hydrosphere, and lithosphere are examined with special reference to environmental impacts and issues. Discussion covers the current state of the environment and the history of the environmental movement. The historical development of environmental management issues and approaches is introduced. Principles of environmental management at local, regional, and global levels are also covered.

ENMT 303 Environmental Regulations and Policy (3)

(Formerly ENMT 493.) Prerequisite: ENMT 301. An analytical survey of principles of constitutional and administrative law that are fundamental to environmental and health and safety management. Focus is on acquiring basic knowledge of federal legislation (including CWA, CAA, SDWA, RCRA/HSCA, CERCLA/SARA, FIFRA, TSCA, FDA, DOT, and OSHA), and becoming familiar with the use of the *Federal Register* and the *Code of Federal Regulations.* The relationship between regulations and public policy at local, state, and federal levels is discussed. Review also covers the social contract and its sanctions, as expressed in law and litigation at local, state, national, and international levels. Students may receive credit for only one of the following courses: ENMT 303 or ENMT 493.

ENMT 305 Hazardous Materials Toxicology (3)

Prerequisite: ENMT 301. An introduction to the human body, how it functions, and how normal body functions are altered by exposure or contact with hazardous materials. Basic principles of toxicology are used to examine human health effects associated with exposure to hazardous chemicals in the community and in work environments. Topics include the kinetics and dynamics of toxins; dermal, ocular, and systematic toxicology; practical aspects of occupational toxicology; the regulatory agencies (FDA and EPA); the data required to make regulatory decisions; and the process of risk assessment.

ENMT 310 Emergency Planning and Operations Management (3)

Prerequisite: ENMT 301. A review of human-made and natural hazards and emergency-preparedness laws. The relationships between industrial processes and hazardous materials are covered. Focus is on developing the skills needed to work safely in a hazardous environment and prepare hazardous materials for transportation, processing, and disposal. Topics include elements of hazardous materials emergency planning, such as direction and control of emergency response and remediation. Review also covers preparation of emergency plans, methodology of disaster response, and performance of emergency operations. Practical exercises demonstrate how to prepare for and respond to emergencies.

ENMT 315 Environmental Audits and Permits (3)

Prerequisite: ENMT 301. A study of the principles of environmental impact assessment and an in-depth look at various laws, regulations, and methods of performing due diligence audits. Topics include the regulatory requirements of NEPA, EIS reports, types of audits, ISO 14000 environmental systems standards, ASTM audit procedures, Department of Health and Safety audits, common law privileges, and self-regulation and business transfer statutes. Strategies and methodology for obtaining environmental permits and compliance are also reviewed.

ENMT 321 Environmental Health (3)

Prerequisite: ENMT 301. A study of the effects of environmental hazards on human health, particularly those hazards created or influenced by human activities. Topics include chemical pollution of the air, soil, and water; and the effects of physical environmental hazards such as radiation and noise pollution on the well being of humans. Discussion covers the control of environmental health hazards through hazard management.

ENMT 322 Occupational Health and Safety (3)

Prerequisite: ENMT 301. A study of the principles of health and safety management in the workplace. Topics include recognition, evaluation, and control of occupational hazards. The strategies used by industrial hygienists and safety professionals to prevent or minimize exposure to occupational hazards are explored. Discussion also covers the role of regulatory processes in occupational health and safety management.

ENMT 340 Environmental Technology (3)

Prerequisite: ENMT 301. An introduction to technology for multimedia (i.e., air, water, land) environmental management, control, and remediation. Survey covers existing, modified, new, and emerging technologies. Case studies of real-world environmental challenges demonstrate the evaluation and selection of the appropriate technology for specific uses. Factors in making technology application decisions, such as technical integrity, cost effectiveness, and environmental soundness, are explained.

ENMT 360 Introduction to Urban Watersheds (3)

An overview of basic watershed processes and the impact of urbanization. Topics include watershed characterization, hydrologic processes, stream characteristics, and the effects of the development process on watersheds, specifically on the hydrology, physical structure, water quality, and biodiversity of aquatic systems. Discussion also covers tools to manage urban watersheds to reduce the impacts of land development.

ENMT 380 Air Quality Management (3)

Prerequisite: ENMT 301. An overview of air quality management principles and strategy. Discussion covers the atmosphere, pollutants and sources, dispersion, effects, regulations, air pollution control technology and management, indoor air quality pollution, and noise control. Indoor air pollution topics include the study of sick buildings, causes and risk factors, diagnostic protocols, contamination measurement, and problem mitigation.

ENMT 390 Environmental Risk Assessment (3)

An overview of principles and guidelines for performing and using risk assessments. Topics include relevant regulations, the requirements of different government agencies (e.g., EPA, OSHA, FDA, etc.), the pros and cons of different risk assessment methods, and how to plan, perform, report, and communicate environmental risk assessments. Emphasis is on environmental, health and safety, and ecological risk assessments. The use and economic effectiveness of risk assessments are also explored.

ENMT 398A Industrial Ecology (1)

An exploration of the intrinsic interdependency between production of consumer goods and natural ecosystems. Discussion covers the limited capacity of natural ecosystems to replenish themselves following resource extraction by humans. Input of natural resources and output of human-derived goods in various industries is investigated. Class projects focus on development of industrial practices that minimize the use of energy and raw materials, reduce the ecological impact of human activities, and conserve and restore a healthy ecosystem, while maintaining economic viability of systems for industry, trade, and commerce.

ENMT 398B Exploring a Geographic Information System: Applications in Urban Watershed Management (1)

An exploration of the use of geographic information system (GIS) as a data analysis and management tool that integrates hydrologic, physical, chemical, and biological data to characterize and evaluate urban watershed conditions. The capacity for geographical surveys and map data to facilitate efforts to protect and restore urban watersheds is explored.

ENMT 405 Pollution Prevention Strategies (3)

Prerequisite: ENMT 301. An overview of alternative environmental strategies to minimize, reduce, and prevent pollution. Topics include source reduction, recovery, reuse, recycling, and conservation; material substitution; process modifications; quality assurance, quality control, and good housekeeping; waste minimization; zero discharge; and pollution prevention, processing, treatment, and disposal. Emphasis is on pollution prevention techniques, practices, and case studies. Review also covers economic analysis and regulatory compliance related to these strategies.

ENMT 486A Internship in Environmental Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in environmental management. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to environmental management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ENMT 486B Internship in Environmental Management Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in environmental management. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to environmental management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ENMT 495 Global Environmental Management Issues (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisite: ENMT 301. A study of global environmental management that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in global environmental management are considered. An overview of the fundamental elements of an integrated environmental management program is provided. Topics include economic development and environmental pollution, remediation, and conservation within a multifaceted scientific, legal, political, and global context. Discussion covers national and international events concerning environmental issues. Case studies and an advanced management project apply principles and concepts to environmental perspectives, experiences, research issues, and new paradigms of design.

Experiential Learning

The Portfolio program yields UMUC credit for learning acquired outside the classroom.

The course in experiential learning (designated EXCL), as well as credit earned through the program, may be applied toward

- appropriate majors and minors;
- general education requirements (according to content) as appropriate; and
- electives.

Information about this program is given on p. 233. Details, an application form, and an online orientation are also available on the Web at *www.umuc.edu/priorlearning.*

EXCL 301 Learning Analysis and Planning (3)

Prerequisite: Formal admission to the program. (Students should visit *www.umuc.edu/priorlearning* or contact *priorlearning@umuc.edu* for more information.) Instruction in the preparation of a portfolio documenting college-level learning gained through life experiences. Focus is on defining goals, documenting learning gained through experience and providing an analysis of applied and theoretical understanding of college-level content. Faculty evaluators assess completed portfolios for a possible award of credit.

Finance

Courses in finance (designated FINC) may be applied as appropriate (according to individual program requirements) toward

- a major in finance, business administration, global business and public policy, human resource management, management studies, or marketing;
- a minor in finance, business administration, or strategic and entrepreneurial management;
- a certificate in various business-related areas; and
- electives.

A description of the curriculum for the finance major and minor begins on p. 41. Descriptions of related curricula may be found on the following pages: business administration (p. 19), global business and public policy (p. 47), human resource management (p. 56), management studies (p. 66), marketing (p. 67), and strategic and entrepreneurial management (p. 77).

FINC 310 Entrepreneurship and New Venture Planning (3)

(Formerly BMGT 330.) Recommended: BMGT 364. An overview of entrepreneurship and planning new business ventures for prospective entrepreneurs and managers. Topics include developing entrepreneurial ideas and innovations; strategic planning; marketing research, analysis, and planning; advertising, promotion, and sales; financial planning and financing; operations and services planning; human resources planning and management; analysis of risk; information management strategy and the Internet; legal aspects of new venture formation; and global venturing. Entrepreneurial theory, profiles and roles of entrepreneurs, business life cycles, entrepreneurial behavior, use of computer software to aid in planning, and entrepreneurial management and technology issues are explored. Discussion and group activities focus on development of a business plan, the factors that should be considered, and the entrepreneur's role in developing and operating a new business. Students may receive credit for only one of the following courses: BMGT 330, FINC 310, MGMT 330, or SBUS 200.

FINC 321 Fundamentals of Building Wealth (3)

(Formerly BMGT 342. For students majoring in both business and nonbusiness disciplines.) A practical overview of personal finance management and creation of wealth that blends financial theory and application. The development of personal financial management skills (e.g., budgeting income and expenditures and planning for financial security and retirement) is encouraged, while an understanding of elements of the U.S. financial structure (including savings and investment alternatives, financing and credit sources, the role of insurance in protecting income and assets, and federal income-tax issues) is provided. These skills are utilized in the development of a personal financial plan. Students may receive credit for only one of the following courses: BMGT 342, BMGT 388F, BMGT 388N, FINC 321, or FINC 322.

FINC 322 Personal Financial Management (1)

(Formerly BMGT 388F.) A basic review of personal financial management. Topics include budgeting, insurance, debt/credit, savings, investments, and estate and retirement plans is provided. Focus is on applying skills in these areas in the pursuit of personal financial goals. Students may receive credit for only one of the following courses: BMGT 342, BMGT 388F, BMGT 388N, FINC 321, or FINC 322.

FINC 330 Business Finance (3)

(Formerly BMGT 340.) Prerequisites: ACCT 221 and STAT 230. An overview of the theory, principles, and practices of financial management in a business environment. Topics include financial analysis and financial risk, characteristics and valuations of securities, capital investment analysis and decision making, the capital structure of the firm, financial leverage, and international finance. Emphasis is on the application of financial theory and methods for solving the problems of financial policy that managers face. Students may receive credit for only one of the following courses: BMGT 340, FINC 330, MGMT 398D, or TMGT 320.

FINC 331 Finance for the Nonfinancial Manager (3)

(Formerly BMGT 341. May be used as either a stand-alone survey course in finance or an introduction to higher-level finance courses for those who wish to pursue the subject further. May not be substituted for FINC 330.) An introduction to the financial fundamentals needed by functional experts and upwardly mobile managers in human resources, marketing, production, and general management. Focus is on preparing to assume higher-level corporate positions or undertaking entrepreneurial activities that require a basic knowledge of finance. The world of finance and its argot and operations are presented in a simple, step-by-step manner. Topics include financial statements and forecasting, capital budgeting, project evaluation, working capital management, and international financial management. Emphasis is on practical applications more than theory. Students may receive credit for only one of the following courses: BMGT 341 or FINC 331.

FINC 340 Investments (3)

(Formerly BMGT 343.) Prerequisite: FINC 330 or BMGT 340. An introduction to financial investments. Topics include securities and securities markets; the risks of investments, as well as returns and constraints on investments; portfolio policies; and institutional investment policies. Students may receive credit for only one of the following courses: BMGT 343 or FINC 340.

FINC 351 Risk Management (3)

(Formerly BMGT 346.) Prerequisites: ACCT 221 and STAT 230. A study focusing on recognizing and evaluating the pure risks facing organizations. Guides for risk-management decisions concerning the retention, control, and transfer of risk (including insurance) are discussed. Students may receive credit for only one of the following courses: BMGT 346 or FINC 351.

FINC 352 Life Insurance (3)

(Formerly BMGT 347.) Prerequisite: ACCT 221. A study of the products and principles of life insurance and health insurance in financial planning for businesses. Topics include pension-planning strategies, such as deferred-compensation and profit-sharing plans; use of trusts in business and in planning individual estates; and comprehensive analysis of the effects of income taxes, estate taxes, and gift taxes on life-insurance programming and estate planning. Students may receive credit for only one of the following courses: BMGT 347 or FINC 352.

FINC 410 Managing Entrepreneurial Ventures (3)

(Formerly BMGT 436.) Prerequisite: FINC 310 or BMGT 330. An exploration of entrepreneurial management and strategies. Topics include the development of partnerships, joint ventures, strategic alliances, and licensing. Issues regarding management, financing, marketing, production, administration, human resources, and growth of the business are analyzed. Discussion covers environmental scanning, analysis, and planning and decision making (including reviewing relevant options and opportunities, forecasting demand and sales, estimating costs, and developing pro forma financial statements). Potential business opportunities are assessed using exercises, case studies, and research related to new technologies, innovation, competition, economic and social change, governmental regulation and laws, product and service features, organizational and human resource issues, information management, global issues, financial management, marketing, operations, and customer service. Students may receive credit for only one of the following courses: BMGT 436, BMGT 461, FINC 410, or MGMT 461.

FINC 421 Financial Analysis (3)

(Formerly BMGT 498Q.) (For students with general business interests, as well as those majoring or minoring in accounting or finance.) Prerequisite: ACCT 221. An analysis and interpretation of financial statements directed at the decision-making needs of managers, stockholders, and creditors. Topics include assessment of business performance, projection of financial requirements, analysis of capital investment decisions and financing choices, risk assessment, and valuation. Students may receive credit for only one of the following courses: BMGT 498Q or FINC 421.

FINC 430 Financial Management (3)

(Formerly BMGT 440.) Prerequisite: FINC 330 or BMGT 340. Analysis and discussion of the financial decisions of national and multinational corporations, based on case studies and reading. Financial principles and concepts are applied to solve financial problems and make financial and corporate policy at the executive level. Topics include assessment of the financial health of the organization, short- and long-term financial management, project and company valuation, cost of capital, risk analysis, investment decisions, and capital markets. Students may receive credit for only one of the following courses: BMGT 440 or FINC 430.

FINC 440 Security Analysis and Valuation (3)

(Formerly BMGT 443.) Prerequisite: FINC 340 or BMGT 343. A study of concepts, methods, models, and empirical findings. Theory is applied to the analysis, valuation, and selection of securities, especially common stock. Students may receive credit for only one of the following courses: BMGT 443 or FINC 440.

FINC 441 Futures Contracts and Options (3)

(Formerly BMGT 444.) Prerequisite: FINC 340 or BMGT 343. A study of institutional features and the economic rationale underlying markets in futures and options. Topics include hedging, speculation, structure of futures prices, interest-rate futures, efficiency in futures markets, and stock and commodity options. Students may receive credit for only one of the following courses: BMGT 444 or FINC 441.

FINC 450 Commercial Bank Management (3)

(Formerly BMGT 445.) Prerequisite: FINC 330 or BMGT 340. An analysis and discussion of cases and readings in commercial bank management. Discussion covers the loan function and the management of liquidity reserves, investments for income, and sources of funds. The objectives, functions, policies, organization, structure, services, and regulations of banks are considered. Students may receive credit for only one of the following courses: BMGT 445 or FINC 450.

FINC 460 International Finance (3)

(Formerly BMGT 446.) Prerequisite: FINC 330 or BMGT 340. Analysis and discussion of financial management issues from the perspective of the multinational firm. Topics include the organization and functions of foreign exchange and international capital markets, international capital budgeting, financing foreign trade, and designing a global financing strategy. Emphasis is on how to manage financial exchange and political risks while maximizing benefits from global opportunities faced by the firm. Students may receive credit for only one of the following courses: BMGT 446 or FINC 460.

FINC 486A Internship in Finance through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in finance. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to finance and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

FINC 486B Internship in Finance Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in finance. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to finance and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

FINC 495 Contemporary Issues in Finance Practice (3)

Intended as a final capstone course to be taken in the student's last 15 credits.) Prerequisites: FINC 340 (or BMGT 343) and 430 (or BMGT 440). A study of finance that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, academic research, practical application, and critical thinking. Emerging issues in finance and business are considered. Individual and group case studies and research papers are used to integrate key financial knowledge in the areas of financial analysis, investments, business valuation, risk and insurance, and international finance. Advanced quantitative financial software models are introduced. Assignments include a three-week comprehensive group case study designed to demonstrate mastery of key finance knowledge and its application. Students may receive credit for only one of the following courses: BMGT 495 or FINC 495.

Fire Science

Courses in fire science (designated FSCN) may be applied as appropriate (according to individual program requirements) toward

- a major in fire science, investigative forensics, or management studies;
- a minor in fire science, homeland security, or management studies;
- a certificate in Terrorism and Institutions: Prevention and Response; and
- electives.

The fire science curriculum is unique and is designed primarily for firefighters. Students should consult an advisor before enrolling in any of the courses.

A description of the curriculum for the fire science major and minor begins on p. 43. A description of related curricula begins on the following pages: homeland security (p. 53), investigative forensics (p. 61), and management studies (p. 66).

FSCN 302 Fire and Emergency Services Administration (3)

A presentation of modern management and planning techniques that apply to organizing a fire department. Procedures explored include those for evaluation and control of budgeting, personnel, communications, and planning. The traditional and evolving roles of the fire department in protection, prevention, and community service are discussed.

FSCN 303 Analytic Approaches to Public Fire Protection (3)

Prerequisite: FSCN 302. A presentation of techniques of operations research and systems analysis as they apply to problems in fire protection. Discussion covers techniques such as cost/benefit analysis, methods for locating fire stations, and the use of statistical analysis. Techniques for collecting data on fires and for managing information are explained.

FSCN 304 Personnel Management for Fire and Emergency Services (3)

Prerequisite: FSCN 302. An examination of personnel practices, management procedures, collective bargaining, binding arbitration, and applicable legislative and administrative procedures. Topics include promotion, personnel development, career and incentive systems, validation of physical requirements, and managerial and supervisory procedures.

FSCN 305 Fire Prevention Organization and Management (3)

An examination of prevention as the primary community-based strategy for fire protection. Topics include community risk reduction, codes and standards, inspections and plans review, incident investigation, fire-prevention research, and the relationship of master planning to fire prevention. The cultural, economic, governmental, nongovernmental, and departmental influences on fire prevention are also explored. Emphasis is on applying the principles studied to anticipate problems and develop strategies for fire prevention.

FSCN 306 Fire Investigation and Analysis (3)

An examination of the technical, investigative, legal, and social aspects of fire. Topics include the principles of fire detection and analysis, environmental and psychological factors of arson, legal considerations, intervention, and mitigation strategies.

FSCN 401 Disaster Planning and Control (3)

Prerequisite: FSCN 302. An analysis of the concepts and principles of community risk assessment, planning, and response to fires and natural and man-made disasters. Topics include the National Incident Management System's incident command system (NIMS ICS), mutual aid and automatic response, training and preparedness, communications, civil disturbances, terrorist threats/incidents, hazardous materials planning, mass casualty incidents, earthquake preparedness, and disaster mitigation and recovery. The emergency management principles of preparation, response, recovery, and mitigation are presented in the fire service environment.

FSCN 402 Fire-Related Human Behavior (3)

A study of human behavior in fire and other emergency situations. Discussion examines current and past research on human behavior, systems models, life safety education, and building design in order to determine how these elements interrelate in emergency situations. A best-practice building life-safety system is presented as one that combines knowledge of psychology and sociology with engineering and education to produce the best possible outcomes in terms of human survivability in an emergency.

FSCN 403 Managerial Issues in Hazardous Materials (3)

Prerequisite: FSCN 302. The development of the knowledge and skills necessary to safely and effectively manage a hazardous materials emergency. Topics include health and safety concerns, political issues, regulations, site management and control, hazard and risk evaluation, information management, response objectives, special tactical problems, decontamination, and termination activities. Federal regulations such as OSHA 1910.120 and NFPA 472 (Standard on Professional Competency of Responders to Hazardous Materials Incidents) are addressed.

FSCN 411 Fire Protection Structure and Systems (3)

Presentation of design principles involved in protecting buildings and other structures from fire. Empirical tests and prediction procedures are explained. Practices in designing systems for detecting, controlling, and suppressing fires, as well as the basic hydraulic design of sprinkler and water-spray systems are presented. Recent innovations in the field are reviewed.

FSCN 412 Political and Legal Foundations of Fire Protection (3)

Prerequisite: FSCN 302. A consideration of the legal basis for the police powers of the government in connection with public safety. The responsibility, legal limitations, and liability of fire-prevention organizations and personnel are examined. Judicial decisions are reviewed, with a focus on the implications of product-liability cases in the field of fire prevention.

FSCN 413 Community Risk Reduction for the Fire and Emergency Services (3)

Prerequisite: FSCN 302. An analysis of the sociological, economic, and political characteristics of communities and their influence on the fire problem. Discussion covers methods of studying community profiles and structures, and the economic, geographic, and sociological variables of fire threat. The functional basis of the community is examined, with attention to the diverse social roles of community agencies and the roles of fire service as a complex organization within the community.

FSCN 414 Fire Dynamics (3)

An investigation into the phenomena of fire propagation in the air-regulated phase and the fuel-regulated phase. Variables in the development of pre- and postflashover fire are analyzed. Topics include geometric material; gaseous, fluid-flow, and thermodynamic parameters; and fire models of compartments and buildings.

FSCN 415 Application of Fire Research (3)

Prerequisite: FSCN 303. A practical, up-to-date review of fire research and its application. The transfer of research and its implications for fire prevention and protection programs are addressed. The focus is on both national and international studies, and on maintaining awareness of ongoing research developments.

FSCN 416 Emergency Services Training and Education (3)

An examination of the management and administration of training and education in fire and emergency services. Topics include the many systems of training and education available and the concept of professional development on both individual and organizational levels. Focus is on safety, especially understanding and preventing training deaths and injuries. Discussion explores how higher education/training contributes to the professional development of fire-service personnel.

FSCN 486A Internship in Fire Science Through Co-op (3)

Prerequisite: FSCN 302 and formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in fire science. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to fire science and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

FSCN 486B Internship in Fire Science Through Co-op (6)

Prerequisite: FSCN 302 and formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in fire science. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to fire science and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Geography

Courses in geography (designated GEOG) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences; and
- electives.

UMUC offers only a limited number of courses each session in this discipline.

GEOG 100 Introduction to Geography (3)

An introduction to the broad field of geography. Emphasis is on concepts relevant to understanding global, regional, and local issues.

Geology

Courses in geology (designated GEOL) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the biological and physical sciences; and
- electives.

UMUC offers only a limited number of courses each session in this discipline.

GEOL 100 Physical Geology (3)

A study of the principles of dynamic and structural geology. Survey covers the rocks and minerals composing Earth, the movement within it, and its surface features and the agents that form them. Students may receive credit for only one of the following courses: GEOL 100 or GEOL 101.

German

Courses in German (designated GERM) may be applied as appropriate (according to individual program requirements) toward

- the general education requirements in the arts and humanities; and
- electives.

Students with prior experience in the German language—either through study or living abroad, informal learning from friends or family, or high school or other coursework that did not transfer to UMUC—should take a placement exam before enrolling. Students with oral proficiency in German who wish instruction in written German should also take the placement test.

UMUC offers a limited number of foreign language courses each session.

A description of the curriculum for the humanities major and minor begins on p. 55.

GERM 111 Elementary German I (3)

(Not open to native speakers of German: assumes no prior knowledge of German.) A basic foundation in listening, speaking, reading, and writing in German. German culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and writing. Focus is on acquiring the skills necessary to communicate with native German speakers orally and in writing at an elementary level. Students may receive credit for only one of the following courses: GERM 101 or GERM 111.

GERM 112 Elementary German II (3)

Prerequisite: GERM 111 or appropriate score on placement test. A continuation of the development of basic skills in listening, speaking, reading, and writing in German. German culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and writing. Focus is on acquiring the skills necessary to communicate with native German speakers orally and in writing at an advanced elementary level. Much of the class is conducted in German. Students may receive credit for only one of the following courses: GERM 102 or GERM 112.

GERM 318 Commercial and Workplace German (4)

Prerequisite: GERM 212 or equivalent German proficiency. A study of business terminology, vocabulary, formats, and practices. Emphasis is on everyday spoken and written workplace German, using authentic text from native speakers. Written and oral practice is provided in finding and communicating information, especially on commercial topics in business and other workplace situations. Assignments include a project involving specific vocabulary, forms of professional communication, and cultural protocols relevant to the student's workplace or major.

Gerontology

Courses in gerontology (designated GERO) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement for behavioral and social sciences (except GERO 341, 342, 351, and 353 and 1-credit GERO courses);
- a major in gerontology, psychology, or social science;
- a minor in gerontology or women's studies;
- a certificate in Health Issues for the Aging Adult; and
- electives.

A description of the curriculum for the gerontology major and minor begins on p. 46. Descriptions of related curricula begin on the following pages: psychology (p. 72) and social science (p. 74).

GERO 100 Introduction to Gerontology (3)

(Fulfills the general education requirement in behavioral and social sciences.) An overview of the processes of aging and the way aging is defined chronologically, functionally, biologically, sociologically, and psychologically. The physical, psychological, cultural, and social aspects of aging are examined. Topics include the demography of aging and its implications for society, social structure and processes (such as patterns of family and social roles), work and retirement, health care and housing, and the implications of an aging society for policy. Students may receive credit for only one of the following courses: GERO 100 or GERO 210.

GERO 220 Psychological Aspects of Aging (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: GERO 100. A review of normal and pathological changes associated with the process of aging. Topics include sensory, perceptual, and psychomotor processes; mental ability, drives, motives, and emotions; intelligence, memory, and cognitive functions; depression; neurological changes; Alzheimer's disease and related dementias; stress; life review processes; personality and adjustment; suicide; bereavement; and treatment modes. Emphasis is on the normal aging process, pathological changes in the elderly (according to current research), and understanding the difference between the two.

GERO 301 Service/Program Management (3)

Prerequisite: GERO 100. An exploration of the managerial aspects of providing health and human services in the field of gerontology through an integrated delivery system. Focus is on the concepts, strategies, and best practices for the management of health and human services. Topics include planning, strategic management, marketing, financing, legal issues and capacity building.

GERO 302 Health and Aging (3)

Prerequisite: GERO 100. An exploration of the physiological processes of aging that covers normal aging and chronic illness. Topics include biological processes and theories of aging, bodily changes normally associated with aging, long-term and health care systems, and related medical terminology. Review also covers substance abuse, environmental factors affecting aging, and ways of promoting health, preventing disease, and assessing health risks.

GERO 306 Programs, Services, and Policies (3)

Prerequisite: GERO 100. An overview of programs and policies designed to enable older adults to obtain necessary services, enhance their health, improve or maintain their economic well-being, and provide support to families of the aging. Trends in aging programs, services, and policies are discussed. Topics include work, retirement, and income maintenance (employment concerns, pensions, Social Security, and Supplementary Security Income); delivery and regulation of health care (long-term care, home care, Medicare, and Medicaid); and social or community services (adult day care, in-home services, senior centers, nutrition and food programs, information and referrals, advocacy, elder abuse protection, and transportation) that promote well-being in older adults. Students may receive credit for only one of the following courses: GERO 304 or GERO 306.

GERO 307 Aging, Religion, and Spirituality (3)

Prerequisite: GERO 100. An examination of aging, religion, and spirituality from the perspectives of the humanities and social science. Focus is on concepts of spiritual or religious development and aging within the major religious traditions (Buddhism, Islam, Judaism, Christianity, and Hinduism). A critical analysis of theoretical and empirical research and clinical perspectives of the role of religion and spirituality in the lives of older adults from different religious traditions are presented. Discussion covers definitions and concepts of religiosity and spirituality in the social science literature. The current and future impact of older adults on religious institutions, the responsibilities of religious institutions to their aging members, and the role of religion and spirituality in the lives of the aging are examined.

GERO 311 Women and Aging (3)

Recommended: GERO 100. An exploration of issues important to women in midlife and later adulthood. Topics include changes in identity, marriage and family, work, health, social relationships, and economic well-being. The impact of social class and ethnicity or culture on women's well-being in midlife and later adulthood is examined. Discussion also covers the impact of policy and services on women's development and quality of life, as well as life planning for midlife and aging women. Students may receive credit for only one of the following courses: GERO 311 or GERO 497E.

GERO 327 Ethnicity and Aging (3)

Prerequisite: GERO 100. An examination of the increasing heterogeneity of the aging population in the United States. Topics include theory and research related to ethnicity and aging, the resources and needs of older adults in different ethnic groups (Hispanic, African American, Asian, and Native American), the impact of ethnicity and culture on the aging family, social support and caregiving, health, and social relationships. Discussion also covers how social, health care, and government agencies can effectively meet the needs of older adults in ethnic communities.

GERO 331 Sociology of Aging (3)

Prerequisite: GERO 100. An examination of the social forces that impinge on the aging process from a number of theoretical perspectives found in sociology and social gerontology. Topics include the social ramifications of an aging population, sociological and social gerontological explanations of the aging process, interactions between the aging process and the larger social structure, cross-cultural similarities and differences in the aging experience, and current social policies toward aging and their implications for the future.

GERO 336 The Aging Family (3)

Prerequisite: GERO 100. An examination of issues faced by aging families. Topics include the structure of family networks, solidarity and conflict between generations, types and quality of support given to and by the older person, and social roles (including role strain, conflict, and reward). Emphasis is on understanding family caregiving—the experience of caregiving; the caregiver-recipient relationship; and the social, psychological, and economic costs of caregiving. The phenomena of grandparents parenting grandchildren is covered. The changing nature of family relationships is analyzed from the perspective of gender, race or ethnicity, social class, age, and historical context. Discussion also covers implications for social programs and policies to support aging families. Students may receive credit for only one of the following courses: GERO 336 or GERO 496L.

GERO 338 Health Promotion in Older Adults (3)

Prerequisite: GERO 100. An exploration of health promotion issues in an older adult population. The literature on health promotion and health risk behaviors in older adults is analyzed critically. Focus is on the modification of risk behaviors related to the development of cardiovascular disease, cancer, and other illnesses common to older adults through ecological and educational models of health promotion. The impact of social, cultural, political, and economic factors on health behavior and health promotion is also examined.

GERO 341 The Long-Term Care Continuum (3)

Prerequisite: GERO 100. A survey of gerontological intervention programs and the care needs of the elderly and their families. The changing needs of aging individuals who have chronic physical and/or mental health impairments are examined. A framework for the continuum of care from community- to institution-based is provided. Focus is on understanding a multidisciplinary approach to community-, home-, and institution-based care. Students may receive credit for only one of the following courses: FMCD 499E, GERO 341, or GERO 496K.

GERO 342 Long-Term Care Administration (3)

(Continuation of GERO 341.) Prerequisite: GERO 100. An overview of the administrative and operational issues of long-term care facilities. The responsibilities of a long-term care administrator and relationships with personnel and administrative structure are examined. Topics include policy, procedures, and insurance or financing. Discussion also covers the ethical and legal concerns of long-term care.

GERO 351 Management of Senior Housing Environment (3)

Prerequisite: GERO 100. A framework for training retirement-housing professionals. Topics include regulatory standards and processes for Housing and Urban Development senior housing structures, environmental design, behavioral and environmental interaction, dietary services, continuity of care, differentiation of management needs in various formats of senior housing, personnel, programming, and medical and personal care services.

GERO 353 Financial Management of Retirement Housing (3)

Prerequisite: GERO 100. An examination of the operational side of senior housing management. Topics include the housing administrator's role as financial manager; application of accounting principles to senior housing needs; working capital, ratio analysis, and vertical analysis; budgeting in senior housing; purchasing; financing new facilities; payroll; and maintenance issues in senior housing.

GERO 355 Nutritional Concerns of Aging (3)

Prerequisite: GERO 100. A survey of the nutritional concerns of the elderly, including causes, pathophysiology, prevention, and control. Topics include the role of nutrients in the etiology of various illnesses associated with aging (such as anemia, osteoporosis, gastrointestinal tract disorders, cancer, cardiovascular diseases, maturity-onset diabetes, crippling arthritis, stroke, Alzheimer's disease, cataracts, tooth loss, and vision loss). Discussion also covers the effects of aging on appetite, nutrition and exercise, vegetarianism, and food choices. Nutritional assessment, the influence of different cultures on nutrition, and community resources are examined. Students may receive credit for only one of the following courses: GERO 355 or GERO 495K.

GERO 380 End of Life: Issues and Perspectives (3)

Prerequisite: GERO 100. An exploration of death, dying, and bereavement from social, cultural, psychological, biomedical, economic, and historical perspectives. Topics include definitions of death, the meaning of death, psychological needs of the dying person and significant others, care of the dying, suicide, euthanasia, end-of-life decision making, the economics of life-sustaining care, and bereavement and grieving.

GERO 390 Economics of Aging (3)

Prerequisites: GERO 100 and either ECON 201 or ECON 203. A study of the fundamental sources of economic security that older adults receive, the many problems they face in retirement, and the impact of an aging population on the nation's economy. Sources of economic security received by older adults are analyzed according to race or ethnicity, gender, and social class background. Topics include the history, development, and fundamental structure of the Social Security and pension systems; Medicare, Medicaid, private health coverage, and the myriad public assistance programs for which elderly persons are eligible; and the nation's evolving private and public policies on retirement. Discussion also covers baby boomer retirement, the international economics of aging, the financial situation of older women, reverse annuity mortgages, and "productive aging" (work and volunteering after retirement).

GERO 410 Cross-Cultural Perspectives of Aging (3)

Prerequisite: GERO 100. An examination of how different cultures interpret aging and the life cycle. Topics include cross-cultural theory and research on aging; research methods; global demographics of aging; cross-cultural perspectives of norms and values regarding work, family, and community roles for older adults; the social and economic status of older adults; intergenerational relationships; caregiving; end-of-life issues; social services; and social policy. Health care for older adults is also covered from a cross-cultural perspective.

GERO 460 Neurocognitive Functioning in the Aging (3)

Prerequisite: GERO 100. An exploration of the relationship between the functioning of the brain and cognitive and functional abilities. Normative age-related and pathological changes in the brain and central nervous system are examined along with the impact of these changes on cognitive and functional abilities in older adults. Discussion covers Alzheimer's and other dementias and their assessment and treatment.

GERO 486A Internship in Gerontology Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in gerontology. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to gerontology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

GERO 486B Internship in Gerontology Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in gerontology. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to gerontology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

GERO 495 Special Topics in Development and Health (1–3)

Specialized study in gerontology and related topics focusing on issues in development and health. May be repeated to a maximum of 6 credits when topics differ.

GERO 495C Alzheimer's Disease: Current Issues, Perspectives, and Research (1)

A theoretical and practical approach to the study of Alzheimer's disease, covering its etiology and establishing its place among the chronic dementias. Topics include medical ethics, legal issues, caregiving, anticipatory grieving, support groups for both patients and caregivers, and community networks. Students may receive credit for only one of the following courses: GERO 495C or HLTH 498U.

GERO 495D Adaptation to Sensory Changes and Aging (1)

A review of age differences in sensory processes. Topics include physical changes and the social and psychological implications of these sensory impairments, prosthetic devices and other human factors concepts, and strategies to improve communication with family and friends.

GERO 495H Illness and Aging (1)

A broad overview of topics relating to illness and wellness in elderly people. Topics include avoidable illness, principles of drug therapy, unique aspects of illness presentation, aging organ systems, biology of aging, epidemiology, and demographics.

GERO 495K Geriatric Nutrition (1)

An overview of the physiological, social, and psychological changes that affect nutritional status and intake in aging. Discussion also includes identification of nutritional needs, intervention and community resources for older adults. Students may receive credit for only one of the following courses: GERO 355 or GERO 495K.

GERO 496 Special Topics in Social and Family Relations (1–3)

Specialized study in gerontology and related topics focusing on social and family relations. May be repeated to a maximum of 6 credits when topics differ.

GERO 496B Issues Affecting Older Workers and Their Employers (1)

An overview of issues affecting older workers and their employers. Topics include descriptive information about older workers and the types of work they perform, policy issues governing older workers and their employers, attitudes about older workers among employers and workers, methods to combat age discrimination, and future issues for older workers in the United States and Europe.

GERO 496C Managing Loss and Grief: Approaches for the Human Services Provider (1)

A discussion of grief and loss based on concepts that have emerged from health care and counseling practices. Focus is on therapeutic interventions that promote personal growth in clients while helping them satisfactorily work through grief.

GERO 496G Elder Abuse and Criminal Victimization (1)

A survey of abusive treatment of older people in the context of violence in families. The typical characteristics of the abusers and the abused, as well as the causes and types of crimes of abuse, are examined. Topics include methodological shortcomings in the conduct of research on cases of abuse, alternative strategies of intervention, and the types of stress that caregivers experience. Students may receive credit for only one of the following courses: GERO 496G or HLTH 498L.

GERO 496K Long-Term Care: Options and Alternatives (1)

An overview of resources available for people no longer able to live independently. The continuum from home care to independent living is examined to determine which type of living situation best suits the individual's medical, personal care, and financial needs. A field trip to a nearby long-term care facility is included. Students may receive credit for only one of the following courses: FMCD 499E, GERO 341, or GERO 496K.

GERO 496P Elder Rights: Social Security and Medicare (1)

An overview of the history and evolution of Social Security and Medicare, including an exploration of basic benefits, current conflicts, and implications for the future.

GERO 496R Geriatric Case Management (1)

A review of the concept of geriatric case management, including the needs of older adults and appropriate interventions.

GERO 497 Special Topics in Administration and Planning (1–3)

Specialized study in gerontology and related topics focusing on administration and planning. May be repeated to a maximum of 6 credits when topics differ.

GERO 497D Retirement Planning: Managing Your Estate (1)

(For nonlawyers.) An examination of the principles and strategies used to settle an estate. Topics include administration of wills and estates, ownership and transfer of property, will substitutes, trusts and powers of appointment, strategies for giving charitable gifts, and gift and estate taxes. Students may receive credit for only one of the following courses: FMCD 499D or GERO 497D.

GERO 497K Strategic Planning for Retirement (1)

A discussion of the techniques for achieving financial independence at retirement and the economic, governmental, and business factors that work against reaching this goal. Topics covered include Social Security and Medicare; pensions and tax-deferred savings plans, including 401(k)s and IRAs; and how much to save for retirement throughout the life span.

GERO 497M Managed Health Care Services in Gerontology (1)

A comparative analysis of the delivery of managed health services to retirees and the elderly in the United States. Focus is on the financing of comprehensive benefits and services while considering demographics, employer-sponsored approaches, government-sponsored approaches, indemnity approaches, and self-sponsored approaches. Key concepts examined include employer/retiree cost-sharing coverage, tax-deferred funding options, purchasing cooperatives, health alliances, fiscal management, and capitation.

GERO 497N Vocational Planning in Gerontology (1)

A review of the various vocational pathways in gerontology. Topics include suggested plans of study, professional affiliations, and market demands.

Government and Politics

Courses in government and politics (designated GVPT) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences;
- a major in emergency management, homeland security, political science, or social science;
- a minor in African American studies, political science, or social science;
- a certificate in Terrorism and Institutions: Prevention and Response; and
- electives.

A description of the curriculum for the political science major and minor begins on p. 71. Descriptions of related curricula may be found on the following pages: African American studies (p. 15), criminal justice (p. 31), emergency management (p. 35), homeland security (p. 53), and social science (p. 74).

GVPT 100 Introduction to Political Science (3)

A survey of the basic principles of political science. Topics include the relationship of political science to the other social sciences; the concepts of modern democracy, political ideology, and political socialization; the function of public opinion, mass media, interest groups, and political parties; the basic institutions of government and the separation of powers; and the role of international relations and globalization.

GVPT 101 Introduction to Political Theory (3)

An introduction to political philosophy. Discussion covers the classic contrast between the philosophies of Plato and Machiavelli concerning the problem of justice and power and the philosophical foundations of liberalism, socialism, and conservatism. Other topics include the political ideas of John Locke, Thomas Hobbes, Jean-Jacques Rousseau, John Stuart Mills, Karl Marx, and Edmund Burke.

GVPT 170 American Government (3)

A comprehensive study of government in the United States, including the basic principles of American government and political culture and a cross-cultural examination of institutions, processes, and public policies.

GVPT 200 International Political Relations (3)

A study of the major factors underlying international relations, the methods of conducting foreign relations, the foreign policies of the major powers, and the means of avoiding or alleviating international conflicts. Students may receive credit for only one of the following courses: GVPT 200 or GVPT 300.

GVPT 210 Introduction to Public Administration and Policy (3)

Recommended: GVPT 100. An introduction to the study of the administrative process in the executive branch. The concepts and principles of administration are examined, then placed in the context of their relationship to public policy. Analysis covers organizational structure and theory and the behavior of participants in the administration of policy.

GVPT 240 Political Ideologies (3)

A survey and an analysis of the leading ideologies of the modern world. Topics include anarchism, communism, socialism, fascism, nationalism, and democracy.

GVPT 280 Comparative Politics and Government (3)

An introduction to some of the major theories and issues in the study of comparative politics. Focus is on examining how different political systems (e.g., democratic or authoritarian) operate. The major forms of government in the world are compared.

GVPT 306 Global Political Economy (3)

A study of the relationship between political and economic processes in international affairs. Discussion covers the effect of globalization on the global environment, the economy, world peace, the power of the nation-state, and inequality between nation-states.

GVPT 308 Human Rights in the World (3)

Recommended: GVPT 100. A study of the principles and practices governing human rights from the beginning of mankind to the modern international conventions and U.N. Declarations. The present international and national push for human rights and emancipation is analyzed and discussed. Students may receive credit for only one of the following courses: GVPT 308 and GVPT 399Y.

GVPT 400 Business and Politics (3)

Recommended: GVPT 100. A study of the inner workings of key political, social, and economic institutions in American society and their effect on individuals, business, and government. Topics include central issues facing contemporary society; the powers of government and business; government regulations affecting business, the consumer, the workplace, and the environment; and business and government in the world economy.

GVPT 401 Problems of World Politics (3)

Recommended: GVPT 100. An examination of the changing face of international affairs in a post–Cold War world and the role of the United States in the evolving international order. Focus is on the roles of key international institutions, states, nonstate actors, and globalization in the evolution of global relations since the collapse of the Soviet Union. Discussion also covers various influences on contemporary affairs, including migration, disease, economic development, and terrorism.

GVPT 402 International Law (3)

Recommended: GVPT 100. An in-depth study of international law and how it relates to issues as diverse as putting food on the table to the prosecution of war criminals. Emphasis is on recent and contemporary trends in the field. The relationship of law to other aspects of international affairs is analyzed as well.

GVPT 403 Law, Morality, and War (3)

Recommended: GVPT 100. An exploration of the complex theoretical and practical connections between the existence of law, the conduct of war, and the status of morality regarding the violence of war in international relations and politics. Discussion covers the legal and moral problems posed by contemporary warfare: the meaning of constitutional and international law in the context of the resolution of disputes, the failure of law in mediating conflict, the necessity of military intervention to ameliorate or end conflicts, and the tension between those who would punish war crimes and those who hope to reconcile adversaries.

GVPT 404 Democratization (3)

Prerequisite: GVPT 100 or GVPT 170. An examination of the process and prospects of democratization. Topics include concepts of democracy and how they have changed over time, as well as the conditions under which democracy historically has developed and thrived. Focus is on the process of global democratization, with special attention to gains and failures in the past three decades.

GVPT 405 Defense Policy and Arms Control (3)

Recommended: GVPT 100. A survey of contemporary issues of military strategy and international security. The processes of formulating defense-related political and economic policy are examined. Topics include nuclear war and conventional (limited) warfare, insurgency by guerrillas, arms control and disarmament, and the possibilities for moderation of war.

GVPT 406 Global Terrorism (3)

(Formerly GVPT 401A.) An examination of the development of global terrorism and its impact on modern civilization, particularly the threat of terrorism upon the international community since the attacks of September 11, 2001. Topics include the definition of terrorism; the historical antecedents of modern terrorism; the motivations, organizations, and support networks of terrorists; and the linkages of state terrorism to global terrorism. Survey covers Europe, Latin America, and the Middle East. Students may receive credit for only one of the following courses: GVPT 401A or GVPT 406.

GVPT 407 State Terrorism (3)

(Formerly GVPT 401B and GVPT 401C. Not open to students who have completed GVPT 401B or GVPT401C.) An examination of the use of terror and political violence by governments, against their own citizenry or against other nations, in the furtherance of national goals. Focus is on regimes that employ terrorism as a means of governance. Topics include the historical antecedents of modern state terrorism beginning with the Reign of Terror; the political climate conducive to state terrorism; the institutionalization of state terror; and the role of rituals, propaganda, and show trials in state terrorism. Survey covers Europe, the Far East, Latin America, and the Middle East.

GVPT 408 Counterterrorism (3)

(Formerly GVPT 399H.) An examination of the prevention, detection, handling, and investigation of terrorist attacks. Focus is on the interlocking nature of effective security procedures and investigative techniques and methodologies used before, during, and after real or abortive terrorist incidents. Topics include the role of the media, both in covering and in investigating terrorist events, and the emerging constitutional and sociopolitical dilemmas for democracies, such as the threats to privacy and individual rights posed by the emergence of highly sophisticated terrorist tactics. Students may receive credit for only one of the following courses: GVPT 399H or GVPT 408.

GVPT 409 Terrorism, Antiterrorism, and Homeland Security (3)

(Formerly GVPT 498X.) An examination of the impact of terrorism upon the homeland security of the United States, especially since the attacks of September 11, 2001. Topics include the antecedents of modern homeland security, the changing face of terrorism in the United States, the threat of weapons of mass destruction and cyber terrorism, the concept of homeland security within a federal system, the establishment of a federal agency for homeland security, the impact of the National Strategy for Homeland Security upon the federal system, civil liberties and the Patriot Act, intelligence and civil rights, and critical infrastructure protection. Students may receive credit for only one of the following courses: GVPT 409 or GVPT 498X.

GVPT 431 Introduction to Constitutional Law (3)

A systematic inquiry into the general principles of the constitutional system, using case studies. Topics include the separation of powers, federal/state relations, and other fundamental features of the American Constitution.

GVPT 433 The Judicial Process (3)

An examination of judicial organization in the United States at all levels of government. Emphasis is on legal reasoning, legal research, and court procedures.

GVPT 434 Race Relations and Public Law (3)

A political and legal examination of rights protected by the Constitution as they affect racial minorities. The constitutional powers of the federal courts, the executive branch, and Congress to define, protect, and extend those rights are probed.

GVPT 443 Contemporary Political Theory (3)

Prerequisite: GVPT 100. A survey of the principal political theories and ideologies from Karl Marx to the present.

GVPT 444 American Political Theory (3)

Recommended: GVPT 100 or GVPT 170. A study of the development and growth of American political concepts from the colonial period to the present.

GVPT 451 Foreign Policy of Russia and Post-Soviet States (3)

An overview of the foreign policy of Russia and several other former Soviet republics. Primary emphasis is on the development of contemporary Russian foreign policy. The impact of the Soviet legacy on other post-Soviet republics and the dynamics of their relations with the outside world are examined.

GVPT 457 American Foreign Relations (3)

Recommended: GVPT 100. A study of the principles and machinery of American foreign relations. Emphasis is on the conduct of the U.S. Department of State and the Foreign Service. Analysis covers the major foreign policies of the United States.

GVPT 460 State and Local Administration (3)

Recommended: GVPT 100 or GVPT 170. A study of the administrative structure, procedures, and policies of state and local governments. Focus is on the state level and on intergovernmental relationships. Illustrations are drawn from Maryland governmental arrangements.

GVPT 475 The Presidency and the Executive Branch (3)

Recommended: GVPT 100 or GVPT 170. An examination of the various roles of the president in the political process of the United States. The president's involvement in legislative matters, the president's function in the executive branch, and the president's role in his or her political party are assessed.

GVPT 480 Comparative Political Systems (3)

A study of major political institutions—such as legislatures, executives, courts, bureaucracies, public organizations, and political parties—along functional lines.

GVPT 484 Government and Politics of Africa (3)

A comparative study of the governmental systems and political processes of selected countries of Africa. Emphasis is on the problems of postcolonial nation-building, political culture, and the nature and role of the military.

GVPT 486A Internship in Government and Politics Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). Recommended: GVPT 100. An opportunity to combine academic theory with new, career-related experience in government and politics. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to government and politics and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

GVPT 486B Internship in Government and Politics Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). Recommended: GVPT 100. An opportunity to combine academic theory with new, career-related experience in government and politics. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to government and politics and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

GVPT 487 Government and Politics of Southwest Asia (3)

A comparative examination of the politics of India, Pakistan, and Afghanistan—three nations that share a common history but emerged from independence movements to develop differently. Discussion addresses religious conflicts; colonial experiences; nationalist ideologies; and the consequences of economic, political, and cultural globalization.

GVPT 498 Advanced Topics in Government and Politics (1–3)

Recommended: GVPT 100. In-depth study of topics of specialized interest.

History

Courses in history (designated HIST) may be applied as appropriate (according to individual program requirements) toward

- the general education requirements in the arts and humanities;
- a major or minor in history;
- a minor in African American studies, Asian studies, or women's studies;
- a certificate in Terrorism and Institutions: Prevention and Response; and
- electives.

A description of the curriculum for the history major and minor begins on p. 51. Descriptions of related curricula may be found on the following pages: African American studies (p. 15), Asian studies (p. 16), humanities (p. 55), and women's studies (p. 77).

HIST 104 Introduction to Archaeology (3)

(Formerly HUMN 105.) An introduction to the methods used by archaeologists to evacuate and date material, and to the ancient cultures of the Near East, Egypt, Greece, and Rome. Students may receive credit for only of the following courses: ARCH 100, HUMN 105, or HIST 104.

HIST 107 Classical Foundations (3)

(Formerly HUMN 102.) A study of aspects of the ancient Greco-Roman world (such as myth and religion, war and conquest, government and politics, social organization, and leisure activities) through examination of the words and actions of the protagonists. Original sources of history, philosophy, poetry, and drama are consulted. Focus is on individuals who contributed to the shaping of classical civilization. Students may receive credit for only one of the following courses: CLAS 100, HUMN 102, or HIST 107.

HIST 115 World History I (3)

A survey of Western and non-Western civilizations and cultures from earliest times to 1500. Emphasis is on the political, social, and cultural developments of the major civilizations and on the interactions between those civilizations.

HIST 116 World History II (3)

A survey of Western and non-Western civilizations and cultures from 1500 to the present. Emphasis is on the political, social, and cultural developments of the major civilizations; the interactions between those civilizations; and the development of a global community since 1500.

HIST 141 Western Civilization I (3)

A survey of the history of Western civilization from antiquity through the Reformation. The political, social, and intellectual developments that formed the values and institutions of the Western world are examined.

HIST 142 Western Civilization II (3)

A survey of the history of Western civilization from the Reformation to modern times.

HIST 156 History of the United States to 1865 (3)

A survey of the United States from colonial times to the end of the Civil War. The establishment and development of national institutions are traced. Students may receive credit for only one of the following courses: HIST 156 or HUMN 119.

HIST 157 History of the United States Since 1865 (3)

A survey of economic, intellectual, political, and social developments since the Civil War. The rise of industry and the emergence of the United States as a world power are emphasized. Students may receive credit for only one of the following courses: HIST 157 or HUMN 120.

HIST 202 Principles of War (3)

A study of the nine classic principles of war, which guide the conduct of war at the strategic, operational, and tactical levels and form the foundation of the art and science of the military profession. Primary and secondary historical resources are used to explore how past theory and practice have shaped the underlying policy, strategic planning, and operational procedures of today's military and national security-related agencies.

HIST 218Q Gettysburg (1)

A study of the major elements of warfare during the American Civil War, focusing on the Gettysburg campaign and its impact. Students may receive credit for only one of the following courses: HIST 218Q or HIST 318Q.

HIST 218R Antietam (1)

A study of the Maryland campaign of the American Civil War. Focus is on the 1862 Battle of Antietam and its impacts within the context of the war. Students my receive credit for only one of the following courses: HIST 218R or HIST 318R.

HIST 284 East Asian Civilization I (3)

An interdisciplinary survey of the development of East Asian cultures. All facets of East Asian traditional life are examined from a historical perspective.

HIST 285 East Asian Civilization II (3)

A survey of the historical development of modern Asia since 1700. The efforts of East Asians to preserve traditional cultures while facing Western expansion in the 18th and 19th centuries are presented; the efforts of those cultures to survive as nations in the 20th century are assessed.

HIST 303B Social History of Baltimore (3)

(Formerly HUMN 376B.) A study of the artistic, architectural, cultural, social, political, and economic history of Baltimore. The fifth largest U.S. port, Baltimore is examined as an urban center historically connected by its harbor to Europe and the world and by canal and railroad to the interior. Topics include the creation of culturally distinct neighborhoods of rural and immigrant groups, early industrial operations in milling and canning, and the effects of fire and the Depression. The complex forces of urban revitalization are studied. Archaeological and preservation sites are toured. Student may receive credit for only one of the following courses: HUMN 376B or HIST 303B.

HIST 309 Introduction to Historical Writing (3)

Recommended: 12 credits in history. A study of the methods and problems of historical research and presentation. Assignments include a major research paper.

HIST 314D The Darfur Crisis (1)

An examination of the impact of the crisis in Darfur on world peace and the course of international politics. Topics include the inception and the evolution of the problem and the reaction of the Sudanese government to the demands of the local population for autonomy in western Sudan. The definition of genocide and its application to the situation in Darfur are debated. Resolutions of the United Nations and other international and regional organizations resolutions regarding Darfur are introduced. American foreign policy is examined as it relates to Darfur.

HIST 316U Contemporary Political History of Afghanistan: 1919 to Present (1)

An introduction to Afghani history from the end of the "Great Game" (the struggle between Great Britain and Russia for supremacy in Central Asia) in 1919 to the present. Emphasis is on the political and economic history of the independent Afghan state. Topics include the closing period of the "Great Game" and the fragile relations between Afghanistan and Great Britain, the period of stability engendered by the rule of King Zahir Shah, the coup d'état of Sardar Mohammed Daoud, the Soviet invasion of Afghanistan, the downfall of the Communist government of President Mohammed Najibullah, the rise of the Taliban, the American-led invasion, and the reconstruction government of President Hamid Karzai. Assignments include intensive reading, writing, and research.

HIST 319A History of Terrorism (3)

A survey of terrorism in the modern world, investigating the ideology of political violence since 1789. Topics include the organization, aims, arms, financing, and composition of terrorist groups, from the 1880s in Russia to the present day worldwide. Various interpretations of the terrorist phenomenon are discussed. Assignments include advanced reading and research.

HIST 319B History of Violence in America (3)

A survey of violence in the United States, with an emphasis on the late 19th century and the 20th century. Theories of conflict and its causes provide a framework for discussing political violence, both past and present. Racial violence in the 20th century is examined. Topics also include violence and organized crime, domestic terrorism, violent crimes, student protest, and labor violence. Assignments include advanced reading and research.

HIST 319H Civil Rights: Martin Luther King Jr. (1)

A survey of the civil-rights movement from 1954 to 1968 as viewed though the career of Dr. King, its principal leader and spokesman. Assignments include advanced reading and research.

HIST 319L History of Drug Use in America (3)

A survey of the long-standing problem of drugs. Practices of drug use from pre-Columbian times to the present are considered. Emphasis is on the role of the alcoholic in American history and the origins of modern attitudes toward drugs.

HIST 319X Jews Under the Nazis (1)

A study of the fate of European Jews under Hitler. How and why the Holocaust occurred are considered. Topics include the history of anti-Semitism in Europe to l933, the German Jewish community, and Nazi persecution (1933–39), and the Holocaust (1939–45).

HIST 319Y Nuremberg War Trials (1)

A study of the Nuremberg War Trials. Topics include the charges, personalities, verdicts, and issues of this juridical milestone. The long-range implications of the precedents established at Nuremberg, not only for Germany, but for America and the world as well, are also examined.

HIST 319Z Nazism and the Third Reich (1)

An examination of Germany in the 1920s and 1930s focusing on the emergence and establishment of Nazism. A number of relevant questions are considered: Why did national socialism arise in Germany when it did? Was national socialism specifically German or representative of a more general European phenomenon? Are the origins time-bound or could they occur again?

HIST 324 Classical Greece (3)

A study of the ancient Greeks from Homer to Socrates, from 800 to 400 B.C. Discussion covers the society and religion of the city-state, the Peloponnesian War, the art and literature of Periclean Athens, and the intellectual circle of Socrates.

HIST 325 Alexander the Great and the Hellenistic Age (3)

A study of the history of the Greeks from 400 to 30 B.C. Topics include Alexander and the changes he wrought in the Mediterranean world; the rise of monarchies and leagues; new directions in religion, art, literature, and science; and the Hellenization of the Near East, including the Jews.

HIST 326 The Roman Republic (3)

A study of ancient Rome during the period 753 to 44 B.C., from its founding to the assassination of Julius Caesar. Focus is on Rome's conquest of the Mediterranean world, the social and political pressures that led to that conquest, and the consequent transformation and decline of the republic. Students may receive credit for only one of the following courses: HIST 326 or HIST 421.

HIST 327 The Roman Empire (3)

A study of Roman history from Augustus to Heraclius, from 44 B.C. to A.D. 641. Topics include the imperial court and government, the diversity of culture in the provinces and cities and the progress of Romanization, Roman religion and its transformation in late antiquity, and the Roman army and defense of the frontiers. Students may receive credit for only one of the following courses: HIST 327 or HIST 421.

HIST 333 Europe During the Renaissance and Reformation (3)

A study of the transformation of continental Europe from 1400 to 1648. Topics include changes in modes of Christian piety and the spread of humanistic ideas, the social and intellectual foundations of reformation theology, the 16th-century reform movements, and the causes and impacts of the Thirty Years War.

HIST 336 Europe in the 19th Century: 1815 to 1919 (3)

A study of the political, economic, social, and cultural development of Europe from the Congress of Vienna to World War I.

HIST 337 Europe's Bloodiest Century (3)

An investigation of the political, economic, and cultural development of Europe since 1914, with special emphasis on the factors involved in the two world wars and their worldwide effects and significance.

HIST 353 Latin America: From Moctezuma to Bolivar (3)

A survey of Latin America from late pre-Columbian civilizations through European incursion and the wars of independence. Topics include cultural collisions, political formation, and the end of Iberian domination.

HIST 354 Latin America: Revolutions, Caudillos, and Democracy (3)

An overview of the political culture of the republics of Latin America. Topics include nation building, modernization, race relations, economic development, gender, reform and revaluation, and relations between the United States and Latin America. Students may receive credit for only one of the following courses: HIST 251 or HIST 354.

HIST 357 Military History: 1494 to 1815 (3)

A survey of the military history of modern Europe from the dynastic wars of the Valois and Habsburgs to the national wars of the French Revolution and Empire. The economic, financial, strategic, tactical, and technological aspects of the development of military institutions and warfare are examined. Students may receive credit for only one of the following courses: HIST 224 or HIST 357.

HIST 358 Modern Military History: 1815 to Present (3)

A survey of the military history of modern Europe from the Congress of Vienna in 1815 to the present. The economic, financial, strategic, tactical, and technological aspects of the development of military institutions and warfare are examined. Students may receive credit for only one of the following courses: HIST 225 or HIST 358.

HIST 360 America in the Colonial Era: 1600 to 1763 (3)

An investigation of the founding of the English colonies in America. Topics include the European backgrounds of the colonies, the reasons for the instability of colonial society, the emergence of stable societies after 1689, and the development of colonial regionalism. Discussion also covers political institutions, social divisions, the economy, religion, education, and urban and frontier problems in the 18th century.

HIST 361 America in the Revolutionary Era: 1763 to 1815 (3)

A consideration of the background and direction of the American Revolution and the early development of the nation through the War of 1812. Emphasis is on how the Revolution shaped American political and social development, including the creation of a new government under the Constitution and the challenges facing the new nation.

HIST 362 Ante-Bellum America: 1815 to 1861 (3)

An examination of the strong sense of nationalism in the United States after the War of 1812 and its transformation into the sectionalism that led to the Civil War. Issues contributing to North/South antagonism, particularly slavery, are discussed. Topics include Jacksonian democracy; capitalism; racism; immigration; Manifest Destiny; and religious, social, and intellectual movements.

HIST 364 Emergence of Modern America: 1900 to 1945 (3)

A study of the emergence of modern American institutions and identities in the years 1900–45. Topics include the presidencies of McKinley, Roosevelt, Taft, and Wilson; the world wars; the Great Depression; and the period of the New Deal. Special consideration is also given to emerging issues such as the role of women and African Americans, corporate enterprises, and the welfare state.

HIST 365 Recent America: 1945 to the Present (3)

A survey of U.S. history from the presidencies of Truman and Eisenhower to the present. Topics include 1960s radicalism, the Cold War, Vietnam, Watergate, and changes in American society.

HIST 372 Legacy of the Civil Rights Movement (3)

An examination of the civil rights movement in the United States from World War II to the present. Focus is on the era of protest and reform through the 1980s, with analysis of its influence into the present decade. Students may receive credit for only one of the following courses: BEHS 372 or HIST 372.

HIST 375 Modern European Women's History (3)

A social and cultural study of the economic, family, and political roles of European women since the Enlightenment and Industrial Revolution. Emphasis is on contemporary discussions on the role of women, the effects of industrialization on women's work and status, the demographic parameters of women's lives, and women's participation in political events from market riots to suffrage struggles. Students may receive credit for only one of the following courses: HIST 212 or HIST 375.

HIST 376 Women and the Family in America to 1870 (3)

An examination of the diverse experiences of different groups of women from the colonial era through 1870. Three main themes are developed: the impact of race and class on women's lives, changes and continuity in the division of labor on the basis of gender, and the shifting definition of the family. Emphasis is on the relationship between ideals and realities in women's lives and alterations in their status within the family and society at large. Students may receive credit for only one of the following courses: HIST 376 or HUMN 366.

HIST 377 Women in America Since 1870 (3)

An examination of the changing role of women in working-class and middle-class families. Topics include the effects of industrialization on women's economic activities and status and women's involvement in political and social struggles, including those for women's rights, birth control, and civil rights. Students may receive credit for only one of the following courses: HIST 211, HIST 367, or HIST 377.

HIST 381 America in Vietnam (3)

A multidisciplinary interpretation of the complex involvement of the United States in Vietnam. Key themes include foreign policies after World War II that led to the Vietnam War, the political and military objectives of the United States, domestic responses in the United States to military involvement, and the lessons and legacies of the war. Students may receive credit for only one of the following courses: BEHS 337 or HIST 381.

HIST 390 The Rise of Islam to 1300 (3)

A survey of the origins, development, and rapid expansion of Islam into Europe, Asia, and North Africa. Topics include the diversity of early Islamic beliefs; the evolution of social and political institutions and their expansion into Europe, the Arab East, and North Africa; and the importance of Islamic scholarship in the birth of the modern world. Focus is on the period before 1300.

HIST 391 History of the Ottoman Empire (3)

A survey of the Ottoman Turkish Empire from 1300 A.D. to its collapse during World War I. Emphasis is on the empire's social and political institutions and its expansion into Europe, the Arab East, and North Africa.

HIST 392 History of the Contemporary Middle East (3)

An exploration of the causes underlying the rise of sovereign nation-states in the Middle East. Topics include modernization, Westernization, and secularization in a traditional society and shifting political and economic power groupings in a regional and worldwide context.

HIST 393 Archival Administration (3)

An examination of the function and administration of archives. Topics include methods of preserving archival material, cataloguing, special problems of oral history archives, and related issues.

HIST 393S History and Archaeology of Sicily: A Field Study (3)

A field study experience that provides a perspective on Western civilization focusing on Sicily and examining how its extraordinary history has played out in the broader context of the ancient world. Online study and discussion serve as preparation for the intensive two-week field experience in Sicily, visiting the island's museums and archaeological sites. Further research follows the field experience, culminating in a research paper. Interested students should contact *history@umuc.edu* for more information.

HIST 394 Museum Administration (3)

A study of museum administration from a curator's perspective. Topics include acquisition, facility management, and resource development. An overview of governing laws is provided. Both private and public museums in the Washington, D.C., metro area serve as models.

HIST 396A Cultural Heritage Protection: Afghanistan (3)

A study of basic strategies for protecting heritage sites, focusing on those in Afghanistan. Discussion covers both theory and application. Topics include cultural, political, legal, and historical considerations.

HIST 396I Cultural Heritage Protection: Iraq (3)

A study of basic strategies for protecting heritage sites, focusing on those in Iraq. Discussion covers both theory and application. Topics include cultural, political, legal, and historical considerations.

HIST 460 African American Life: 1500 to 1865 (3)

An examination of African American communities in the Western Hemisphere from 1500 to 1865. Topics include the origins of African American communities in the Western Hemisphere and the resulting diversity of experiences and cultures. Emphasis is on African American communities in North America, especially the evolution of those communities and their cultures.

HIST 461 African American Life Since 1865 (3)

An examination of African Americans in the United States since the abolition of slavery. Emphasis is on 20th-century developments, including the migration from farm to city, the growth of the civil rights movement, and the race question as a national problem.

HIST 462 The U.S. Civil War (3)

A study of the U.S. Civil War. Topics include causes of the war; sectional politics and secession; resources and strategies of the Confederacy and the Union; the changing character of the war; emancipation and its consequences; the economic, social, and political conditions of the home front; and the wartime origins of Reconstruction.

HIST 463 U.S. Military History Since 1865 (3)

An examination of the evolution of the U.S. armed forces since the Civil War. Topics include the role of the armed forces in U.S. diplomatic relations, the social and economic impact of war and peace, and the changing image of the military in American culture. Students may receive credit for only one of the following courses: HIST 419N or HIST 463.

HIST 465 World War II (3)

An examination of the Second World War. Topics include the origins and causes of the war; the political, military, economic, and social circumstances and events; and its catastrophic impact and legacy.

HIST 466 The Cold War (3)

An introduction to the history of the Cold War, which divided the world along ideological, economic, political, and military lines for more than 40 years. Focus is on the chronology of the struggle between the United States and the Soviet Union, with the former leading the NATO nations and the latter leading the Warsaw Pact nations. Students may receive credit for only one of the following courses: HIST 320, HIST 419I, or HIST 466.

HIST 476 Historic Preservation (3)

A study of the theory and techniques of historic preservation. Topics include the principles of acquisition, stabilization, restoration, and conversion of structures or sites into interpretive or public facilities. Assignments include field trips and reports.

HIST 477 Editing Historical Documents (3)

Prerequisites: HIST 309 and an upper-level advanced writing course (WRTG 391, WRTG 393, WRTG 394, ENGL 391, COMM 393, or COMM 394). A study of theory and practice in handling manuscripts and documentary artifacts. Topics include how to establish taxonomic criteria, analyze, transcribe, annotate, proof, index, edit, and publish manuscripts. Discussion also covers techniques for establishing databases and catalogs.

HIST 480 History of Traditional China (3)

A study of the history of China from earliest times to 1644. Emphasis is on the development of Chinese institutions that have molded the life of the nation and its people.

HIST 481 History of Modern China (3)

A study of the history of modern China from 1644 to the present. Focus is on the process of change, as China moved from its perceived position of the center of the civilized world to that of a nation-state in a complex international environment.

HIST 482 History of Japan to 1800 (3)

An examination of traditional Japanese civilization from the age of Shinto mythology and the introduction of continental learning to the rule of military families. Topics include transition to a money economy and the creation of a town-based culture. Political, economic, religious, and cultural history is also covered.

HIST 483 History of Japan Since 1800 (3)

A survey of Japan's renewed contact with the Western world and its emergence between 1800 and 1931 as a modern state, an industrial society, and world power. Japan's road to war, the period of occupation, and the era of recovery are covered, from 1931 to the present.

HIST 486A Internship in History Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in history. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to history and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

HIST 486B Internship in History Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in history. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to history and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Homeland Security

Courses in homeland security (designated HMLS) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in homeland security;
- a major in criminal justice, emergency management, or fire science; and
- electives.

A description of the curriculum for the homeland security major and minor begins on p. 53. A description of the curriculum for the emergency management major begins on p. 35.

HMLS 302 Introduction to Homeland Security (3)

An introduction to the public- and private-sector dimensions of the theory and practice of homeland security at the national, regional, state, and local level. An overview of the administrative, legislative, and operational elements of homeland security programs and processes (including a review of homeland security history, policies, and programs) is provided. Topics include the threat of terrorism and countermeasures, including intelligence, investigation, and policy that support U.S. homeland security objectives.

HMLS 304 Strategic Planning in Homeland Security (3)

Prerequisite: HMLS 302. An examination of the fundamentals of strategic planning necessary for the maintenance of domestic security and the operation of the homeland security organization in both the public and private sectors. Topics include organizational priorities, planning documents, policy development, financial operations, and the evaluation process. Discussion also covers the risk management framework that analyzes threat, risk, vulnerability, probability, and impact as parameters for decision making and resource allocation.

HMLS 406 Legal and Political Issues of Homeland Security (3)

Prerequisite: HMLS 302. A study of the legal aspects of current government regulations on intelligence operations, identity management, information dissemination, infrastructure protection, business community security concerns, and ethical issues. The development of public policy in homeland security is examined on local, regional, national, and international levels. Topics include surveillance, personal identity verification, personal privacy and redress, federal legislation passed in the aftermath of the terrorist attacks, the rights of foreign nationals, the rights of U.S. citizens, the governmental infrastructure for decisions concerning legal rights, and the difficulties of prosecuting terrorist suspects (such as jurisdictional issues, rules of evidence, and prosecution strategies).

HMLS 408 Infrastructure Security Issues (3)

An examination of infrastructure protection on international, national, regional, state, and local levels. Topics include what constitutes critical infrastructure, including both cyber and physical infrastructure, and the development of vulnerability assessments in both the public and private sectors. An overview of U.S. homeland security policy as it relates to the protection of critical infrastructures and key assets (including the roles of the federal, state, and local governments and the private sector in the security of these resources) is provided. Focus is on risk reduction and protection of critical infrastructures utilizing available resources and partnerships between the public and private sectors.

HMLS 414 International Security Issues (3)

Prerequisite: HMLS 302. A study of the role of intelligence in international security. Topics include the intelligence process—the collection, analysis, sharing and dissemination of information between governments and between governments and the private sector. Discussion also covers investigative law enforcement techniques, including information case management and prosecution. Emphasis is on evaluating current international intelligence and enforcement efforts. Future challenges and opportunities for international intelligence operations are also examined.

HMLS 486A Internship in Homeland Security Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in homeland security. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to homeland security and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

HMLS 486B Internship in Homeland Security Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in homeland security. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to homeland security and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

HMLS 495 Public Safety Policies and Leadership (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: At least 15 upper-level credits in CCJS, EMGT, FSCN, or HMLS courses. A study of leadership theories, skills, and techniques used in the public safety professions. The interdisciplinary perspective—encompassing criminal justice, emergency management, fire science, and homeland security—is designed to support integrated public safety management. A review of current issues and contemporary successful leadership styles in the public safety professions integrates knowledge of principles gained through previous coursework. Case studies and exercises are used to address challenges in strategic planning. Other tools focus on evaluation of personal leadership styles and techniques.

Humanities

Courses in humanities (designated HUMN) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities; and
- electives.

A description of the curriculum for the humanities major and minor begins on p. 55.

HUMN 100 Introduction to Humanities (3)

An introduction to the humanities through a review of some of the major developments in human culture. The goal is to promote analysis of underlying assumptions about the way societies are formed and run and how they express their ideas through art, literature, architecture, music, and philosophy. Students develop the conceptual tools to understand cultural phenomena critically.

HUMN 351 Myth and Culture (3)

A presentation of reflections on the interrelations of myth, religion, and culture in which myths are evaluated as embodiments of ethnic and universal ideas. Religion is analyzed within American and non-American cultures. Ideas and symbols from mythology that provide background for literature, music, and art are introduced.

HUMN 486A Internship in Humanities Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in the humanities. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to the humanities and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

HUMN 486B Internship in Humanities Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in the humanities. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to the humanities and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

HUMN 495 Humanities Seminar (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: at least 15 credits in humanities-related courses. A study of the humanities that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. A theme or topic (which varies each semester) is examined from an interdisciplinary perspective. Assignments include a major paper or presentation that demonstrates mastery of the subject matter and research and writing skills.

Human Resource Management

Courses in human resource management (designated HRMN) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in human resource management, business administration, global business and public policy, or management studies;
- a certificate in Business Project Management, Human Resource Management, or Management Foundations; and
- electives.

A description of the curriculum for the human resource management major and minor begins on p. 56. Descriptions of other management-related curricula may be found on the following pages: accounting (p. 13), business administration (p. 19), environmental management (p. 39), fire science (p. 43), global business and public policy (p. 47), management studies (p. 66), and marketing (p. 67).

HRMN 300 Human Resource Management (3)

A basic study of human resource management. Topics include human resource planning and the recruitment, selection, development, compensation, and appraisal of employees. Scientific management and unionism are explored insofar as these historical developments affect the various personnel functions. Students may receive credit for only one of the following courses: BMGT 360, HRMN 300, or TMGT 360.

HRMN 302 Organizational Communication (3)

A study of the structure of communication in organizations. Problems, issues, and techniques of organizational communication are analyzed through case histories, exercises, and projects. The examination of theory and examples is intended to improve managerial effectiveness in communication and negotiation. Students may receive credit for only one of the following courses: BMGT 398N, HRMN 302, MGMT 320, MGST 315, or TEMN 315.

HRMN 362 Labor Relations (3)

A study of the development and methods of organized groups in industry, with reference to the settlement of labor disputes. Labor unions and employer associations involved in arbitration, mediation, and conciliation are analyzed from an economic as well as a legal standpoint. Topics include collective bargaining, trade agreements, strikes, boycotts, lockouts, company unions, employee representation, and injunctions. Students may receive credit for only one of the following courses: BMGT 362 or HRMN 362.

HRMN 363 Negotiation Strategies (3)

An introduction to methods and processes of negotiation and collective bargaining. Negotiating strategies related to selected products, services, and management issues are explored. Students may receive credit for only one of the following courses: BMGT 398W, HRMN 363, or MGMT 398W.

HRMN 365 Conflict Management in Organizations (3)

An introduction to processes observed in and management of conflict within organizations. Topics include general models of conflict, methods of managing conflict, and issues related to disagreements in organizational contexts. Students may receive credit for only one of the following courses: BMGT 398X, HRMN 365, or MGMT 398X.

HRMN 367 Organizational Culture (3)

Prerequisite: BMGT 364. An examination of the nature, definitions, theories, and aspects of organizational culture. Analysis covers patterns of behavior and their relationship to organizational culture, especially the impact of the organization's business on employee behavior and culture. Topics include the role of nationality, gender, and race within organizational culture; implications of addressing organizational challenges; theory versus practice; and the relative roles of the individual, groups, and the organization in a cultural context. Students may receive credit for only one of the following courses: BMGT 398T or HRMN 367.

HRMN 392 Stress Management in Organizations (1)

An exploration of the changing nature of work and stress in organizations, due to a business emphasis on productivity and personal and family demands. Focus is on the causes of stress and methods of managing stress in organizational settings. Topics include interactions, performance objectives, social structure, job characteristics, and other factors causing stress in organizations. Consideration is given to political climate, pressure to achieve, interpersonal conflict, and time pressures. Discussion covers practical approaches to reduce stress at work. Students may receive credit for only one of the following courses: BMGT 398Y, HRMN 392, MGMT 398Y, or MGST 398H.

HRMN 395 The Total Rewards Approach to Compensation Management (3)

Prerequisite: HRMN 300. An exploration of alternative compensation philosophies to define total rewards as everything that employees value in the employment relationship. Topics include building and communicating a total rewards strategy, compensation fundamentals, the analysis and documentation of a job analysis, linking pay to performance, employee motivation, and performance appraisal. Strategies such as incentive cash and/or stock compensation programs, employee ownership, benefits and nonmonetary rewards are discussed and evaluated. The interrelationships among compensation, motivation, performance appraisal, and performance within the organization are examined. Discussion also covers the design and implementation and operation of a total rewards program, including organizational compatibility. Students may receive credit for only one of the following courses: BMGT 388L, HRMN 390, or HRMN 395.

HRMN 400 Human Resource Management: Analysis and Problems (3)

Prerequisite: HRMN 300. A study of the role of human resource management in the strategic planning and operation of organizations, performance appraisal systems, and compensation and labor/management issues. The influence of federal regulations (including equal opportunity, sexual harassment, discrimination, and other employee-related regulations) is analyzed. The critical evaluation of human resource problems is supported with a review of research findings, readings, discussions, case studies, and applicable federal regulations. Students may receive credit for only one of the following courses: BMGT 460, HRMN 400, or TMGT 360.

HRMN 406 Employee Training and Development (3)

An examination of employee training and human resource development in various organizations. Topics include the development, administration, and evaluation of training programs; employee development; career development; and organizational change. Issues in employee development (including assessment of employee competencies, opportunities for learning and growth, and the roles of managers in employee development) are explored. Students may receive credit for only one of the following courses: BMGT 498I, HRMN 406, or MGMT 498I.

HRMN 408 Employment Law for Business (3)

Recommended: BMGT 380. A conceptual and functional analysis of the legal framework and principles of industrial and employment relations, with special emphasis on discrimination in the workplace in the domestic and global environment. Topics include discrimination based on race, sex, age, and disability; testing and performance appraisal; wrongful discharge; labor/management issues; and employee benefits. Salient transnational employment issues are also explored. Students may receive credit for only one of the following courses: BMGT 468, BMGT 498G, HRMN 408, or MGMT 498G.

HRMN 462 Labor Relations Law (3)

Recommended: BMGT 380. A conceptual and functional analysis and application of legal principles relevant to labor/management relations and the collective bargaining process in the domestic and global industrial and public sectors. Topics include the historical and statutory development of unionization; union organization and unfair labor practices; negotiation and administration of the collective bargaining agreement; economic pressures, including strikes, pickets, boycotts, and lockouts; arbitration and conflict resolution; public-sector regulation; and transnational labor/management issues. Students may receive credit for only one of the following courses: BMGT 462 or HRMN 462.

HRMN 486A Internship in Human Resource Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in human resource management. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to human resource management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

HRMN 486B Internship in Human Resource Management Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in human resource management. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to human resource management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

HRMN 495 Contemporary Issues in Human Resource Management Practice (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisite: HRMN 400. A study of human resource management that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in human resource management are considered. Students may receive credit for only one of the following courses: BMGT 388K, HRMN 494, or HRMN 495.

Information Systems Management

Courses in information systems management (designated IFSM) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing;
- a major in information systems management, computer information technology, computer studies, cybersecurity, emergency management, homeland security, or laboratory management;
- a minor in computing;
- a certificate in Database Management, Information Assurance, Information Management, or Project Management for IT Professionals; and
- electives.

A description of the curriculum for the information systems management major begins on p. 59. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 24), computer information technology (p. 26), computer science (p. 27), computer studies (p. 29), computing (p. 31), and cybersecurity (p. 33).

IFSM 201 Introduction to Computer-Based Systems (3)

(Course activities require access to a standard office productivity package, i.e., word processing, spreadsheet, database, and presentation software.) An overview of computer information systems in which hardware, software, procedures, systems, and human resources are explored in relation to their integration and application in business and other segments of society. Students may receive credit for only one of the following courses: BMGT 301, CAPP 101, CAPP 300, CMST 300, IFSM 201, or TMGT 201.

IFSM 300 Information Systems in Organizations (3)

(Course activities require access to Microsoft Office Professional.) Prerequisite: IFSM 201 and basic knowledge of office productivity software. An overview of information systems and how they provide value in organizations by supporting organizational (or business) objectives. Discussion covers human aspects of computing, types of computer systems, and general theory of systems and their relationship to the overall organization.

IFSM 302 Workplace Productivity (3)

Recommended: IFSM 201. A survey of techniques for improving the productivity of practices and procedures in the workplace. Teaming (e.g., encouraging employees' participation in group activities, brainstorming, and making meetings more effective) and problem solving (e.g., simplifying work; charting work-flow processes; diagramming causes and effects; and using Pareto analysis, histograms, and total quality management) are the two major approaches emphasized.

IFSM 303 Human Factors in Information Systems (3)

Recommended: IFSM 201. A general survey of the application of human factors to the design and use of information systems. Topics include the history, evolution, and current state of the human/computer interface. The contributions of psychology, engineering, and physiology to the development of ergonomics are described.

IFSM 304 Ethics in the Information Age (3)

Recommended: IFSM 201. An introduction to information systems as used to provide information for decision making in a democratic society. Discussion covers the philosophy, techniques, and ethical considerations involved in the use of information systems.

IFSM 310 Software and Hardware Concepts (3)

Prerequisites: CMIS 102 or CMIS 102A. A survey of computer systems. Emphasis is on the interrelationships of hardware architecture, system software, and application software. Topics include the architectures of processors and storage systems and implications for system software design. Discussion also covers the effects of the design of hardware and system software on the development of application programs in a business environment. Students may receive credit for only one of the following courses: CMIS 270, CMIS 310, CMSC 311, or IFSM 310.

IFSM 410 Database Concepts (3)

Prerequisites: CMIS 102 (or CMIS 102A) and IFSM 300. An introduction to the design and management of database systems in a business environment. Topics include the role of databases in organizations, the management of information as a critical business resource, types and functions of database management systems, conceptual data modeling and entity/relationship and semantic data models, and the fundamental principles of relational and object-oriented database design. The implementation and maintenance of database management systems and the role of the database administrator are discussed. Students may receive credit for only one of the following courses: CMIS 320 or IFSM 410.

IFSM 411 SQL (3)

Prerequisite: IFSM 410 or CMIS 320. In-depth practice using Structured Query Language (SQL), the most common database manipulation language. Business-related case studies illustrate the various uses of SQL. Discussion covers the underlying theory of relations (including relational operators, keys, and entity and referential integrity). Students may receive credit for only one of the following courses: CMIS 420, IFSM 411, or IFSM 498I.

IFSM 420 Advanced Database Concepts (3)

Prerequisite: IFSM 411 or CMIS 320. Investigation and application of advanced database concepts, including database administration, database technology, and the selection and acquisition of database management systems. An intensive practicum in data modeling and system development in a database environment is provided. An overview of future trends in data management is also included.

IFSM 432 Disaster Recovery Planning (3)

Prerequisite: IFSM 300 or CSIA 303. A study of disaster recovery and emergency planning as applied to the information-systems function in corporations. Topics include security risk evaluation and management, creation of threat profiles, continuity of operations planning, contingency planning, and incident reporting. A self-directed approach/tool for the conduct of information security risk evaluation is introduced. Projects include developing a security protection strategy and plan. Students may receive credit for only one of the following courses: IFSM 432 or IFSM 498N.

IFSM 433 Information Security Needs Assessment and Planning (3)

Prerequisite: IFSM 300 or CSIA 303. In-depth practice in gathering security requirements to generate a security plan. Topics include the collection and analysis of functional security requirements, risk analysis, requirements traceability matrices and the collection of metrics, the investigation of physical security, operational procedures and legal issues related to information security, and the identification of education and training requirements. Projects include generating a site security plan based on site-specific or case-study requirements.

IFSM 438 Project Management (3)

Prerequisite: IFSM 300. An exposition of planning, scheduling, and controlling a system project during its life cycle. Topics include the use of project-management techniques such as PERT (Project Evaluation and Review Technique) and Gantt charts and other techniques of planning, scheduling, and controlling projects. Demonstrations and exercises in using project-management software are provided. Students may receive credit for only one of the following courses: BMGT 487, IFSM 438, or TMGT 430.

IFSM 461 Systems Analysis and Design (3)

Prerequisite: IFSM 300. A study of the methods used in analyzing needs for information and in specifying requirements for an application system. Implementation of the operational system, integration of computer technology, and aspects of organizational behavior in the design support system are examined. Topics include the concept of the system life cycle, the iterative nature of the processes of analysis and design, and the methodology for developing a logical specification and physical design for an operational system. Students may receive credit for only one of the following courses: IFSM 436, IFSM 460, or IFSM 461.

IFSM 486A Internship in Information Systems Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in information systems management. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to information systems management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

IFSM 486B Internship in Information Systems Management Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in information systems management. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to information systems management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

IFSM 498X Digital Evidence and Computer Crime (1)

Prerequisite: IFSM 310 or CCJS 105. A study of computers as extensions of traditional crime scenes and various ways that digital evidence can be useful in investigations into crimes such as computer intrusions and violent crimes. Focus is on a systematic approach to investigating a crime based on the scientific method. Topics include file systems, data recovery, and Internet traces, as well as procedures and tools for properly collecting and examining digital evidence. Relevant background and terminology and legal issues that arise in computer-related investigations are also covered.

Japanese

Courses in Japanese (designated JAPN) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities and Asian studies; and
- electives.

UMUC offers a limited number of foreign language courses each session.

A description of the curriculum for the humanities major and minor begins on p. 55. A description of the curriculum for the Asian studies major and minor begins on p. 16.

JAPN 111 Elementary Japanese I (3)

(Not open to native speakers of Japanese; assumes no prior knowledge of Japanese.) An elementary study of Japanese. Emphasis is on oral communication skills as a foundation for building balanced proficiency in the four communication skills of listening, speaking, reading, and writing. Topics include basic structures, vocabulary, pronunciation, and writing, as well as elements of culture, history, and geography. Authentic text from native speakers is used as much as possible.

JAPN 112 Elementary Japanese II (3)

(Not open to native speakers of Japanese.) Prerequisite: JAPN 111. Continued basic study of Japanese, emphasizing oral communication as a foundation for building balanced proficiency in the four communication skills of listening, speaking, reading, and writing. Topics include basic structures, vocabulary, pronunciation, and writing, as well as further elements of culture, history, and geography. Oral and written authentic text from native speakers is used as much as possible.

JAPN 114 Elementary Japanese III (3)

(Not open to native speakers of Japanese.) Prerequisite: JAPN 112. Further development of skills in listening, speaking, reading, and writing in Japanese. Japanese culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, character recognition and writing, and composition. Focus is on acquiring the skills necessary to communicate with native Japanese speakers orally and in writing at an advanced elementary level. Oral and written authentic text is used as much as possible.

JAPN 115 Elementary Japanese IV (3)

(Not open to native speakers of Japanese.) Prerequisite: JAPN 114. Improvement of skills in listening, speaking, reading, and writing in Japanese. Japanese culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, character recognition and writing, and composition. Focus is on acquiring the skills necessary to communicate with native Japanese speakers orally and in writing at a basic intermediate level. Oral and written authentic text is used as much as possible.

Journalism

Courses in journalism (designated JOUR) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in communication studies;
- a minor in journalism; and
- electives.

JOUR 201 fulfills the general education requirement in communications.

UMUC offers only a limited number of courses each session in this discipline.

A description of the curriculum for the journalism minor begins on p. 62. Descriptions of related curricula may be found on the following pages: communication studies (p. 22) and speech communication (p. 76).

JOUR 201 Writing for the Mass Media (3)

(Fulfills the general education requirement in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An introduction to writing news and feature articles for print and electronic media. Emphasis is on writing—from mechanics (grammar, spelling, punctuation, and journalism style) to content (accuracy, completeness, audience, and readability)—and reporting.

JOUR 202 Editing for the Mass Media (3)

Prerequisite: JOUR 201. Presentation of the basic editing skills that apply to print and electronic media. Hands-on practice in copyediting, fact checking, headline writing, photo selection, and page layout is provided. Students may receive credit for only one of the following courses: JOUR 202 or JOUR 310.

JOUR 319A Analyzing and Understanding the News (1)

An analysis of radio, television, and newspaper reporting designed to improve critical understanding of the news. Topics include the benefits of channel surfing and turning to more than one news provider, whether print or broadcast, for information. Reasons for loyalty to favorite sources of news information are examined.

JOUR 319B Issues in Online Journalism (1)

A review of the recent history of online journalism that stresses the issues and challenges that writers face in this medium. Online newspapers and journals are reviewed for content and design. The basics of setting up an online newspaper—from getting source material to designing the look of the publication—are examined.

JOUR 330 Public Relations Theory (3)

Prerequisite: JOUR 201. A study of the historical development and contemporary status of public relations in business, government, associations, and other organizations. Communication theory and social science methodology are studied as they apply to the research, planning, communication, and evaluation aspects of the public relations process.

JOUR 331 Public Relations Techniques (3)

Prerequisite: JOUR 330. A review of the techniques of public relations. Emphasis is on news releases, publications and printed materials, speeches, special events, and audiovisual media. Techniques are applied in laboratory and field projects. Students may receive credit for only one of the following courses: BMGT 398U or JOUR 331.

JOUR 350 Photojournalism in the Digital Age (3)

(Students are required to use their own digital SLR camera.) An exploration of techniques and trends in photojournalism. Practice in the fundamentals of photography (exposure, basic lighting techniques, portraiture and composition, and scanning and digitally toning photos using Photoshop) is provided. Assignments include developing a mini portfolio of short photo essays and a final story project to be published on the course Web site. The history of photojournalism is surveyed, focusing on the recent development of webzines and online newspapers.

JOUR 371 Magazine Article and Feature Writing (3)

Prerequisite: JOUR 201. A study of various types of feature articles for magazines, newspapers, and electronic media. Practice in researching and writing the feature article and in evaluating freelance markets is provided.

JOUR 410 History of Mass Communication (3)

Prerequisite: WRTG 101/101X or ENGL 101/ENGL 101X. Recommended: COMM 300 or a journalism class. A discussion of the development of newspapers, magazines, radio, television, and motion pictures as media of mass communication. The influence of the media on the historical development of the nation is considered.

JOUR 459 Special Topics in Mass Communication (3)

Prerequisite: WRTG101/101X or ENGL 101/101X. Recommended: COMM 300 or a journalism class. An in-depth study of a specific area in journalism or public relations. Topics may focus on areas such as international public relations, crisis communication, newsroom management, environmental journalism, or political campaigns. Assignments include advanced reading and research. May be repeated to a maximum of 6 credits when topics differ.

JOUR 486A Internship in Journalism Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in journalism. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to journalism and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

JOUR 486B Internship in Journalism Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in journalism. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to journalism and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Legal Studies

Courses in legal studies (designated LGST) may be applied as appropriate (according to individual program requirements) toward

- a major in legal studies;
- a certificate in Paralegal Studies; and
- electives.

LGST 360 and 363A may be applied toward the general education requirement in interdisciplinary issues/computing.

A description of the legal studies major begins on p. 64.

LGST 101 Introduction to Law (3)

A survey of the U.S. legal system and the role of the paralegal in the legal environment. Topics include the organization and powers of federal and state lawmaking institutions, court procedures, and the analysis of statutory provisions and judicial opinions. Students may receive credit for only one of the following courses: LGST 101 or PLGL 101.

LGST 200 Techniques of Legal Research (3)

Prerequisite or corequisite: LGST 101. An introduction to the book-based methods used to locate relevant, mandatory, and current rules and interpretations. Topics include the analysis, publication, and citation of judicial opinions, statutory provisions, and administrative law and the features and use of secondary sources, digests, and citators. Computer-assisted research systems are introduced, but assignments require legal research in a physical library with a hard-copy law collection. Students may receive credit for only one of the following courses: LGST 200 or PLGL 200.

LGST 201 Legal Writing (3)

Prerequisite: LGST 200. An introduction to the principles of writing clearly and effectively in the legal environment. Emphasis is on types of documents that paralegals may be called upon to draft, including intake memos, legal synthesis and office memos, and client letters. Students may receive credit for only one of the following courses: LGST 201 or PLGL 201.

LGST 204 Legal Ethics (3)

A survey of basic principles relating to the ethical practice of law. Rules and guidelines governing the ethical conduct of lawyers and nonlawyers are covered, as are law office management principles relevant to ethical requirements. Students may receive credit for only one of the following courses: LGST 204 or PLGL 204.

LGST 300 Legal Citation and Style (1)

A study of the rules for citation and style as set out in *The Bluebook: A Uniform System of Citation.* Topics include citation to state and federal primary authority, citation within legal memoranda including parentheticals and signals, and style rules for quotations and language.

LGST 312 Torts (3)

Prerequisite: LGST 201. A study of the causes of action, defenses, and remedies in the major categories of tort law, as well as tort-litigation procedures and writings for which a paralegal may be responsible. Topics include intentional torts, negligence, strict liability, damages, and civil procedures. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 312 or PLGL 312.

LGST 314 Workers' Compensation Law (1)

A thorough study of the Maryland Workers' Compensation Act and the practice of workers' compensation law in Maryland. Practical aspects of the workers' compensation system (including jurisdiction, employer/employee relationships, injuries covered by the Act, defenses, compensation benefits, vocational rehabilitation, and appeals) are covered. Students may receive credit for only one of the following courses: LGST 314 or PLGL 398H.

LGST 315 Domestic Relations (3)

Prerequisite: LGST 201. A study of the various legal aspects of family law. Emphasis is on the processes, procedures, and writings a paralegal may handle. Topics include divorce, separation, and annulment; child custody and visitation; and alimony, child support, disposition of property, and legal rights of children. Relevant aspects of civil procedures, enforcement, and the modification of orders and agreements are covered. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: FMCD 487, LGST 315, or PLGL 315.

LGST 316 Estates and Probate (3)

Prerequisite: LGST 201. A study of the legal concepts entailed in drafting and preparing simple wills and administering estates in Maryland, as well as the processes, procedures, and writings for which a paralegal may be responsible. Topics include preliminary and practical considerations of administering an estate; the appraisal of estate assets and probate inventory; inheritance taxes; claims against the estate; management of debts, accounting, and distribution considerations; the drafting and execution of wills; and guardianships. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 316, PLGL 216, or PLGL 316.

LGST 320 Criminal Law and Procedures (3)

Prerequisite: LGST 201. A study of the substantive and procedural aspects of the criminal justice system, particularly those aspects related to the work of a paralegal. Topics include crimes and defenses, penalties, and court procedures. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: CJUS 234, LGST 320, or PLGL 320.

LGST 322 Evidence (3)

Prerequisite: LGST 201. A study of laws that govern the admissibility of evidence for establishing or controverting facts in trials and administrative proceedings, and the role of the paralegal in gathering evidence and helping attorneys prepare for trial. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 322, PLGL 222, or PLGL 322.

LGST 325 Litigation (3)

Prerequisite: LGST 201. An examination of the process of civil litigation and the responsibilities commonly assigned to paralegals. Topics include investigation and interviewing, preparation of pleadings and motions, discovery, the conduct of the trial, and post-trial activity. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 325 or PLGL 325.

LGST 327 Alternative Dispute Resolution (3)

An overview of the various processes and techniques to settle disputes without court adjudication. Topics include negotiation, mediation, and arbitration. Students may receive credit for only one of the following courses: LGST 327, PLGL 327, or PLGL 398G.

LGST 330 Administrative Law (3)

Prerequisite: LGST 201. An overview of the functions and procedures of federal and state administrative agencies, as well as preparation of writings pertinent to administrative law practice. Topics include rulemaking, adjudication, the use and control of agency discretion, and disclosure of information. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 330 or PLGL 330.

LGST 335 Elder Law (3)

Prerequisite: LGST 201. An overview of legal issues that are increasingly relevant as the older population increases. Topics include health care, public entitlements, and legal and financial decision making. Emphasis is on the role of the paralegal in those areas. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 335, PLGL 335, or PLGL 398E.

LGST 340 Contract Law (3)

Prerequisite: LGST 201. A comprehensive study of the major areas of contract law that paralegals are most likely to encounter. Topics include formation, interpretation and enforcement, discharge, and breach and remedies for breach. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 340 or PLGL 340.

LGST 343 Real Estate Transactions (3)

Prerequisite: LGST 201. A study of the essentials of real estate law. Emphasis is on settlement procedures in Maryland, especially the processes, procedures, and writings for which a paralegal may be responsible. Topics include real estate contracts, types and sources of mortgage financing, title work, and closing and settlement. Other topics include easements and covenants and condos, PUDs, and co-ops. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 343 or PLGL 343.

LGST 345 Landlord Tenant Law (1)

A nuts-and-bolts study of landlord/tenant issues. Focus is on the rights and obligations of landlords in rental properties and the rights of tenants and how to assert those rights. Topics include lease provisions and eviction processes and how to defend against eviction. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 345 or PLGL 398K.

LGST 350 Sports Law (3)

(Formerly LGST 398A.) Prerequisite: LGST 201. A study of the laws that apply to sports and the role paralegals may play. Topics include the laws that apply to the business of sports and issues such as ethics, contracts, Title IX, representation of athletes, and drug testing. Students may receive credit for only one of the following courses: LGST 350 or LGST 398A.

LGST 360 Computer Application in the Legal Environment (3)

(Course activities require access to a standard office productivity package, i.e., word processing, spreadsheet, database, and presentation software.) Prerequisite: IFSM 201. An overview of uses of computer software in the legal environment. The concepts and theory of computer operations are explained in the context of needs analysis for law firms. Emphasis is on applications such as text processing, database management, electronic spreadsheets, timekeeping, docket control, and litigation support. Students may receive credit for only one of the following courses: CAPP 343, LGST 360, or PLGL 360.

LGST 363A Computer-Assisted Litigation Support (3)

(Course activities require access to a standard office productivity package, i.e., word processing, spreadsheet, database, and presentation software.) Prerequisites: IFSM 201 and LGST 325. A focused study of the use of text processing, database management, and electronic spreadsheets to support litigation. Topics include document discovery; document coding and abstracting; search and retrieval methods; project management; and preparing trial exhibits, presentations, and other visual aids. Students may receive credit for only one of the following courses: LGST 363A or PLGL 363A.

LGST 398B Public Housing (1)

A thorough review of federal and state law pertaining to public housing, designed to prepare the paralegal to represent individuals in public housing cases. Topics include admission and eligibility requirements, preferences and admissions, rent computation procedures, lease requirements, repair requirements, security deposits, rent increases, recertification of income, and termination proceedings. Practical aspects, including procedures in formal and informal hearings, are covered.

LGST 398C Social Security Cases (1)

A thorough review of the pertinent Social Security regulations, case law, and procedure for Social Security Disability (SSD) and Supplemental Security Income (SSI) cases, designed to prepare the paralegal to represent individuals at Social Security Administration hearings. Focus is on practical aspects, such as cross-examining vocational experts; analyzing medical records; preparing witness and client direct examination, opening statements, and closing arguments; and evaluating hypothetical client cases.

LGST 398D Drug and Alcohol Cases in Maryland (1)

A hands-on survey of the statutes, regulations, and case law governing the sentencing, commitment, and treatment of drug and alcohol offenders in Maryland, including those with dual diagnoses. Procedures and forms are discussed and illustrated.

LGST 398F Civil Litigation Filings in Federal Court (1)

A study of the rules and practical aspects of civil trial filings in federal court, specifically the U.S. District Court for the District of Maryland. Topics include review of the federal court system; applicable rules of federal civil procedure, including those pertaining to federal court jurisdiction; determining whether federal or local court rules apply; preparing and filing complaints, motions, discovery, and other pleadings; and service of process. Focus is on learning how to assist attorneys with preparing and filing pleadings (including complaints and answers), discovery, and motions (such as those for postponement of trial). Discussion covers practical considerations, including location of courts, courthouse etiquette, copy requirements, obtaining copies of documents from court, and organization of trial folders.

LGST 398G Civil Litigation Filings in Maryland State Courts (1)

A study of the rules and practical aspects of civil trial filings in Maryland district and circuit courts. Topics include the applicable Maryland rules of civil procedure, including those pertaining to jurisdiction of district and circuit courts; the filing of complaints, motions, and other pleadings; and service of process. Focus is on learning how to assist attorneys with preparing and filing pleadings (including complaints and answers), discovery, and motions (such as those for postponement of trial). Discussion covers practical considerations, including location of courts, courthouse etiquette, copy requirements, obtaining copies of documents from court, and organization of trial folders.

LGST 398H Immigration Law: Deportation and Removal (1)

(Designed primarily for students with prior experience or study in the area of immigration law.) A hands-on survey of immigration statutes, regulations, and case law as they relate to deportation and removal proceedings. Topics include the types of applications that can be filed to prevent deportation or removal; the procedural rules of the Immigration Courts in Baltimore, Maryland, and Arlington, Virginia; and the types of evidence that can be submitted to defend against deportation or removal. Procedures and forms are illustrated.

LGST 398J Elder Guardianships in Maryland (1)

A thorough review of the statutes and regulations pertaining to elder guardianships in Maryland and the student's role in assisting attorneys in representing elderly clients and/or their families. Topics include the guardianship process, qualifications of the petitioner for guardianship, postpetition procedures, obtaining emergency guardianships, obtaining medical records of the alleged disabled, and avoiding guardianships with advance directives. Discussion also covers guardianship of person and property, eligibility for guardianship, appointment of counsel for the alleged disabled, and guardian reporting and oversight. Procedure and forms, including petitions and show cause orders, are illustrated.

LGST 398Q Discovery Fundamentals (1)

A thorough study of the rules and practical aspects of preparing and responding to discovery requests in Maryland and federal courts and the paralegal's role in the discovery process. Topics include applicable Maryland and federal rules of procedure; applicable privileges; significance of the discovery process; ethical obligations with regard to discovery responses; and tactical considerations in responding to discovery requests. Focus is on learning how to assist attorneys with the preparation and filing of discovery requests (such as interrogatories, requests for admissions, requests for production of documents, subpoenas, and deposition notices) and on preparing responses to discovery, including initial disclosure obligations under the federal rules. Discussion also covers electronic discovery and practical considerations, such as managing and maintaining discovery files.

LGST 398U Diversity Issues in Dispute Resolution (1)

A study of the influence of race, ethnicity, gender, nationality, religiosity, and other social group designations on approaches to and course of conflict with focus on legal disputes. Topics include stereotyping, cultural differences in approaches to conflict, and the impact of bigotry and discrimination on the course of conflict. Strategies for effectively dealing with these issues in legal, dispute-resolution, and personal settings are considered.

LGST 398W Domestic Violence Cases in Maryland (1)

A thorough review of statutes and court rules pertaining to domestic violence cases in Maryland. Focus is on acquiring the knowledge to assist attorneys in representing victims in criminal and civil court proceedings. Procedures and forms, including protective order/peace order petitions and motions, are illustrated. Topics include the victim's socioeconomic status, race/ethnicity, gender, and culture and resources outside the court system.

LGST 400 Advanced Legal Research and Analysis (3)

Prerequisite: LGST 200. A focused look at identifying legal issues and supportive primary and secondary legal authority using a variety of tools in Lexis, Westlaw, and the Internet. Students learn to develop research strategies to perform complex legal research and extensive legal analysis. Students may receive credit for only one of the following courses: LGST 400 or PLGL 400.

LGST 401 Advanced Legal Writing (3)

Prerequisites: LGST 201 and 204. A thorough grounding in the principles and techniques of drafting sophisticated legal memoranda that paralegals may be called upon to prepare. Kinds of writings that are covered include complex office and advocacy memoranda, as well as selected parts of appellate briefs. Assignments include legal research. Students may receive credit for only one of the following courses: LGST 401 or PLGL 401.

LGST 411 Consumer Protection Law (3)

Prerequisite: LGST 201. A general overview of consumer protection law and the roles of federal, state, and local agencies. Topics include warranties, the regulation of consumer credit, restrictions on advertising, and credit reporting. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 411 or PLGL 411.

LGST 415 Intellectual Property (3)

Prerequisite: LGST 201. An overview of patents, trademarks, and copyright law. Emphasis is on the role of the paralegal in application, maintenance, research, and litigation processes. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 415, PLGL 398D, or PLGL 415.

LGST 420 Immigration Law (3)

Prerequisite: LGST 201. An overview of the laws, agencies, and procedures involved in U.S. immigration law and the role of paralegals in immigration practice. Topics include sources and administration of immigration law and research and preparation of various immigration documents. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 420, PLGL 398F, or PLGL 420.

LGST 425 Advanced Civil Litigation (3)

Prerequisites: LGST 201 and 325. Recommended: LGST 322. A study of the nuts and bolts of paralegal practice in large-case civil litigation. Topics include discovery and motion practice; pretrial preparation, including the pretrial memorandum; and preparation of the excerpt of record for the appellate court. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 425 or PLGL 398N.

LGST 432 Environmental Law (3)

Prerequisite: LGST 201. An exploration of the statutory and regulatory bases of environmental law, for the prospective paralegal. Topics include the role of federal agencies in such undertakings as controlling various types of pollution, assessing and managing risk, and regulating toxic substances. Assignments include legal research and written and oral analysis. Students may receive credit for only one of the following courses: LGST 432, PLGL 332, or PLGL 432.

LGST 442 Business Organizations (3)

Prerequisite: LGST 201. Recommended: LGST 340. An overview of the legal aspects of establishing, organizing, developing, and operating a business enterprise and the processes, procedures, and writings for which a paralegal may be responsible. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 442, PLGL 342, or PLGL 442.

LGST 445 Employment Law (3)

Prerequisite: LGST 201. An overview of federal and state laws governing the employment relationship in the public and private sectors. Topics include employee protection from discrimination and harassment, employer obligations toward disabled workers, privacy issues, and employment contract matters. Focus is on the knowledge and practical skills required for a paralegal working in this area. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 445 or PLGL 398O.

LGST 450 Bankruptcy Law (3)

Prerequisite: LGST 201. A study of the bankruptcy code, the related rules of procedure, and the role of the paralegal in assisting attorneys in bankruptcy practice. Techniques detailed include how to identify and gather relevant data and how to draft and file appropriate documents. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 450 or PLGL 450.

LGST 486A Legal Studies Internship Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in legal studies. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to legal studies and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

LGST 486B Legal Studies Internship Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in legal studies. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to legal studies and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Library Skills and Information Literacy

Courses in library skills (designated LIBS) may be applied toward

- the general education requirement in information literacy; and
- electives.

Degree-seeking students must complete LIBS 150 (or present its equivalent in transfer) during the first 18 credits of enrollment at UMUC.

LIBS 150 Information Literacy and Research Methods (1)

An introduction to the research process and methods for retrieving information in a library or through online sources. Development of a research topic and the creation of effective strategies for finding relevant information are discussed and practiced. The following information literacy skills are emphasized: understanding the research process; selecting appropriate print and electronic sources to answer research questions; effectively using Web search engines and UMUC Information and Library Services' electronic resources to find information; and evaluating, organizing, and correctly citing the information found. Credit for LIBS 150 may not be earned through challenge exam or portfolio credit. Students may receive credit for only one of the following courses: COMP 111, LIBS 100, or LIBS 150.

Marketing

Courses in marketing (designated MRKT) may be applied as appropriate (according to individual program requirements) toward

- a major in marketing, business administration, global business and public policy, graphic communication, or management studies;
- a minor in marketing, business administration, or management studies; and
- electives.

A description of the curriculum for the marketing major and minor begins on p. 67. Descriptions of other management-related curricula may be found on the following pages: accounting (p. 13), business administration (p. 19), environmental management (p. 39), fire science (p. 43), global business and public policy (p. 47), human resource management (p. 56), and management studies (p. 66).

MRKT 310 Marketing Principles (3)

An introduction to the field of marketing, intended to develop a general understanding and appreciation of the forces, institutions, and methods involved in marketing a variety of goods, services and ideas by fulfillment of customer needs. Topics include segmentation, target marketing, positioning, developing new products, pricing, value chains, and marketing communications. Students may receive credit for only one of the following courses: BMGT 350, MGMT 322, MRKT 310, or TMGT 322.

MRKT 314 Nonprofit Marketing (3)

Prerequisite: MRKT 310. An introduction to key issues in nonprofit marketing. Topics include nonprofit marketing issues related to constituencies, planning, products and services, membership, and promotion, as well as association and social marketing. Students may receive credit for only one of the following courses: BMGT 398B or MRKT 314.

MRKT 354 Integrated Marketing Communications (3)

Prerequisite: MRKT 310. An in-depth study of promotional activities such as advertising, personal selling, sales promotions, and direct marketing (including use of the Internet). Emphasis is on strategic planning of promotional activities to communicate with customers to achieve marketing objectives. The relationship of integrated marketing communications to other elements of promotional activities is also explored. Students may receive credit for only one of the following courses: BMGT 354 or MRKT 354.

MRKT 395 Managing Customer Relationships (3)

Prerequisite: MRKT 310. A study of marketing strategies focused on identifying profitable customers, retaining those customers, and growing their lifetime value. Topics include identifying individual customers, determining loyalty segments of customers, assessing the lifetime revenue value of customers, understanding customer behavior, developing programs to change customer behavior, and designing customer loyalty and customer service programs and policies. Students explore various customer relationship management (CRM) technology–related tools and metrics to support managerial assessment of customer relationship management efforts. Students may receive credit for only one of the following courses: BMGT 395, BMGT 398A, MGMT 395, MGMT 398A, or MRKT 395.

MRKT 410 Consumer Behavior (3)

Prerequisite: MRKT 310. An overview of the increasing importance of consumers in the marketing system and the importance of understanding them. Discussion covers the foundations of consumer behavior (such as economic, social, psychological, and cultural factors). Consumers are analyzed in marketing situations as buyers and users of products and services and in relation to the various social and marketing factors that affect their behavior. The influence of well-directed communications is also considered. Students may receive credit for only one of the following courses: BMGT 451, CNEC 437, or MRKT 410.

MRKT 412 Marketing Research Applications (3)

Prerequisites: STAT 230 (or BMGT 230) and MRKT 310. A study of the specialized field of marketing research as it is used to identify market needs, profile target markets, test promotional efforts, and measure the effectiveness of marketing plans. Procedures for planning survey projects, designing statistical samples, tabulating data, and preparing reports are covered. Emphasis is on managing the marketing research function. Students may receive credit for only one of the following courses: BMGT 452 or MRKT 412.

MRKT 454 Global Marketing (3)

Prerequisite: MRKT 310. An in-depth study of marketing principles as they relate to the global marketplace. Emphasis is on understanding the influence of internationalization on the U.S. economy, the competitive pressures on the intensifying global markets, and the development of marketing plans tailored to reach international and global markets. Topics include the political, economic, legal, regulatory, and sociocultural trends affecting international marketing; the dynamic environments in which global marketing strategies are formulated; and the challenge of implementing marketing programs leading to competitive advantage.

MRKT 457 E-Marketing (3)

Prerequisite: MRKT 310. An exploration of how the use of Web-based computer applications and databases can enhance the marketing process and create relationships with customers. Topics include the use of the Internet in developing marketing strategy, conducting market research, and making marketing-mix decisions. Emphasis is on the Internet as a national and global marketing communications tool. Discussion also covers creative Web site design techniques to measure advertising effectiveness. Students may receive credit for only one of the following courses: BMGT 398O, BMGT 398R, MGMT 398O, MGMT 398R, or MRKT 457.

MRKT 475 Sales Management (3)

Prerequisite: MRKT 310. An overview of the role of the sales manager, both at headquarters and in the field, in managing people, resources, and functions of marketing. The problems of organizing, forecasting, planning, communicating, evaluating, and controlling sales are analyzed. Pertinent concepts of behavioral science are applied to the management of the sales effort and sales force. Students may receive credit for only one of the following courses: BMGT 455 or MRKT 475.

MRKT 486A Internship in Marketing Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in marketing. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to marketing and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

MRKT 486B Internship in Marketing Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in marketing. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to marketing and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

MRKT 495 Marketing Policies and Strategy (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: MRKT 310 and one other marketing course. A study of marketing that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in marketing are considered. Focus is on the use of appropriate decision models and the analysis of consumers and markets. Students may receive credit for only one of the following courses: BMGT 457 or MRKT 495.

Mathematics

Courses in mathematics (designated MATH) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in mathematics (with the exception of MATH 009 and 012);
- a minor in mathematical sciences;
- a major in computer science; and
- a certificate in Game Development;
- electives.

Students who are planning to major or minor in management, computing, or science-related fields of business administration, computer and information science, or the biological or social sciences should consider courses from sequence I. Students who are planning a major or minor in computer science, mathematical sciences, or the physical and engineering sciences should consider courses from sequence II. Students in other majors or minors should refer to their chosen curriculum for mathematics requirements.

Sequence I

MATH 009	Introductory Algebra
MATH 012	Intermediate Algebra
MATH 106	Finite Mathematics
MATH 107	College Algebra
MATH 220	Elementary Calculus I
MATH 221	Elementary Calculus II

Approved course in statistics

Sequence II

MATH 009	Introductory Algebra
MATH 012	Intermediate Algebra
MATH 115*	Pre-Calculus
MATH 140	Calculus I
MATH 141	Calculus II
MATH 240	Introduction to Linear Algebra
MATH 241	Calculus III

* or MATH 107–108

Degree-seeking students must complete the general education requirement in mathematics (or present the equivalent in transfer) during their first 18 credits of enrollment at UMUC.

Placement tests are required for enrollment in MATH 012, 106, 107, 108, 115, 140, and 220. Students may visit *www.umuc.edu/testing* for times and locations of tests or contact Exams and Testing Services by phone at 800-888-UMUC, ext. 5249, or by e-mail at *exams@umuc.edu.*

Students are expected to own and use scientific calculators in all mathematics and statistics courses.

A description of the curriculum for the mathematical sciences minor begins on p. 69. A description of the computer science major begins on p. 27.

MATH 009 Introductory Algebra (3)

(Not open to students who have already successfully completed a higher-level mathematics course. Does not apply toward degree requirements. Yields institutional credit only.) A comprehensive review of fractions, percentages, operations with signed numbers, and geometric formulas. Basic algebraic topics include exponents, polynomials, and linear equations. Students may receive credit for only one of the following courses: MATH 009, MATH 009M, or MATH 100.

MATH 012 Intermediate Algebra (3)

(Not open to students who have already successfully completed a higher-level mathematics course. Does not apply toward degree requirements. Yields institutional credit only.) Prerequisite: MATH 009 or an appropriate result on the placement test. A study of problem-solving techniques in intermediate-level algebra. Emphasis is on numbers and algebraic properties, graphing skills, and applications drawn from a variety of areas (such as statistics, computing, and discrete mathematics). Topics include polynomials; factoring; exponents and their notation; linear, quadratic, and other equations; and inequalities. Students may receive credit for only one of the following courses: MATH 012, MATH 101, MATH 101M, MATH 102, MATH 102M, MATH 199A, or MATH 199M.

MATH 106 Finite Mathematics (3)

(Not intended for students planning to take MATH 107 or higher-numbered mathematics courses.) Prerequisite: MATH 012 or an appropriate result on the placement test. A survey of selected topics from contemporary mathematics to introduce mathematical thinking. Applications and projects of other disciplines are covered. Topics include problem solving, finance, probability and statistics, linear models, set theory, and logic. Other topics may include sequences and series, geometry, and game theory.

MATH 107 College Algebra (3)

(The first course in the two-course series MATH 107–108. An alternative to MATH 115 Pre-Calculus.) Prerequisite: MATH 012 or an appropriate result on the placement test. An introduction to equations, inequalities, and absolute values and a study of functions and their properties, including the development of graphing skills with polynomial, rational, exponential, and logarithmic functions. Applications are also covered. Students may receive credit for only one of the following courses: MATH 107 or MATH 115.

MATH 108 Trigonometry and Analytical Geometry (3)

(The second course in the two-course series MATH 107–108. An alternative to MATH 115 Pre-Calculus.) Prerequisite: MATH 107 or an appropriate result on the placement test. An introduction to trigonometric functions, identities, and equations and their applications. Analytical geometry and conic sections are covered. Additional topics may include matrices, determinants, sequences, and series. Students may receive credit for only one of the following courses: MATH 108 or MATH 115.

MATH 115 Pre-Calculus (3)

(Not open to students who have completed MATH 140 or any course for which MATH 140 is a prerequisite.) Prerequisite: MATH 012 or an appropriate result on the placement test. Explication of elementary functions and graphs. Topics include polynomials, rational functions, and exponential and logarithmic functions. Algebraic techniques preparatory for calculus are presented. Students may receive credit for only one of the following: MATH 107–108 or MATH 115.

MATH 140 Calculus I (4)

Prerequisite: MATH 108 or MATH 115. An introduction to calculus. Topics include functions, the sketching of graphs of functions, limits, continuity, derivatives and applications of the derivative, definite and indefinite integrals, and calculation of area. Students may receive credit for only one of the following courses: MATH 130, MATH 131, MATH 140, or MATH 220.

MATH 141 Calculus II (4)

(A continuation of MATH 140.) Prerequisite: MATH 140. A study of integration and functions, with application, and coverage of other topics. Focus is on techniques of integration, improper integrals, and applications of integration (such as volumes, work, arc length, and moments); inverse, exponential, and logarithmic functions; and sequences and series. Students may receive credit for only one of the following courses: MATH 131, MATH 132, MATH 141, or MATH 221.

MATH 220 Elementary Calculus I (3)

Prerequisite: MATH 107, MATH 115, or an appropriate result on the placement test. A presentation of the basic ideas of differential and integral calculus. Emphasis is on elementary techniques of differentiation, as well as applications. Students may receive credit for only one of the following courses: MATH 130, MATH 131, MATH 140, or MATH 220.

MATH 240 Introduction to Linear Algebra (4)

Prerequisite: MATH 141 or MATH 132. An explanation of the basic concepts of linear algebra. Topics include vector spaces, applications to line and plane geometry, linear equations, and matrices, as well as linear transformations, changes of basis, diagonalization, similar matrices, Jordan canonical forms, eigenvalues, determinants, and quadratic forms. Students may receive credit for only one of the following courses: MATH 240, MATH 400, or MATH 461.

MATH 241 Calculus III (4)

Prerequisite: MATH 141 or MATH 132. An introduction to multivariable calculus. Exposition covers vectors and vector-valued functions; partial derivatives and applications of partial derivatives (such as tangent planes and Lagrangian multipliers); multiple integrals; volume; surface area; and the classical theorems of Green, Stokes, and Gauss.

MATH 246 Differential Equations (3)

Prerequisite: MATH 141 or MATH 132. An introduction to the basic methods of solving differential equations. Separable, exact, and linear differential equations are addressed. The main techniques considered include undetermined coefficients, series solutions, Laplace transforms, and numerical methods. Students may receive credit only once under this course number.

MATH 301 Concepts of Real Analysis I (3)

Prerequisites: MATH 240 and 241. An approach to real analysis. Topics include sequences and series of numbers, continuity and differentiability of real-valued functions of one variable, the Riemann integral, sequences of functions, and power series. Discussion also covers the functions of several variables, including partial derivatives, multiple integrals, line and surface integrals, and the implicit-function theorem. Students may receive credit for only one of the following courses: MATH 301 or MATH 410.

MATH 381 Operations Research (3)

Prerequisite: MATH 240. An exploration of linear programming models and applications, simplex algorithms, sensitivity analysis, integer programming, and network flow models.

MATH 402 Algebraic Structures (3)

Prerequisite: MATH 240. An overview of groups, rings, integral domains, and fields; detailed study of several groups; and exploration of properties of integers and polynomials. Topics may include an introduction to computer algebra and Boolean algebra.

MATH 450 Logic for Computer Science (3)

Prerequisites: CMSC 150 and MATH 141 (or MATH 132). Elementary development of propositional logic (including the resolution method) and first-order logic (including Hebrand's unsatisfiability theorem). Discussion covers the concepts of truth and interpretation; validity, provability, and soundness; completeness and incompleteness; and decidability and semidecidability. Students may receive credit for only one of the following courses: CMSC 450, MATH 444, MATH 445, or MATH 450.

MATH 463 Complex Variables (3)

Prerequisite: MATH 241. A survey of analytic functions, mapping properties of the elementary functions, the algebra of complex numbers, and the Cauchy integral formula. Topics include conformal mapping as well as theory of residues and its application to evaluation of integrals.

MATH 466 Numerical Analysis (3)

Prerequisites: MATH 240 and 241. A study of various methods of numerical analysis. Topics include solutions of equations in one variable, interpolation and polynomial approximation, and numerical integration. Discussion also covers direct methods for solving linear systems and applications to finance and actuarial science.

MATH 486A Internship in Mathematics Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in mathematics. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to mathematics and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

MATH 486B Internship in Mathematics Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in mathematics. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to mathematics and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Music

Courses in music (designated MUSC) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities; and
- electives.

UMUC offers a limited number of courses each session in this discipline.

A description of the curriculum for the humanities major and minor begins on p. 55.

MUSC 210 The Impact of Music on Life (3)

A study of music as a part of culture. Materials are drawn from traditions throughout the world to illustrate issues of historical and contemporary significance, including the impact of race, class, and gender on the study of music. Students may receive credit for only one of the following courses: HUMN 211 or MUSC 210.

MUSC 436 Jazz: Then and Now (3)

An examination of jazz in America during the past 75 years—its major styles and influential artists. Students may receive credit for only one of the following courses: HUMN 436 or MUSC 436.

Natural Science

Courses in natural science (designated NSCI) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the biological and physical sciences;
- a major in laboratory management;
- a minor in natural science; and
- electives.

A description of the curriculum for the natural science minor begins on p. 70. A description of the curriculum for the laboratory management major begins on p. 63.

NSCI 100 Introduction to Physical Science (3)

(For students not majoring in a science.) Prerequisite: MATH 012 or higher. An introduction to the basic principles of physics, chemistry, astronomy, geology, oceanography, and meteorology. Discussion covers the development of scientific thinking, the scientific method, the relationships among the various physical sciences, and the role of the physical sciences in interpreting the natural world. Students may receive credit for only one of the following courses: GNSC 100 or NSCI 100.

NSCI 101 Physical Science Laboratory (1)

(For students not majoring or minoring in a science. Fulfills the laboratory science requirement only with previous or concurrent credit for NSCI 100.) Prerequisite: MATH 012 or higher. Prerequisite or corequisite: NSCI 100. A laboratory study of the basic principles of physics and chemistry that illustrates how they apply to everyday life as well as to the fields of astronomy, geology, oceanography, and meteorology. Assignments include experiments, observations, and exercises.

NSCI 103 Fundamentals of Physical Science (4)

(For students not majoring or minoring in a science. Fulfills the laboratory science requirement.) Prerequisite: MATH 012 or higher. An introduction to the basic principles of physics, chemistry, geology, oceanography, meteorology, and astronomy that illustrates how they apply to everyday life. Discussion and laboratory activities cover the development of scientific thinking, the scientific method, the relationships among the various physical sciences, and the role of the physical sciences in interpreting the natural world. Students may receive credit for only one of the following courses: GNSC 100, NSCI 100, or NSCI 101.

NSCI 170 Concepts of Meteorology (3)

(For students not majoring or minoring in a science.) Prerequisite: MATH 012 or higher. An introduction to the basic principles of atmospheric science. Topics include the effect of different weather elements (such as temperature, pressure, winds, and humidity) on weather patterns and climate. Additional topics include weather phenomena such as El Niño, thunderstorms, tornadoes, and hurricanes, as well as the impact of humans on Earth's atmosphere (with respect to global warming, pollution, and the depletion of the ozone layer). Students may receive credit for only one of the following courses: GNSC 170, GNSC 398D, or NSCI 170.

NSCI 171 Laboratory in Meteorology (1)

(For students not majoring or minoring in a science. Fulfills the laboratory science requirement only with previous or concurrent credit for NSCI 170 or GNSC 170.) Prerequisite: MATH 012 or higher. Prerequisite or corequisite: NSCI 170. An introduction to the basic concepts of meteorology. Focus is on the observation, measurement, and analysis of weather data, including the interpretation of weather patterns and conditions found on weather maps, satellite images, radar imagery, and atmosphere diagrams. Students may receive credit for only one of the following courses: GNSC 171 or NSCI 171.

NSCI 301 Laboratory Organization and Management (3)

(Does not fulfill the general education requirement in the biological and physical sciences.) An overview of the day-to-day organization and management of research and development laboratories. Topics include laboratory operating systems, finances and recordkeeping, communication systems, safety procedures, data management, project planning, problem solving, procurement, personnel training, and inventory execution and maintenance. Students may receive credit for only one of the following courses: GNSC 301, MEDT 301, or NSCI 301.

NSCI 362 Environmental Change and Sustainability (3)

A multidisciplinary study of the relationship between the global environment and human adaptations to it. Emphasis is on the concept of sustainability as it applies to human adaptations and interactions with the environment. Current scientific research is used to explore the scientific, social, and global implications of environmental issues such as global warming, population growth, energy resources, biodiversity, and the genetic modification of organisms. Emphasis is on the environment as "global commons" and individual responsibility in environmental sustainability. Students may receive credit for only one of the following courses: BEHS 361, GNSC 361, HUMN 360, NSCI 361, or NSCI 362.

NSCI 398 Special Topics in Natural Science (3)

A study of topics in the sciences of special interest to students and faculty.

NSCI 398I Astrobiology (3)

(For students not majoring in a science.) An introduction to planetary astronomy with an overview of biology, geology, and chemistry related to the existence of life on Earth and to speculations that affect the search for life elsewhere in the cosmos. Topics include the chemistry of comets, space missions to Mars and Europa in search of life, the relevance of life on Earth in extreme environments (e.g., deep-sea vents and Antarctica), the assembly of prebiotic amino acids into DNA, and the possibility of life elsewhere in the universe. Students may receive credit for only one of the following courses: ASTR 380, GNSC 398I, or NSCI 398I.

NSCI 398J Energy After Petroleum (1)

A broad survey of all of the world's energy sources and their utilization, problems, and possible solutions. The basic laws of physics relating to energy are outlined. Discussion covers energy sources such as solar, fossil fuel, alternate fuels, and geothermal. Physical concepts of energy, power, and energy transformations (including the basic laws of thermodynamics applicable to heat engines) are examined. The political-economic realities that surround viable energy policies are also considered.

Philosophy

Courses in philosophy (designated PHIL) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in Asian studies or humanities;
- a minor in philosophy; and
- electives.

UMUC offers only a limited number of courses each session in this discipline.

A description of the curriculum for the philosophy minor begins on p. 70. A description of the curriculum for the humanities major and minor begins on p. 55.

PHIL 100 Introduction to Philosophy (3)

An introduction to the literature, problems, and methods of philosophy. The subject is approached either by studying some of the main figures in philosophic thought or by considering some central, recurring problems of philosophy. Students may receive credit for only one of the following courses: HUMN 125 or PHIL 100.

PHIL 110 Practical Reasoning (3)

An examination of methods for thinking analytically about real-world problems and solving them. Emphasis is on using inductive and deductive reasoning, proper argumentation, accepted methods of analysis, and synthesis of ideas; recognizing informal logical fallacies; and understanding the role of presuppositions and nonlogical factors as they apply to scientific, social, ethical, political, and other contemporary problems.

PHIL 127 World Religions (3)

(Formerly HUMN 127.) An introduction to the major religious traditions of the world that have given shape to human culture and continue to exert a powerful influence on the destiny of the world. Focus is on Hinduism, Buddhism, Confucianism, Taoism, Islam, Judaism, Christianity, and other modern religions. Students may receive credit for only one of the following courses: HUMN 127, RLST 125, or PHIL 127.

PHIL 140 Contemporary Moral Issues (3)

An exploration of how philosophical analysis can be a foundation for thinking clearly about moral issues. Problems analyzed include such widely debated issues as abortion, euthanasia, the death penalty, homosexuality, pornography, reverse discrimination, business ethics, sexual equality, and economic equity. Students may receive credit for only one of the following courses: HUMN 300 or PHIL 140.

PHIL 236 Philosophy of Religion (3)

A philosophical study of some of the main problems of religious thought: the nature of religious experience, the justification of religious belief, the conflicting claims of religion and science, and the relation between religion and morality. Students may receive credit for only one of the following courses: HUMN 236 or PHIL 236.

PHIL 245 Political and Social Philosophy (3)

A critical examination of classical political theories. Examples are drawn from the work of Plato, Hobbes, Locke, Rousseau, Mill, and Marx. Contemporary theories (such as those of Hayek, Rawls, and recent Marxist thinkers) are also covered. Students may receive credit for only one of the following courses: HUMN 245, PHIL 245, or PHIL 345.

PHIL 307 Asian Philosophy (3)

An examination of the major philosophical systems of the East and their relation to important ideas of Western thought.

PHIL 312 Ethics and Religion (3)

(Formerly HUMN 312.) An exploration of the roles religions around the world play in the establishment of the moral codes in the societies where they are practiced and the results when different religions promote different moral responses in the same society. Discussion covers the relationships, if any, of ethics—the search for general principles that underlie specific moral rules or claims—to the different religions that express these moral codes. Students may receive credit for only one of the following courses: HUMN 312 and PHIL 312.

PHIL 315 Workplace Ethics (3)

(Formerly HUMN 311.) Examination and discussion of normative ethical theory; moral reasoning; and the larger economic, social, political, and legal framework of the workplace within which ethical issues arise. Discussion covers workplace issues such as discrimination, harassment, the quality of work life, professional rights and responsibilities, and specific cases exemplifying these issues. Possible examples include cases in the areas of hiring, privacy, intellectual property, whistle-blowing versus loyalty, health care, ethics in advertising, consumerism in relation to product liability, economic globalization, and the common environment. Students may receive credit for only one of the following courses: HUMN 310, HUMN 311, or PHIL 315.

PHIL 331 Philosophy of Art (3)

A study of concepts central to thought about art, including the concept of the fine arts both in their historical development and in their present problematic situation.

PHIL 336 Ideas Shaping the 21st Century (3)

(Formerly HUMN 336.) An overview of predominating ideas and philosophies that may govern and alter humanity and this planet in the early 21st century. Ideas and ways of living are evaluated insofar as they reveal the nature of intelligence and determine the uses of this planet. Topics include the rise of science, religions, and technoconsciousness; the development of systems of communication; prevailing perceptions of justice and human relationships; and "quality of life" as expressed in architecture and the arts. Students may receive credit for only one of the following courses: HUMN 336 or PHIL 336.

PHIL 348 Religions of the East (3)

(Formerly HUMN 348.) An overview and examination of the religions of East Asia. Topics include the religious traditions of India known collectively as Hinduism and Jainism, the development of Buddhism and its spread through Asia, Chinese indigenous beliefs, and the religions of Japan (particularly Shinto and Zen Buddhism). Discussion examines the interrelationships of these religious traditions through their history and main teachings. Students may receive credit for only one of the following courses: HUMN 348, HUMN 350, or PHIL 348.

PHIL 349 Religions of the West (3)

(Formerly HUMN 349.) An overview and examination of the Abrahamic religions, with special attention to their common ancestry and relationships. Topics include the history and belief structures of Judaism, Christianity, and Islam. Discussion also covers the ethical systems of these religions, as well as their relationship to the cultures in which they developed and exist today. Students may receive credit for only one of the following courses: HUMN 349 or HUMN 350 or PHIL 349.

Psychology

Courses in psychology (designated PSYC) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences;
- a major in psychology, investigative forensics, or social science;
- a minor in psychology or forensics;
- a certificate in various disciplines; and
- electives.

A description of the curriculum for the psychology major and minor begins on p. 72. Descriptions of related curricula may be found on the following pages: forensics (p. 45), investigative forensics (p. 61), and social science (p. 74).

PSYC 100 Introduction to Psychology (3)

A survey of the basic principles, research concepts, and problems in psychological science. The biological, cognitive, and social perspectives of human thought and behavior are addressed. Topics include neuroscience, sensation and perception, learning and conditioning, memory, motivation, language and intelligence, personality and social behavior, and psychopathology and therapy. Applications of psychology are also presented. Students may receive credit for only one of the following courses: BEHS 101 or PSYC 100.

PSYC 101 Psychology of Adjustment (3)

(Formerly PSYC 235.) A study of theory and research on the psychology of personal adjustment in everyday life. Emphasis is on self-concept, emotions, self-control, interpersonal relations, and stress. Students may receive credit for only one of the following courses: PSYC 101 or PSYC 235.

PSYC 301 Biological Basis of Behavior (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200). An introduction to the anatomical structures and physiological processes that determine behavior. Topics include the acquisition and processing of sensory information, the neural control of movement, and the biological bases of complex behaviors (such as sleep, learning, memory, sex, language, and addiction), as well as the basic functioning of the nervous system.

PSYC 305 Research Methods in Psychology (3)

Prerequisites: PSYC 100 and STAT 225 (or PSYC 200). A survey of research methods focusing on the fundamentals of research design and behavior. Topics include scientific writing using APA style, evaluation of research literature, and ethical issues in research. Practice is provided in asking research questions, formulating research hypotheses, designing and conducting a simulated research study, and presenting results.

PSYC 306 Special Topics in Psychology (1–3)

Prerequisite: PSYC 100. Seminar discussion of topics of current interest. Areas explored may extend or augment those covered in more general topical courses. May be repeated to a maximum of 6 credits when topics differ.

PSYC 306A APA Writing Style for Psychology (1)

Prerequisite: PSYC 100. An introduction to the effective use and application of APA style for research projects, technical papers, and expository writing in the psychological and behavioral sciences.

PSYC 306F Psychology of Happiness (1)

Prerequisite: PSYC 100. An introduction to the theories, concepts, and research related to the psychology of happiness, as well as implications for psychotherapy. Topics include neurobiological and cultural determinants of well-being, fulfillment in work and relationships, sources of unhappiness, and psychological approaches to increasing contentment and satisfaction.

PSYC 307 Special Topics in Psychology: Natural Science Theme (1–3)

Prerequisite: PSYC 100. Seminar discussion of topics of current interest. Areas explored may extend or augment those covered in more general topical courses. May be repeated to a maximum of 6 credits when topics differ.

PSYC 307D Improving Memory and Thinking (1)

(Formerly PSYC 309D.) Prerequisite: PSYC 100. A presentation of methods of improving memory and thinking as outcomes of basic theory and research. Assignments include workshop activities and critical review of relevant research.

PSYC 307G Parapsychology (1)

Prerequisite: PSYC 100. An introduction to parapsychology and experimental methods used in that field. Topics include the history of parapsychology, superstition and science, ESP in the laboratory, evidence for life after death, and reincarnation. Rival explanations for phenomena are considered critically.

PSYC 307H Sleep and Dreams (1)

Prerequisite: PSYC 100. An introduction to the clinical, cultural, and research aspects of sleep and dreams. Topics include historical and theoretical approaches to sleep and dreams, sleep deprivation and disorders, biological rhythms, typical dreams, and dream interpretation.

PSYC 307X Substance Abuse: An Introduction (1)

(Formerly PSYC 309X.) Prerequisite: PSYC 100. An introduction to the study of drug abuse. Topics include the causes, symptoms, and defenses for substance abuse, as well as prevention and treatment. Review covers biology, personality, life style, and relationships with families, peers, and communities. Drug abuse is compared to other social problems, including self-destructive, high-risk, and sabotaging behavior. How different cultures respond to drug abuse is also addressed. Practice exercises, observations, interviews, and media summaries supplement class discussions.

PSYC 308 Special Topics in Psychology: Social Science Theme (1–3)

Prerequisite: PSYC 100. Seminar discussion of topics of current interest. Areas explored may extend or augment those covered in more general topical courses. May be repeated to a maximum of 6 credits when topics differ.

PSYC 308E Cultivating Executive Skills (1)

Prerequisite: PSYC 100. A presentation of relevant behavioral and managerial science theory, research, and real-world applications of leadership training. Focus is on applied executive skills. Issues of workplace diversity, technology, and effective use of human resources are also covered.

PSYC 308H Psychology of Motivating People at Work (1)

(Formerly PSYC 309H.) Prerequisite: PSYC 100. An examination of successful strategies for motivating people in work settings. Basic theories of work motivation are covered. Focus is on identifying managerial and personal motivational strategies in organizations through review of relevant research and case studies.

PSYC 308K Introduction to Black Psychology (1)

Prerequisite: PSYC 100. An introduction to issues and perspectives in the study of the psychological development of Black people, particularly in America, over the past 100 years. Topics include the Afrocentric and Eurocentric ethos; the nature of Black personality as affected by slavery and racism; psychological assessment, treatment, and counseling techniques; and the relationships between psychological research and social policy in American and Western research.

PSYC 308Q Psychology of Religion and Spirituality (1)

(Formerly PSYC 309Q.) Prerequisite: PSYC 100. An examination of the relationship of modern psychology and traditional religion in finding meaning in human reality and providing concepts and techniques for the ordering of the interior life. Topics include attitudes toward anxiety, issues of guilt, existential trust, the nature of suffering and evil, and the image of God and the function of belief.

PSYC 309 Special Topics in Psychology: Clinical Science Theme (1–3)

Prerequisite: PSYC 100. Seminar discussion of topics of current interest. Areas explored may extend or augment those covered in more general topical courses. May be repeated to a maximum of 6 credits when topics differ.

PSYC 309C Psychology of Eating Disorders (1)

Prerequisite: PSYC 100. An introduction to the current research on eating disorders—anorexia nervosa, bulimia nervosa, and obesity. Topics include adolescent eating behavior, theoretical explanations, factors associated with eating disorders, and the general management of disorders.

PSYC 309H Psychological Consequences of War and Violent Conflict (1)

Prerequisite: PSYC 100. A study of the effects of war on various groups of vulnerable people using a case example. Theoretical bases and issues are emphasized in order to better understand the development of disorders, the expression of these disorders, and treatment and rehabilitation.

PSYC 309K Managing Interpersonal Stress and Conflict (1)

Prerequisite: PSYC 100. An exploration of the nature and causes of stress and techniques for its management. Discussion covers psychological processes that cause interpersonal conflict and those that can bring about its reduction, as well as interpersonal and group factors, such as cooperation and negotiation.

PSYC 309S Introduction to the Psychology of Parenting (1)

Prerequisite: PSYC 100. An overview of psychological issues relevant to parenting. Key theories and relevant research findings that directly apply to effective and ineffective parenting are presented. Practical lessons in grand-, step-, and single- parenting; learning disabilities; the influence of media and technology; and cross-cultural aspects are considered.

PSYC 309W Professional Psychology (1)

Prerequisite: PSYC 100. An overview of the profession of psychology. Lessons learned in teaching, research, therapy, and organizational consulting are presented. Career goals and aspirations are also addressed.

PSYC 309X Ethics in Mental Health and Psychological Treatment (1)

Prerequisite: PSYC 100. A general introduction to ethical considerations in the diagnosis and treatment of psychologically impaired persons. Topics include confidentiality, dual relationships, credentialing, recordkeeping, informed consent, and legal concerns.

PSYC 309Y Introduction to Hypnosis (1)

Prerequisite: PSYC 100. An introduction to some of the basic concepts and principles of hypnosis for psychological practice. The relationship between hypnosis and systematic desensitization and their respective roles in affecting human behavior are examined. Therapeutic uses of hypnosis and practical exercises in the use of self-hypnosis are also explored.

PSYC 310 Sensation and Perception (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 301. A survey of theories and historical and contemporary research in how the auditory, visual, gustatory, olfactory, kinesthetic, and touch senses acquire information and how psychological, anatomical, physiological, and environmental factors help us perceive the world.

PSYC 315 Motivation (3)

Prerequisites: PSYC 100 and 301. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A study of the interaction of physiological, neurological, and pharmacological aspects of motivation with environmental influences such as culture, learning, and social dynamics. Relevant issues (such as aggression, sex, achievement, and cognition) are discussed.

PSYC 321 Social Psychology (3)

(Formerly PSYC 221.) Prerequisite: PSYC 100. An examination of the influence of social factors on individual and interpersonal behavior. Topics include conformity, attitudinal change, personal perception, interpersonal attraction, and group behavior. Students may receive credit for only one of the following courses: BEHS 221, BEHS 421, BEHS 450, PSYC 221, or PSYC 321.

PSYC 332 Psychology of Human Sexuality (3)

Prerequisite: PSYC 100. A survey of historical and contemporary psychological views on a wide variety of sexual behaviors. Topics include theory and research on the interrelationship of lifespan psychological development, psychological functioning, interpersonal processes, and sexual behaviors. Political and social issues involved in current sexual norms and practices are also discussed. Students may receive credit for only one of the following courses: BEHS 363, HLTH 377, or PSYC 332.

PSYC 334 Psychology of Interpersonal Relationships (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A study of research and theory on the development, maintenance, and dissolution of human relationships, followed by consideration of practical applications. Topics include processes critical to successful relating (such as communication, bargaining, and resolution of conflict). Focus is also on issues that are specific to troubled dyadic relations of equal partners (such as jealousy, spousal abuse, and divorce).

PSYC 338 Psychology of Gender (3)

Prerequisite: PSYC 100. A survey of the biological, lifespan development, socialization, personality attributes, mental health factors, and special considerations associated with gender.

PSYC 339 Educational Psychology (3)

Prerequisite: PSYC 100. An overview of educational psychology focusing on processes of learning. Discussion covers measurement of differences between individuals (in intelligence, styles of thinking, understanding, attitudes, ability to learn, motivation, emotions, problem solving, and communication of knowledge) and the significance of those differences. Problems in the field are introduced and outlined. Examination of research in educational psychology supplements study. Students may receive credit for only one of the following courses: EDHD 460, PSYC 309J, or PSYC 339.

PSYC 341 Introduction to Memory and Cognition (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. An introduction to basic models, methods of research, and findings in the fields of memory, problem solving, and language. Applications as well as theory are explored.

PSYC 345 Group Dynamics (3)

Prerequisites: PSYC 100 and 321. Recommended: STAT 225 (or PSYC 200) and PSYC 305. An analysis and exploration of psychological forces in small-group behavior. Issues of growth, conflict, and successful performance are considered. Emphasis is on the application of rigorous scientific theory and research to the impact group dynamics have on real organizational and community problems. Topics include group development, team building, sports psychology, multicultural influence, social advocacy, and leadership. Students may receive credit for only one of the following courses: PSYC 309A, PSYC 345, or SOCY 447.

PSYC 351 Lifespan Development Psychology (3)

Prerequisite: PSYC 100. An integrated study of the biological, socioemotional, and cognitive development of humans from conception through late adulthood. Examination of each progressive stage of development emphasizes the interaction of nature and nurture on one's physiology, capability, and potential.

PSYC 353 Abnormal Psychology (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. An examination of mental disorders across the lifespan. Topics include the identification and diagnosis of specific disorders as well as their etiology and treatment. Students may receive credit for only one of the following courses: PSYC 331, PSYC 353, or PSYC 431.

PSYC 354 Cross-Cultural Psychology (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. An exploration of cultural components of theory and research in the fields of personality, social psychology, and community psychology. The interplay of individual, ethnic, and cultural factors in psychosocial growth and well-being, as well as in cross-cultural and cross-ethnic communication, is stressed. Counseling and psychotherapeutic interactions are discussed.

PSYC 355 Child Psychology (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A survey of research and theory focusing on psychological development, from conception through childhood. Physiological, conceptual, and behavioral changes are addressed, with attention to the social and biological context in which individuals develop. Students may receive credit for only one of the following courses: PSYC 333, PSYC 355, or PSYC 433.

PSYC 356 Psychology of Adolescence (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A description of adolescent development according to research and theory. The physiological, intellectual, and social changes of the teen years are viewed as interrelated, and the systems dealing with those changes are examined.

PSYC 357 Psychology of Adulthood and Aging (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. An overview of the development of physiological, intellectual, and interpersonal social functioning from early adulthood through the aging years. The dual theme is that of stability and change. Discussion covers theory and research and their implications.

PSYC 361 Survey of Industrial and Organizational Psychology (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A general survey of the field of industrial/organizational psychology. Topics include entry into the organization (recruitment, selection, training, socialization); organizational psychology (motivation, attitudes, leadership); and productivity in the workplace (quality of work, performance appraisals, absenteeism, turnover). The role that the larger environment plays in influencing behavior and attitudes on the job is also considered.

PSYC 370 Foundations of Forensics Psychology (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A survey of psychological research and theory related to behavior in the criminal trial process. Topics include jury selection, criminal profiling, eyewitness testimony, prediction of violent behavior, and mental competency of the accused.

PSYC 386 Psychology of Stress (3)

Prerequisite: PSYC 100. An examination of the forces that define and determine the stress response. Stress is studied as the product of the interactions of one's social structure, occupational status, and psychological and physiological levels of well-being. The psychological perspective is brought to bear on the stresses produced by work organizations, political climate, definitions of achievement, socioeconomic pressures, and the conflicts of those circumstances with ethical and moral values. Practical applications discussed include the constructive use of stress management techniques and the relationship between stress and illness. Students may receive credit for only one of the following courses: BEHS 463, HLTH 285, or PSYC 386.

PSYC 405 Principles of Behavior Modification (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A review of various features of human behavior. Literature on theory and research is evaluated in the application of operant and respondent conditioning principles. Analysis covers approaches to behavioral problems in school, home, and professional settings.

PSYC 415 History of Psychology (3)

(Recommended as preparation for graduate study in psychology.) Prerequisites: PSYC 100 and two upper-level psychology courses. A study of the origins of psychology in philosophy and biology and the development of psychology as a science in the 19th and 20th centuries. Current theoretical perspectives and experiments are considered in relation to the enduring problems of psychology, as well as the roles of culture, science, and technology in the development of psychological ideas.

PSYC 424 Psychology of Persuasion (3)

Prerequisite: PSYC 100. Recommended: PSYC 305, PSYC 321, and STAT 225 (or PSYC 200). A study of the effect of social communication on behavior and attitudes. Theory and research concerning social influence and change of attitude are examined.

PSYC 432 Introduction to Counseling Psychology (3)

Prerequisite: PSYC 100. A survey and critical analysis of research and intervention strategies developed and used by counseling psychologists. Historical and current trends in content and methodology are examined.

PSYC 435 Personality Theories (3)

Prerequisite: PSYC 100. A study of major theories and perspectives on personality, including trait, psychodynamic, behavioristic, and humanistic theories. Methods of personality research and relevant findings are also introduced and applied to real-world settings.

PSYC 436 Introduction to Clinical Psychology (3)

Prerequisite: PSYC 100. A survey of diagnostic and therapeutic strategies employed by clinical psychologists. The scientist-practitioner model is emphasized through the critical analysis of theories and empirical research that provide the foundation for determining effective treatments of mental disorders.

PSYC 437 Positive Psychology (3)

Prerequisite: PSYC 100. A survey of the science of positive psychology. Focus is on the unique characteristics of the human experience that contribute to health and well-being. Topics include hope, optimism, human strengths, happiness, flow, and attachment.

PSYC 441 Psychology of Human Learning (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A review and analysis of the major phenomena and theories of human learning. Conditioning, the application of behavior analysis to real-world problems, and laboratory techniques in learning research are also presented.

PSYC 451 Principles of Psychological Assessment (3)

(Recommended as preparation for graduate study in psychology.) Prerequisites: PSYC 100 and STAT 225 (or PSYC 200). Recommended: PSYC 305. An examination of basic concepts and theories of psychological assessment, including test development. Social, legal, cultural, and ethical considerations in psychological testing are also discussed.

PSYC 486A Psychology Field Experience Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in psychology. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to psychology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

PSYC 486B Psychology Field Experience Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in psychology. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to psychology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Sociology

Courses in sociology (designated SOCY) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences;
- a minor in sociology or forensics;
- a major in homeland security or social science;
- various certificates; and
- electives.

A description of the curriculum for the sociology minor begins on p. 76. Descriptions of related curricula may be found on the following pages: forensics (p. 45), homeland security (p. 53), and social science (p. 74).

SOCY 100 Introduction to Sociology (3)

An introduction to the fundamental concepts and principles of sociology. Topics include the study of cultures, patterns of social values, social institutions, stratification, and social change. Students may receive credit for only one of the following courses: BEHS 102 or SOCY 100.

SOCY 105 Introduction to Contemporary Social Problems (3)

An exploration of various personal, institutional, cultural, historical, and global problems that confront American society today. Problems range from drugs, divorce, crime, mental illness, and alienation in modern society to the environment and national and global economic and political conflicts. Special attention is paid to issues of technology and social change. Students may receive credit for only one of the following courses: SOCY 105 or SOCY 210.

SOCY 300 American Society (3)

A survey of the social structure and organization of American society, with special reference to recent social changes. The character, structure, values, and ideology of American social movements are examined from a sociological perspective. Topics include urban demographic changes and other population trends, as well as changes in the conduct of work, family life, and recreation.

SOCY 312 Family Demography (3)

Prerequisite: SOCY 100 or SOCY 243. A study of the family and population dynamics. Discussion covers issues of fertility (such as teenage pregnancy, the timing of parenthood, and the determinants and consequences of family size) as they relate to family behavior (such as marital patterns, the use of child-care options, and the relationship between work and the family). Issues of policy as related to demographic changes in the family are also considered.

SOCY 313 The Individual and Society (3)

Prerequisite: SOCY 100. An examination of changing concepts of the interaction between the individual and society. Analysis employs the framework of classical functional, conflict, and social constructivist theories, as well as the context of rapidly changing communication technology and globalization. Topics include the construction of social order; the role of trust in social interaction; and work, power, social organization, and the social self. Selected readings are taken from the sociologies of work, gender, postmodernism, globalization, and human rights. Persistent social problems, such as poverty and social inequality, are analyzed. Students may receive credit for only one of the following courses: BEHS 312, SOCY 311, or SOCY 313.

SOCY 325 The Sociology of Gender (3)

Prerequisite: SOCY 100. An inquiry into the institutional bases of gender roles and gender inequality, cultural perspectives on gender, gender socialization, feminism, and gender-role change. Emphasis is on contemporary American society.

SOCY 398 Special Topics in Sociology (3)

Prerequisite: SOCY 100. A study of topics of special interest.

SOCY 403 Intermediate Sociological Theory (3)

Prerequisite: SOCY 100. A study of major theoretical approaches to sociology, including functionalism, conflict, and symbolic interactionism. Original works of major theorists are examined in historical perspective.

SOCY 410 Social Demography (3)

Prerequisite: SOCY 100. A study of social demography. Topics include types of demographic analysis, demographic data, population characteristics, migration, mortality, fertility, population theories, world population growth, and population policy.

SOCY 423 Ethnic Minorities (3)

Prerequisite: SOCY 100. An exposition of basic social processes in the relations of ethnic groups, immigrant groups, African Americans, and Native Americans in the United States and of ethnic minorities in Europe.

SOCY 424 Sociology of Race Relations (3)

Prerequisite: SOCY 100. An analysis of race-related issues, focusing mainly on American society. Topics include the historical emergence, development, and institutionalization of racism; the effects of racism on its victims; and conflicts that are racially based.

SOCY 426 Sociology of Religion (3)

A survey of the varieties and origins of religious experience and religious institutions. The role of religion in social life is explored.

SOCY 427 Deviant Behavior (3)

Prerequisite: SOCY 100. An exploration of current theories of the genesis and distribution of deviant behavior. Topics include definitions of deviance, implications for a general theory of deviant behavior, labeling theory, and secondary deviance.

SOCY 428 Global Perspectives on Migrants and Refugees (3)

Prerequisite: SOCY 100. A sociological exploration of global migration, including study of migrants and refugees, legal and illegal immigration, politics and laws, and the role of the global economy in generating population flows.

SOCY 432 Social Movements (3)

Prerequisite: SOCY 100. An examination of movements that seek change in the social and political structure of society. Topics include the origins, tactics, organization, recruitment, and success of such movements. Case studies feature movements in the areas of labor, civil rights, feminism, the environment, student and neighborhood activism, and gay rights.

SOCY 443 The Family and Society (3)

Prerequisite: SOCY 100. An examination of the family as a social institution. Topics include the family's biological and cultural foundation; its historic development, changing structure, and function; the interaction of marriage and parenthood; and the disorganizing and reorganizing factors in current trends.

SOCY 462 Women in the Military (3)

A cross-national analysis of past, present, and future trends in women's roles in the military. Topics include the effects of cultural forces, national security, technological changes, demographic patterns, occupational structures, labor shortages, and considerations of efficiency and rationality on women's roles in the armed forces.

SOCY 464 Military Sociology (3)

Prerequisite: SOCY 100. An overview of social change and its effects on the growth of military institutions. Topics include the structure of complex formal military organizations, the sociology of military life as a distinct cultural ethos, and the interrelationships of military institutions, civilian communities, and society. Military service is evaluated as an occupation or a profession.

SOCY 473 Sociology of Urban Environments (3)

Prerequisite: SOCY 100. A study of the rise of urban civilization and metropolitan regions. Topics include ecological process and structure, the city as a center of dominance, social problems, control, and planning.

SOCY 486A Internship in Sociology Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in sociology. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to sociology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

SOCY 486B Internship in Sociology Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in sociology. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to sociology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

SOCY 498 Selected Topics in Sociology (1–3)

Prerequisite: SOCY 100. An advanced study of topics of special interest in sociology. Assignments include advanced reading and research.

Spanish

Courses in Spanish (designated SPAN) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities;
- a certificate in Workplace Spanish; and
- electives.

Students with prior experience in the Spanish language—either through study or living abroad, informal learning from friends or family, or high school or other coursework that did not transfer to UMUC—should take a placement exam before enrolling. Students with oral proficiency in Spanish who wish instruction in written Spanish should also take the placement test.

UMUC offers a limited number of foreign language courses each session.

A description of the curriculum for the humanities major and minor begins on p. 55.

SPAN 111 Elementary Spanish I (3)

(Not open to native speakers of Spanish; assumes no prior knowledge of Spanish. Students with prior experience with the Spanish language should take a placement test to assess appropriate level.) A basic foundation in listening, speaking, reading, and writing in Spanish. Spanish culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and writing. Focus is on acquiring the skills necessary to communicate with native Spanish speakers orally and in writing at an elementary level. Students may receive credit for only one of the following courses: SPAN 101 or SPAN 111.

SPAN 112 Elementary Spanish II (3)

(Not open to native speakers of Spanish.) Prerequisite: SPAN 111 or appropriate score on a placement test. A continuation of the development of basic skills in listening, speaking, reading, and writing in Spanish. Spanish culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and writing. Focus is on acquiring the skills necessary to communicate with native Spanish speakers orally and in writing at an advanced elementary level. Much of the class is conducted in Spanish. Students may receive credit for only one of the following courses: SPAN 102 or SPAN 112.

SPAN 211 Intermediate Spanish I (3)

Prerequisite: SPAN 112 or appropriate score on a placement test. Further development of skills in listening, speaking, reading, and writing in Spanish. Spanish culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and composition. Focus is on acquiring the skills necessary to communicate with native Spanish speakers orally and in writing at an intermediate level. Class is conducted primarily in Spanish. Students may receive credit for only one of the following courses: SPAN 201, SPAN 114, or SPAN 211.

SPAN 212 Intermediate Spanish II (3)

(Serves as preparation for upper-level courses in Spanish language, culture, and literature.) Prerequisite: SPAN 211 or appropriate score on a placement test. Improvement of skills in listening, speaking, reading, and writing in Spanish. Spanish culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and composition. Focus is on acquiring the skills necessary to communicate with native Spanish speakers orally and in writing at an advanced intermediate level. Class is conducted almost entirely in Spanish. Students may receive credit for only one of the following courses: SPAN 115, SPAN 202, or SPAN 212.

SPAN 318 Commercial and Workplace Spanish (4)

Prerequisite: SPAN 212 or appropriate score on placement test. A study of business terminology, vocabulary, formats, and practices. Emphasis is on everyday spoken and written workplace Spanish, using authentic text from native speakers. Written and oral practice is provided in finding and communicating information, especially on commercial topics in business and other workplace situations. Assignments include a project involving specific vocabulary, forms of professional communication, and cultural protocols relevant to the student's workplace or major. Students may receive credit for only one of the following courses: SPAN 315 or SPAN 318.

SPAN 401 Advanced Composition I (3)

Development of written skills in Spanish. Vocabulary enrichment is gained through an in-depth study of word formation, compounds, derivatives, and word-fields, with emphasis on the basic as well as figurative meanings of words. The refinement of rhetorical forms is also covered.

SPAN 486A Internship in Spanish Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in Spanish. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to Spanish and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

SPAN 486B Internship in Spanish Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in Spanish. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to Spanish and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Speech Communication

Courses in speech communication (designated SPCH) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in communications;
- a minor in speech communication or communication studies;
- a major in communication studies or laboratory management;
- a certificate in Diversity Awareness; and
- electives.

A description of the curriculum for the speech communication minor begins on p. 76. Descriptions of related curricula may be found on the following pages: communication studies (p. 22) and journalism (p. 62).

SPCH 100 Foundations of Speech Communication (3)

(Fulfills the prerequisite for all 300- or 400-level speech courses. Students for whom English is not a first language should consider taking SPCH 101X instead.) An overview of the principles of communication. Verbal and nonverbal language, listening, group dynamics, and public speaking are highlighted. Emphasis is on applying communication principles to contemporary problems and preparing various types of oral discourse. Students may receive credit for only one of the following courses: SPCH 100, SPCH 100X, SPCH 101, SPCH 107, or SPCH 108.

SPCH 100X Foundations of Speech Communication (3)

(Enrollment restricted to students for whom English is a second language.) An overview of the principles of communication. Verbal and nonverbal language, listening, group dynamics, and public speaking are highlighted. Emphasis is on applying communication principles to contemporary problems and preparing various types of oral discourse. Students may receive credit for only one of the following courses: SPCH 100, SPCH 100X, SPCH 101, SPCH 107, or SPCH 108.

SPCH 125 Introduction to Interpersonal Communication (3)

An overview of the concepts of interpersonal communication. Topics include nonverbal communication, perception, listening, the relationship of language to meaning, and feedback.

SPCH 200 Advanced Public Speaking (3)

Prerequisite: SPCH 100/100X, SPCH 101, SPCH 107, or SPCH 108. A study of rhetorical principles and models of speech composition. Principles are studied in conjunction with preparing and presenting particular forms of public communication.

SPCH 222 Interviewing (3)

A presentation of the principles and practices used in the recognized types of interview. Special attention is given to behavioral objectives and variables in communication as they figure in the process of interviewing. Students may receive credit for only one of the following courses: SPCH 222 or SPCH 422.

SPCH 324 Communication and Gender (3)

Prerequisite: Any SPCH course or COMM 300. An investigation of how communication influences gender and how gender affects communication. Topics include gender roles, similarities and differences between genders in communication styles, and the role gender plays in personal and professional relationships, as well as its role in culture and the media.

SPCH 397 Organizational Presentations (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisite: SPCH 100/100X, SPCH 101, SPCH 107, or SPCH 108. A study of techniques for planning small- and large-group presentations, including audience profiling and needs analysis. Topics include listener patterns and preferences, presentation organization, confidence-building techniques, platform skills, and audio/video technology and presentation software such as PowerPoint.

SPCH 420 Small-Group Communication (3)

Prerequisite: Any SPCH course or COMM 300. A study of the principles and practices that govern small-group communication in business, government, and the wider community. Topics include team building, group roles in decision making, leadership, and conflict resolution. Analysis covers communicating online and face-to-face with group members. Assignments include in-depth reading, writing, research, and group discussion.

SPCH 424 Communication in Complex Organizations (3)

Prerequisite: Any SPCH course or COMM 300. An examination of the structure and function of communication in organizations. Organizational climate and culture, information flow, networks, and role relationships are major themes.

SPCH 426 Negotiation and Conflict Management (3)

Prerequisite: Any SPCH course or COMM 300. A study of the role of communication in shaping negotiation and conflict processes and outcomes. Simulation and role play are used to model workplace practices.

SPCH 470 Listening (3)

Prerequisite: Any SPCH course or COMM 300. A survey of theories of the listening process. Emphasis is on functional analysis of listening behavior. Students may receive credit only once under this course number.

SPCH 472 Theories of Nonverbal Communication (3)

Prerequisite: Any SPCH course or COMM 300. An examination of theories, research, and applications of nonverbal communication in both personal and professional contexts. Topics include movement, body language, and gestures; clothing and personal artifacts; facial expression and eye behavior; use of space and territory; touching behavior; paralanguage; and voice characteristics. Cross-cultural and gender differences in nonverbal communication are also explored.

SPCH 482 Intercultural Communication (3)

Prerequisite: Any SPCH course or COMM 300. An examination of the major variables of communication in an intercultural context. Topics include cultural, racial, and national differences; stereotypes; values; cultural assumptions; and verbal and nonverbal channels.

SPCH 486A Internship in Speech Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in speech communication. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to speech communication and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

SPCH 486B Internship in Speech Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in speech communication. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to speech communication and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Statistics and Probability

Courses in statistics and probability (designated STAT) may be applied as appropriate (according to individual program requirements) toward

- a minor in mathematical sciences;
- the statistics requirement for a variety of majors and minors;
- a certificate in Applied Behavioral and Social Sciences; and
- electives.

UMUC offers a limited number of courses each session in this discipline.

A description of the curriculum for the mathematical sciences minor begins on p. 69.

Students are expected to own and use scientific calculators in all mathematics and statistics courses.

STAT 200 Introduction to Statistics (3)

Prerequisite: MATH 103, MATH 106, or MATH 107. An introduction to statistics. Topics include descriptive statistics, methods of sampling, tables, graphs, percentiles, concepts of probability, normal and chi-square distributions, sampling distributions, confidence intervals, hypothesis testing of one and two means, proportions, binomial experiments, sample size calculations, correlation, and regression. Applications in business, social sciences, and other fields are discussed. Students who receive credit for STAT 200 may not receive credit for the following courses: BEHS 202, BEHS 302, BMGT 230, ECON 321, GNST 201, MATH 111, MGMT 316, PSYC 200, SOCY 201, STAT 100, STAT 225, or STAT 230.

STAT 225 Introduction to Statistical Methods in Psychology (3)

Prerequisite: MATH 103, MATH 106, or MATH 107. Recommended: PSYC 100 or introductory social sciences course. An introduction to quantitative methods in the behavioral and social sciences and psychological research. Topics include the measurement of variables, measures of central tendency and dispersion, correlation, statistical inference and probability, hypothesis testing, t-tests, analysis of variance, and chi-squares tests. Students who receive credit for STAT 225 may not receive credit for the following courses: BEHS 202, BEHS 302, BMGT 230, ECON 321, GNST 201, MGMT 316, PSYC 200, SOCY 201, STAT 100, STAT 200, or STAT 230.

STAT 230 Business Statistics (3)

Prerequisite: MATH 103, MATH 106, or MATH 107. An introduction to the essential concepts of statistics for business and management. Concepts reviewed include descriptive statistics, probability theory, discrete and continuous probability distributions, sampling theory, estimation, hypothesis testing, regression, and decision theory. Discussion also covers the application of these concepts to solving problems in business and management. Students may receive credit for only one of the following courses: BEHS 202, BEHS 302, BMGT 230, ECON 321, GNST 201, MGMT 316, PSYC 200, SOCY 201, STAT 200, STAT 225, or STAT 230.

STAT 400 Applied Probability and Statistics I (3)

Prerequisite: MATH 141. An intermediate study of statistical theory. Topics include random variables and standard distributions, sampling methods, law of large numbers and the central-limit theorem, moments, estimation of parameters, and testing of hypotheses.

STAT 410 Introduction to Probability Theory (3)

Prerequisites: MATH 240 and MATH 241. A discussion of probability and its properties. Presentation covers random variables and distribution functions in one dimension and in several dimensions, as well as moments, characteristic functions, and limit theorems.

STAT 450 Regression and Variance Analysis (3)

Prerequisite: STAT 401. A study of statistical techniques, concentrating on one-, two-, three-, and four-way layouts in analysis of variance. Concepts and techniques presented include multiple-regression analysis, the Gauss-Markov theorem, fixed-effects models, linear regression in several variables, and experimental designs.

STAT 486A Internship in Statistics Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in statistics. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to statistics and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

STAT 486B Internship in Statistics Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 233). An opportunity to combine academic theory with new, career-related experience in statistics. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to statistics and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Theatre

Courses in theatre (designated THET) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities; and
- electives.

UMUC offers a limited number of courses each session in this discipline.

A description of the curriculum for the humanities major and minor begins on p. 55.

THET 110 Introduction to the Theatre (3)

An introduction to the people of the theatre: actors, directors, designers, and backstage personnel. Topics include the core and characteristics of a script, theatrical forms and styles, and theatre history. Students may receive credit for only one of the following courses: HUMN 110 or THET 110.

Women's Studies

Courses in women's studies (designated WMST) may be applied as appropriate (according to individual program requirements) toward

- a minor in women's studies; and
- electives.

UMUC offers a limited number of courses each session in this discipline.

The description of the curriculum for the women's studies minor begins on p. 77.

WMST 200 Introduction to Women's Studies: Women and Society (3)

(Fulfills the general education requirement in behavioral and social sciences.) An interdisciplinary study of the status, roles, and experiences of women in contemporary society. Sources from a variety of fields (such as literature, psychology, history, and anthropology) focus on the writings of women themselves.

Writing

Courses in writing (designated WRTG) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in communications;
- the major in communication studies;
- a certificate in Business Project Management, Desktop Communication, or Workplace Communications; and
- electives.

Degree-seeking students must complete WRTG 101 (or present its equivalent in transfer) during their first 18 credits of enrollment at UMUC. WRTG 101 is prerequisite to all writing courses with higher numbers and most courses in English and communication studies. Placement tests are required for enrollment in WRTG 101 and 101X. Students may visit *www.umuc.edu/testing* for times and locations of tests or contact Exams and Testing Services by phone at 800-888-UMUC, ext. 5249, or by e-mail at *exams@umuc.edu.*

WRTG 391, 393, and 394 are designated as upper-level advanced writing courses and may be applied toward the general education requirement in upper-level advanced writing.

Specific WRTG courses may be recommended in relation to specific majors and minors. Students should check the descriptions of their curricula.

Students for whom English is a second language should consider taking writing courses designated with X, such as WRTG 101X, 391X, etc.

The description of the general education requirements begins on p. 8.

The description of the curriculum for the communication studies major and minor begins on p. 22. Descriptions of related curricula begin on the following pages: English (p. 37) and journalism (p. 62).

WRTG 101 Introduction to Writing (3)

(Formerly ENGL 101. Students for whom English is not a first language should consider taking WRTG 101X instead.) Prerequisite: Satisfactory performance on a placement test or EDCP 103. Practice in effective writing and clear thinking at all levels, including the sentence and paragraph, with emphasis on the essay and research report. Specific steps reviewed within the writing process include formulating purpose, identifying an audience, and selecting and using research resources and methods of development. Assignments include composing a total of at least 4,500 words (approximately 20 pages). Students may receive credit for only one of the following courses: ENGL 101, ENGL 101X, WRTG 101, or WRTG 101X.

WRTG 101X Introduction to Writing (3)

(Formerly ENGL 101X. Enrollment restricted to students for whom English is not a first language.) Prerequisite: Satisfactory performance on a placement test or EDCP 103. Practice in effective writing and clear thinking at all levels, including the sentence and paragraph, with emphasis on the essay and research report. Specific steps reviewed within the writing process include formulating purpose, identifying an audience, and selecting and using research resources and methods of development. Assignments include composing a total of at least 4,500 words (approximately 20 pages). Students may receive credit for only one of the following courses: ENGL 101, ENGL 101X, WRTG 101, or WRTG 101X.

WRTG 288 Standard English Grammar (3)

(Formerly ENGL 281. Fulfills the general education requirement in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An overview of grammatical structures of standard formal and written English. Topics include parts of speech, punctuation, choice and usage of words, sentence patterns, and advanced grammatical issues. Students may receive credit for only one of the following courses: ENGL 281, ENGL 281X, or WRTG 288.

WRTG 289 Introduction to Principles of Text Editing (3)

(Formerly ENGL 278F. Fulfills the general education requirement in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An introduction to the practice of editing. Focus is on striving for correctness, consistency, and clarity of style, while writing, evaluating, and rewriting various documents. Students may receive credit for only one of the following courses: ENGL 278F or WRTG 289.

WRTG 291 Expository and Research Writing (3)

(Formerly ENGL 291. Fulfills the general education requirement in communications.) Prerequisites: WRTG 101/101X (or ENGL 101/101X) and LIBS 150. Continued practice in critical reading, thinking, and writing skills. Focus is on analyzing, evaluating, and synthesizing diverse sources and viewpoints to develop persuasive and argumentative writing projects. Assignments include written exercises, two short research essays, and a research paper, resulting in a total of at least 4,500 words (approximately 20 pages). Students may receive credit for only one of the following courses: ENGL 291, ENGL 291H, or WRTG 291.

WRTG 293 Introduction to Technical and Business Writing (3)

(Formerly COMM 293. Fulfills the general education requirement in communications.) Prerequisites: WRTG 101/101X (or ENGL 101/101X) and LIBS 150. An introduction to the process of technical and business writing. Topics include conducting audience and needs analyses; organizing and writing clear, precise, grammatically correct workplace prose; and producing a variety of routine professional reports and correspondence. Students may receive credit for only one of the following courses: COMM 293, ENGL 293, or WRTG 293

WRTG 387 Issues and Methods in Tutoring Writing (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. The development of the theoretical knowledge and practical skills to strengthen writing, research, and critical thinking and be effective as a tutor, particularly of writing. Topics include various strategies for effective online tutoring, the ethics of tutoring, the writing process, and the diverse writing challenges students face and techniques to overcome them. Discussion also covers the opportunities and challenges of online tutoring and online writing pedagogy.

WRTG 388 Advanced Grammar and Style (3)

(Formerly ENGL 384. Fulfills the general education requirement in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of the basic units of grammatical description, the nature of grammatical categories and structures and the reasons for creating and using them, and the application of grammatical concepts to written style. Students may receive credit for only one of the following courses: ENGL 384 or WRTG 388.

WRTG 390 Writing for Managers (3)

(Formerly COMM 390. Fulfills the general education requirement in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. A practicum in the kinds of writing skills that managers need for the workplace. Communication skills emphasized include planning information, developing reader-based prose, improving personal writing performance and guiding the writing of subordinates, and mastering such writing tasks as strategic plans and performance appraisals. Students may receive credit for only one of the following courses: COMM 390, HUMN 390, or WRTG 390.

WRTG 391 Advanced Expository and Research Writing (3)

(Formerly ENGL 391. Students for whom English is a not a first language should consider taking WRTG 391X instead. Fulfills the general education requirement in upper-level advanced writing.) Prerequisite: WRTG 101/101X or ENGL 101/101X. Instruction and practice in methods of presenting ideas and factual information clearly and effectively. Emphasis is on developing skills fundamental to academic writing. Published writings are discussed and evaluated. Assignments include composing a total of 6,000 words (approximately 25 pages). Students may receive credit for only one of the following courses: ENGL 391, ENGL 391X, WRTG 391, or WRTG 391X.

WRTG 391X Advanced Expository and Research Writing (3)

(Formerly ENGL 391X. Enrollment restricted to students for whom English is a second language. Fulfills the general education requirement in upper-level advanced writing.) Prerequisite: WRTG 101/101X or ENGL 101/101X. Instruction and practice in methods of presenting ideas and factual information clearly and effectively. Emphasis is on developing skills fundamental to both workplace and academic writing. Published writings are discussed and evaluated. Assignments include composing a total of 6,000 words (approximately 25 pages). Students may receive credit for only one of the following courses: ENGL 391, ENGL 391X, WRTG 391, or WRTG 391X.

WRTG 393 Advanced Technical Writing (3)

(Formerly COMM 393. Students for whom English is a not a first language should consider taking WRTG 393X instead. Fulfills the general education requirement in upper-level advanced writing.) Prerequisite: WRTG 101/101X or ENGL 101/101X. The writing of technical papers and reports. Focus is on building skills in critical thinking, research, and document design. Assignments include composing a total of 6,000 words (approximately 25 pages) in various formats (e.g., the oral presentation, the résumé, correspondence, manuals, procedures, instructions, and different types of reports, including proposal, progress, analytic, and feasibility). Students may receive credit for only one of the following courses: COMM 393, COMM 393X, ENGL 393, ENGL 393X, WRTG 393, or WRTG 393X.

WRTG 393X Advanced Technical Writing (3)

(Formerly COMM 393X. Enrollment restricted to students for whom English is not a first language. Fulfills the general education requirement in upper-level advanced writing.) Prerequisite: WRTG 101/101X, ENGL 101/101X. The writing of technical papers and reports. Focus is on building skills in critical thinking, research, and document design. Assignments include composing a total of 6,000 words (approximately 25 pages) in various formats (e.g., the oral presentation, the résumé, correspondence, manuals, procedures, instructions, and different types of reports, including proposal, progress, analytic, and feasibility). Students may receive credit for only one of the following courses: COMM 393, COMM 393X, ENGL 393, ENGL 393X, WRTG 393, or WRTG 393X.

WRTG 394 Advanced Business Writing (3)

(Formerly COMM 394. Students for whom English is not a first language should consider taking WRTG 394X instead. Fulfills the general education requirement in upper-level advanced writing.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An introduction to professional workplace writing. Topics include context, purpose, audience, style, organization, format, technology, results, and strategies for persuasion when writing typical workplace messages. In addition to shorter assignments, a substantial formal report that incorporates data analysis and support for conclusions or recommendations is required. Assignments include composing a total of 6,000 words (approximately 25 pages). Students may receive credit for only one of the following courses: COMM 394, COMM 394X, ENGL 394, ENGL 394X, WRTG 394, or WRTG 394X.

WRTG 394X Advanced Business Writing (3)

(Formerly COMM 394X. Enrollment restricted to students for whom English is not a first language. Fulfills the general education requirement in Upper-level advanced writing.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An introduction to professional workplace writing. Topics include context, purpose, audience, style, organization, format, technology, results, and strategies for persuasion when writing typical workplace messages. In addition to shorter assignments, a substantial formal report that incorporates data analysis and support for conclusions or recommendations is required. Assignments include composing a total of 6,000 words (approximately 25 pages). Students may receive credit for only one of the following courses: COMM 394, COMM 394X, ENGL 394, ENGL 394X, WRTG 394, or WRTG 394X.

WRTG 489 Advanced Technical Editing (3)

(Formerly COMM 491. Fulfills the general education requirement in communications.) Prerequisite: WRTG 393/393X, WRTG 394/394X, COMM 393/393X, or COMM 394/ 394X. Recommended: WRTG 288 (or ENGL 281) or familiarity with grammar. A systematic approach to methods of preparing a document for publication or other disseminations. Discussion addresses the full range of editing levels (copyediting, substantive editing, and document design) and includes an overview of design goals that reflect specific readers and purposes. Students may receive credit for only one of the following courses: COMM 491, ENGL 489B, or WRTG 489.

WRTG 493 Seminar in Advanced Technical Writing (3)

(Formerly COMM 490. Intended as a final, capstone course to be taken in a student's last 15 credits. Fulfills the general education requirement in communications.) Prerequisites: COMM 300 and either WRTG 393/393X, WRTG 394/394X, COMM 393/393X, or COMM 394/394X. A study of technical writing that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application and critical thinking. Emerging issues in creating, maintaining, storing, and revising technical information are considered. Topics include the review of textual and online resources useful to technical communicators and the requirements for a professional portfolio. Emphasis is on professional communication practices. Assignments include oral presentations. Students may receive credit only once under this course number and for only one of the following courses: COMM 490, ENGL 489A, or WRTG 493.

WRTG 494 Grant and Proposal Writing (3)

(Formerly COMM 492. Fulfills the general education requirement in communications.) Prerequisite: WRTG 393/393X, WRTG 394/394X, COMM 393/393X, or COMM 394/394X. An advanced study of technical writing, focusing on composing competitive proposals in response to Request for Proposals (RFPs) and other funding solicitations from the federal government, community and private sources. Discussion covers stages of the proposal-development process, including researching the funding agency for its mission, target populations, and problems of interest; assessing the RFP to determine evaluation criteria; and assembling the required elements of a successful proposal. Assignments include working in teams to prepare a competitive proposal. Students may receive credit for only one of the following courses: COMM 492, ENGL 489C, or WRTG 494.

WRTG 496 Writing for the Computer Industry (3)

(Formerly COMM 496. Fulfills the general education requirement in communications.) Prerequisite: A 300-level writing course. Recommended: WRTG 393/393X or COMM 393/393X. Study of and practice in the designing, writing, testing, publishing, and maintaining of effective user documentation as well as other software development documents. The assumption is made that software tools, as well as their documentation, should relate directly to user tasks. Emphasis is on the difference between writing successfully for publication on paper and for display on the computer screen. Students may receive credit for only one of the following courses: COMM 496 or WRTG 496.

ACADEMIC AND ADMINISTRATIVE REQUIREMENTS

SCHOLASTIC AND ADMINISTRATIVE STANDARDS

UMUC standards for academic rigor consider the degree to which students demonstrate content mastery, application of critical thinking skills, and adherence to UMUC's code of academic integrity.

Institutional Credit

A course that may not be applied toward graduation may be assigned a credit value for purposes of course load per session and tuition. This institutional credit is included in the grade point average (GPA) and in determining eligibility for financial aid and veterans educational benefits. However, students required to take these courses do so in addition to the 120 units of graduation credit required for the degree.

Grading Methods

There are four grading methods at UMUC. The most commonly used is the standard method. The pass/fail alternative is available only under limited conditions. The satisfactory/D/fail method is restricted to certain specified courses. Any course may be audited. Regulations for each are given in the following paragraphs.

Grade	Interpretation	Quality Points
A	Outstanding *Performance excels far above established standards for university-level performance*	4
B	Superior *Performance is above established standards*	3
C	Good *Performance meets established standards*	2
D	Substandard *Performance is below established standards*	1
F	Failure *Performance does not meet minimum requirements*	0
FN	Failure for nonattendance	0
G	Grade under review	0
P	Passing (D or higher)	0
S	Satisfactory (C or higher)	0
I	Incomplete	0
AU	Audit	0
W	Withdrawal	0

Standard

Unless students choose either the pass/fail or audit option at the time of registration, they will be given a letter grade according to the standard method. Under the standard grading method, students are given a grade of A, B, C, D, or F on the basis of their performance in meeting the requirements of each course. For only a very few courses, the standard grading method is replaced by the satisfactory/D/fail method.

Pass/Fail

Degree-seeking students who have earned 30 credits (including at least 15 credits at UMUC) and who have a cumulative grade point average of 2.0 may take one course of up to 6 credits each standard session (fall, spring, or summer) on a pass/fail basis, up to a maximum of 18 credits. Students must elect pass/fail grading at the time of registration. This status may not be changed after the second week of classes has ended for the standard session and after the first week of classes for eight-week sessions.

This grading method is allowed only for electives. Required courses (e.g., general education courses and courses for the major and minor) may not be taken pass/fail, nor may pass/fail grading be used in retaking a course for which a letter grade was earned previously.

Students who register for pass/fail grading must still complete all the regular requirements of the course. The teacher evaluates the work under the normal procedure for letter grades and submits a regular grade. Grades of A, B, C, or D are then converted to the grade P, which is entered into the permanent record. A grade of F remains unchanged.

Although a grade of P earns credit toward graduation, it is not included in calculating a grade point average. A failing grade carries no credit, and the failing grade is included in the computation of grade point averages.

Satisfactory/D/Fail

This grading method is available only on a limited basis. Although a grade of satisfactory (S) earns credit toward graduation, it is not included in calculating grade point averages. The grade of D earns credit and is included in computing grade point averages. While a failing grade (F) earns no credit, it is included in computing grade point averages.

Audit

Students who do not wish to receive credit may register for courses as auditors after being admitted. Students must indicate this intention when they register. Students may request a change from credit to audit status anytime before the end of the second

scheduled week of a standard session or the first week of classes in an eight-week session. Auditing students do not have to complete course assignments, but may request to do so in order to receive faculty feedback on their work.

Audited courses are listed on the permanent record, with the notation AU. No letter grade is given for audited courses, nor are credits earned.

Grades and Marks

Passing: The Grade of P

The grade of P is conferred after a teacher has evaluated coursework under the normal procedure for letter grades and has submitted a standard grade (A, B, C, or D). Then Undergraduate Student Affairs converts that standard grade into the grade of P.

A passing grade is recorded on the permanent record and confers credit toward graduation. However, courses graded P are not included in calculating grade point averages.

Satisfactory: The Grade of S

The grade of S is equivalent to a grade of C or higher. This grade is used to denote satisfactory progress in an experiential setting or practicum, such as EXCL 301. Although the grade of S confers credit and appears on the permanent record, courses graded S are not used in determining grade point averages.

Failure: The Grade of F

The grade of F means a failure to satisfy the minimum requirements of a course. Although it carries no credit, it is included in calculating the grade point average. A student assigned the grade of F must register again for the course, pay the applicable fees, repeat the course, and earn a passing grade to receive credit for that course.

Failure for Nonattendance: The Grade of FN

The grade of FN means a failure in the course because the student has not attended or participated in course assignments and activities. It is assigned when the student ceases to attend class or fulfill requirements but has not officially withdrawn.

Grade Under Review: The Mark of G

The mark of G is an exceptional and temporary administrative mark given only when the final grade in the course is under review. It is not the same as a mark of Incomplete.

Incomplete: The Mark of I

The mark of I (incomplete) is an exceptional mark given only to students whose work in a course has been satisfactory but who for reasons beyond their control have been unable to complete all the requirements of a course. The following criteria must be met:

- The student must have completed at least 60 percent of the work in the course with a grade of C or better.
- The mark of I must be requested before the end of the course.

The procedure for awarding the mark of I is as follows:

- The student must ask the teacher for a mark of I. (Teachers cannot award a mark of I on their own initiative.)
- The teacher decides whether to grant the request.
- The teacher sets a date for completion of the remaining requirements of the course.
- The teacher and the student together agree on the remaining requirements of the course and the deadline for submitting the work.
- The student is responsible for completing the work.
- After the work is completed, the teacher submits a grade change to replace the mark of I on the student's record with a grade.

If the mark of I is not made up by the agreed-upon deadline (which is not to exceed the maximum time allowed after submission of the original grade), the I is changed to an F. Students should refer to UMUC policy 170.71 Policy on Grade of Incomplete and Withdrawal at *www.umuc.edu/policy* for details.

Students should be aware that a mark of I in their final semester may delay graduation.

The mark of I cannot be removed by means of credit by examination, nor can it be replaced by a mark of W (defined below). Students who elect to repeat an incomplete course must register again for the course, pay all applicable fees, and repeat the course. For purposes of academic retention, the course grade is counted as an F. The mark of I is not used in determining grade point averages.

Withdrawal: The Mark of W

Students may receive the mark of W by officially withdrawing from a course. Ceasing to attend class does not constitute an official withdrawal. Procedures for withdrawing are detailed on the UMUC Web site at *www.umuc.edu/students.* Students must withdraw from a course at least two weeks before the last scheduled class in a session. (For accelerated courses, withdrawals must be submitted before the close of business on the first day of class.)

For most courses, this mark appears on the permanent record unless withdrawal is completed before the end of the schedule

adjustment period. For intensive format courses, students must withdraw before the class starts to avoid a mark of W.

For purposes of academic retention, the mark of W is counted as attempted hours. It is not used in determining grade point averages.

Changes in Grade

Teachers may change a grade previously assigned through MyUMUC, the university's online academic and administrative services portal. Any change must be made no later than four months after the original grade was awarded.

Grading Repeated Courses

When a course is repeated, only the higher grade earned in the two attempts is included in the calculation of the GPA.

For purposes of academic retention, both attempts are counted. Both grades are entered on the permanent record, with a notation indicating that the course was repeated. Students cannot increase the total hours earned toward a degree by repeating a course for which a passing grade was conferred previously.

To establish credit in a course previously failed or withdrawn from, students must register, pay the full tuition and fees, and repeat the entire course successfully.

Repeated Registration for a Course

No student may register more than twice for the same course. Registering more than twice for the same course (including courses previously attempted at other institutions in the University System of Maryland) is generally forbidden. It may be allowed only under special circumstances, with prior approval of an advisor.

Grades and Quality Points

The grade point average is calculated using the quality points assigned to each grade or mark (chart on p. 220). First, the quality-point value of each grade or mark is multiplied by the number of credits; then the sum of these quality points is divided by the total number of credits attempted for which a grade of A, B, C, D, or F was received.

Academic Warning and Dismissal

At the end of every session (fall, spring, or summer), the cumulative grade point average of each student who has attempted at least 15 credits at UMUC is computed based on all UMUC graded coursework. Undergraduate Student Affairs then takes action, required by UMUC policy, according to the student's level of progress as described below.

There are four levels of academic progress: satisfactory, warning, probation, and dismissal.

Levels of Progress

SATISFACTORY

A student whose cumulative grade point average is 2.0 or higher is considered to be making satisfactory progress.

WARNING

A student whose cumulative GPA is less than 2.0 will be placed on academic warning. The student will remain on academic warning as long as the cumulative GPA is less than 2.0 and the GPA for the session is 2.0 or better.

A student who attempts 15 credits or more in a period of at least two standard sessions and earns no quality points will receive an academic warning regardless of the cumulative grade point average.

A student on academic warning whose GPA for the session is 2.0 or better, but whose cumulative GPA is less than 2.0, will continue on warning until he or she has completed courses at UMUC that raise the cumulative GPA to 2.0 or better.

A student on academic warning is limited to a maximum enrollment of 7 credits per standard session or to a maximum of 4 credits per session 1 or session 2.

PROBATION

A student on academic warning or admitted on provisional status whose GPA for the session is less than 2.0 will be put on probation.

A student on probation whose GPA for the session is 2.0 or better, but whose cumulative GPA is less than 2.0, will return to academic warning or provisional status.

A student on academic probation is limited to a maximum enrollment of 7 credits per standard session (fall, spring, or summer).

DISMISSAL

A student on probation whose GPA for the session is less than 2.0 will be dismissed.

Regardless of cumulative GPA, a student who has maintained an average of at least 2.0 during a particular session will not be dismissed at the end of that period. A student who is dismissed is ineligible to register again for UMUC courses until he or she is reinstated.

Reinstatement After Dismissal

A student seeking reinstatement is required to

- Have all official transcripts from previously attended colleges and universities sent to UMUC, preferably before meeting with an advisor.
- Meet with an advisor before petitioning for reinstatement.
- Wait at least one standard session before petitioning for reinstatement. Such an appeal should be made in writing to the associate provost, Student Affairs.

Deadlines for requesting reinstatement are as follows:

Fall enrollment	July 15
Spring enrollment	November 15
Summer enrollment	April 15

After the student's record, the advisor's recommendation, and the student's petition have been reviewed, the student will receive a written response. Reinstated students will be placed on warning immediately or will retain provisional status, as appropriate.

Further information is provided in UMUC policy 158.00 Academic Levels of Progress, available online at *www.umuc.edu/policy.*

Scholastic Recognition

Dean's List

Students who complete at least 12 credits (in courses graded A, B, C, D, or F) with a GPA of at least 3.5 in an academic year at UMUC are eligible for the Dean's List.

Students who fail to earn the required average by the end of the academic year must complete a minimum of 12 more credits during the next academic year to be considered for the Dean's List again. All courses taken during an academic year are used in computing the average, even though the total number of credits may exceed 12. An academic year is designated as summer through spring sessions. Eligibility for the Dean's List is calculated once a year.

Academic Honors

Academic honors for excellence in scholarship are determined by the students' cumulative GPA at UMUC. The distinction of *summa cum laude* is conferred on those students with a cumulative GPA of 4.000; *magna cum laude* honors are conferred on those students with a cumulative GPA of 3.901 to 3.999; *cum laude* honors are conferred on those students with a cumulative GPA of 3.800 to 3.900. To be eligible for any of these categories of recognition, a student must have earned at least 45 credits at UMUC in courses for which a letter grade and quality points were assigned. For honors to be conferred with a second bachelor's degree, the student is required to have a total of 45 new UMUC credits and the requisite GPA. (More information on attaining a second bachelor's degree may be found on p. 9.)

Honor Societies

Inquiries concerning honor societies should be addressed to the student's advisor.

ALPHA SIGMA LAMBDA

UMUC students are eligible for membership in Alpha Sigma Lambda, the national honor society for students in continuing higher education. To qualify for membership, a student must be pursuing a first bachelor's degree, have completed at least 30 credits at UMUC, in courses graded A, B, C, D, or F, and maintained a GPA of 3.7 or higher in all UMUC courses.

At least 15 credits, from UMUC or transferred, must be in courses outside the major.

LAMBDA PI ETA

Membership in Lambda Pi Eta, the official communication studies honor society of the National Communication Association, is open to qualified UMUC students. To be eligible, students must have earned at least 60 credits toward the bachelor's degree, including at least 30 credits at UMUC and 12 credits in communication studies, with a GPA of 3.5 or higher both in communication studies and overall coursework.

PHI ALPHA THETA

UMUC students may qualify for membership in Phi Alpha Theta, the international honor society in history. To qualify for membership, students must attain a GPA of 3.5 or higher in at least 12 credits of UMUC history courses and have an overall UMUC GPA of 3.4.

PHI KAPPA PHI

The honor society of Phi Kappa Phi promotes the pursuit of excellence in all fields of higher education and recognizes outstanding achievement by students, faculty, and others through election to membership and through various awards for distinguished achievement. To qualify for membership in Phi Kappa Phi, candidates must have completed at least 90 credits toward the bachelor's degree, at least 45 of which must have been for UMUC courses carrying letter grades of A, B, C, D, or F. The candidate's GPA in UMUC courses must be in the top 10 percent of the previous UMUC graduating class.

PI GAMMA MU

Pi Gamma Mu is the international honor society for the social sciences and recognizes outstanding scholarship in the social sciences at UMUC. Membership is offered to qualified students interested in anthropology, criminal justice, economics, gerontology, history, political science, social psychology, sociology, and women's studies.

Students who are in their last 60 credits of undergraduate study, have earned at least 20 hours of social science credit (including at least 9 credits at UMUC), and have a GPA that ranks in the upper 35 percent of their class may be invited to join.

PSI CHI

Psi Chi is the international honor society in psychology, founded in 1929 for the purposes of encouraging, stimulating, and maintaining excellence in scholarship and advancing the science of psychology. Qualified students must be invited to join. To qualify for membership, students must have declared a major or minor in psychology and earned at least 30 credits toward a bachelor's degree, including at least 9 credits in psychology. Additionally, qualified students must be in the top 35 percent of their class, based on rankings within sophomore, junior, and senior classes; have an overall GPA of at least 3.3 for sophomores and juniors and 3.5 for seniors; and have a psychology GPA of at least 3.3 for sophomores and juniors and 3.5 for seniors.

SIGMA TAU DELTA

Membership in Sigma Tau Delta, the international English honor society, is open to qualified UMUC students with a major in English. To be eligible, students must have earned at least 45 credits toward the bachelor's degree with an overall GPA of 3.5 or higher. At least 30 credits must have been earned through UMUC and must include 12 credits of English, not including ENGL 101 (now WRTG 101), and 6 credits of upper-level coursework. Students must also have earned a GPA of 3.6 in English coursework at UMUC.

UPSILON PI EPSILON

The Kappa Chapter of Upsilon Pi Epsilon, the international honor society for the computing and information disciplines, is open to graduate and undergraduate students. To qualify for membership, undergraduate students must be pursuing a bachelor's degree with a major in the computing and information disciplines and must have completed at least 45 credits. Students should have completed at least 30 credits at UMUC in courses graded A, B, C, D, or F, including at least 15 credits in the computing and information disciplines, and must have a GPA of at least 3.5, overall and in all computing and information systems coursework. Students are inducted into the honor society twice a year.

RIGHTS AND RESPONSIBILITIES OF THE STUDENT

Current information and links to policies and resources are available in the online Student Handbook at *www.umuc.edu/students/handbook.* Students should refer to the handbook for the most current information.

Attendance and Participation

The student is responsible for attending all classes and any related activities regularly and punctually. Students taking classes in accelerated format are responsible for attending all class meetings for the duration of the course. In some courses, teachers may base part of the final grade on class participation.

Depending on session length and format, students should expect to spend three to six hours per week in class discussion and activities (online or on-site) and two to three times that number of hours outside the class in study, assigned reading, and preparation of assignments. Courses offered in accelerated formats require more time per week. Students are expected to achieve the same intended learning outcomes and do the same amount of work in an online course as they would in an on-site course. Active participation is required in all online courses, and students should expect to log in to their online courses several times a week.

Absence from class does not excuse a student from missed coursework. The student is responsible for obtaining detailed information about missed class sessions, including their content, activities covered, and any announcements or assignments. Failure to complete any required coursework may adversely affect the student's grade. Teachers are not expected to repeat material that a student has missed because of the student's absence from class.

The student is also responsible for registering for a proctored exam. Exam registration takes place during the first few weeks of the session. Students who fail to register for proctored exams will not be allowed to take the exams during testing week.

Technology Use

Internet Access

UMUC is committed to ensuring that students acquire the level of fluency in information technology they need to participate actively in contemporary society and have access to up-to-date resources. All UMUC students must be prepared to participate in asynchronous, computer-based class discussions, study groups, online database searches, course evaluations, and other online activities whether their course is held online or in a classroom.

All UMUC students must therefore ensure that they have access to the Internet and have a current e-mail address. If the student

does not have Internet access through a home computer, he or she may use one at a UMUC computer lab, a university or public library, or another source. However, that source should be regularly available.

The most current technical requirements are available online at *http://tychousa.umuc.edu/tech/min_tech.html.*

Electronic File Sharing

Peer-to-peer programs permit computers to share data in the form of music, movies, games, computer files, and software.

All users of the UMUC network are required to comply with federal copyright laws. UMUC network users are not permitted to share unauthorized copyrighted material over the UMUC network, whether on personally owned or on university computers.

Any unauthorized distribution of copyrighted materials on the university network, including peer-to-peer file sharing, is a violation of federal law and UMUC policies. Violations may lead to disciplinary proceedings and, in some cases, civil and criminal legal action. UMUC's computing resources policies can be found online at *www.umuc.edu/suppserv/it/it_home.shtml.* UMUC's computer use policy can be found at *www.umuc.edu/policy/fiscal/fisc27000.shtml.*

More information on how to legally download music is available on the Recording Industry Association of America Web site at *www.riaa.com.* Information on how to legally download movies and television programs is provided on the Motion Picture Association of America Web site at *www.mpaa.org.*

Examinations

The student is responsible for obtaining information about quizzes and examination schedules and policies. Final examinations are usually given during the last scheduled class meeting for classes meeting on-site. For online classes, the final examination is usually given during the last week of the session. In most cases, the student is required to register for a proctored final exam. Exam registration takes place during the first few weeks of the session. Students who fail to register for proctored exams will not be allowed to take exams during the testing week.

Makeup examinations and tests may be given to students who for valid reasons are unable to take exams at the scheduled time. Teachers are not required to offer makeup examinations because of a student's absence unless the student can present evidence that it was caused by unavoidable circumstances or occurred on a religious holiday.* In such cases, an examination may be rescheduled for the mutual convenience of student and teacher and must cover only the material for which the student was originally responsible. Such a rescheduling must not cause a conflict with the student's other classes. Exams and Testing Services *(www.umuc.edu/testing)* schedules makeup exam sessions for students whose teachers cannot schedule a special makeup session. There is a fee for this service.

Course Load

No student may register for courses whose scheduled meeting times overlap to any extent. Decisions on the number of courses a student can successfully complete in any one session are normally left to the student's discretion. It should be noted, however, that the majority of UMUC students register for between 3 and 9 credits, and students are strongly advised not to exceed this limit. Students should carefully and realistically assess other commitments before registering for more than 9 credits. In no case may a student register for more than 18 credits in a 17-week period without written permission from an advisor. Permission to register for more than 18 credits is based on demonstrated academic excellence at UMUC. A minimum GPA of 3.5 and an enrollment history indicating success in carrying a heavier-than-average course load at UMUC are required.

Academic Integrity

Integrity in teaching and learning is a fundamental principle of a university. UMUC believes that all members of the university community share the responsibility for academic integrity, as expressed in the University System of Maryland policy "Faculty, Student, and Institutional Rights and Responsibilities for Academic Integrity." Details are available from the Office of the Dean, School of Undergraduate Studies.

At UMUC, faculty members are expected to establish classroom environments conducive to the maintenance of academic integrity by promptly giving students a complete syllabus describing the course and its requirements, grading submitted work promptly and adequately, and arranging appropriate testing conditions, including having faculty members monitor examinations given in class.

Students at UMUC are expected to conduct themselves in a manner that will contribute to the maintenance of academic integrity. Failure to maintain academic integrity (academic dishonesty) may result in disciplinary action.

Students are responsible for understanding and avoiding academic dishonesty and plagiarism, whether intentional or unintentional. The definitions of academic dishonesty and plagiarism and the procedures for pursuing complaints of academic dishonesty are described in UMUC Policy 150.25 Academic

** The UMUC policy on religious holidays is stated in the appendices.*

Dishonesty and Plagiarism, which can be found at *www.umuc.edu/policy* or is available from the Office of the Dean, School of Undergraduate Studies.

Appealing a Grade

The established performance standards for a course grade are communicated in the syllabus and other course materials. If a student believes that his or her grade was not based on such standards, he or she may pursue the appeal process for arbitrary and capricious grading. Procedures for appealing a grade are detailed in UMUC Policy 130.80 Procedures for Review of Alleged Arbitrary and Capricious Grading, which is available from the Office of the Dean, School of Undergraduate Studies, or online at *www.umuc.edu/policy.*

There is a time limit for appealing a grade. Therefore, students who want to appeal a grade must initiate the process within 30 days of the posting of the grade.

Code of Student Conduct

Students are subject to UMUC Policy 151.00 Code of Student Conduct, which can be found at *www.umuc.edu/policy* or is available from the Office of Student Affairs. Violations of the code are considered to be violations of UMUC policy and are grounds for discipline by UMUC. Allegations of misconduct by UMUC students should be referred to the provost and chief academic officer.

Student Grievance Procedures

The procedures necessary to file a formal complaint concerning the actions of members of the UMUC faculty or administrative staff are detailed in UMUC Policy 130.70 Student Grievance Procedures, which is available at *www.umuc.edu/policy* or from the Office of the Dean, School of Undergraduate Studies. Students who wish to seek redress for the acts or omissions of a faculty or staff member must first request a conference with that person and attempt to resolve the complaint informally within 14 calendar days of the alleged act or omission.

Change of Address

Students who move during the session should not only leave a forwarding address with the U.S. Postal Service but should also notify UMUC by updating their personal information through MyUMUC.

Transfer of Credits from UMUC

To have credits earned through UMUC transferred, each student must obtain authoritative guidance from the destination institution (including other institutions in the University System of Maryland). Only the destination institution can answer specific questions about its own residency and degree requirements or about the applicability of UMUC courses to its curricula. Specific policies dealing with transfer students are given in the appendices.

Code of Civility

To promote a positive, collegial atmosphere among students, faculty, and staff, UMUC has developed a Code of Civility, which is also available in the *Student Handbook* at *www.umuc.edu/students/civility.html.*

ADMISSION AND ENROLLMENT

GENERAL INFORMATION AND ORIENTATION

Before the beginning of each term, UMUC holds open houses and orientations (online and on-site) for new and prospective students. These events offer an opportunity to learn about UMUC and its programs, student services, academic and career options, faculty members, and fellow students. Prospective students can be admitted and register for courses at these times.

For general information, or to be directed to specific offices, students may call 800-888-UMUC (8682). Most offices are open weekdays from 8:30 a.m. to 5 p.m. eastern time.

ADMISSION

Admission Requirements

The admission procedures of UMUC were designed to meet the needs of adult, part-time students. Most applicants who have a high school diploma or the equivalent are admissible. In most cases, neither transcripts nor test scores are required. By the end of the first session, a student who plans to earn a degree at UMUC must make sure that official transcripts have been sent from each institution previously attended.

Student Status

Upon being admitted to UMUC, students are assigned to regular or provisional status. Admission of foreign-educated applicants is governed by requirements given on p. 228.

REGULAR

A qualified applicant who wants to receive credit for courses (whether he or she intends to receive a degree or not) is admitted as a regular student. For financial aid purposes, a regular student must be seeking a degree or certificate at UMUC. Admission as a regular student is granted to applicants who submit a completed, signed application and fulfill the following academic requirements that apply to their educational level:

- Graduation from a regionally accredited or state-approved high school in the United States

or

- Successful completion of the General Education Development (GED) examination with a total score of 225 and no individual test score below 40 (for tests completed before January 2002) or a total score of 2250 and no individual test score below 410 (for tests completed after January 2002).

To be granted regular admission status, students should have maintained a cumulative grade point average of at least 2.0 (on a 4.0 scale) in all college-level work attempted at other regionally accredited colleges and universities, including other University System of Maryland institutions. However, an academic probation or dismissal that occurred at least two years before the date when the student applies for admission has no bearing on the student's admission status.

Students are not required to submit official transcripts at the time of admission. However, students must have all official documents of their educational background on file by the end of the first session of attendance. Students who present at least 24 credits of transferable college coursework are not required to submit official high school transcripts or GED scores.

PROVISIONAL

Two categories of students may be admitted in provisional status:

1. Applicants who, during the last two years, earned a cumulative grade point average of less than 2.0 (on a 4.0 scale) at another institution and/or were academically dismissed from another institution (regardless of their cumulative grade point average).
2. Foreign-educated students who have not completed at least 24 credits of transferable college coursework.

All provisional students may enroll for a maximum of 7 credits during a fall, spring, or summer session.

During their first session of enrollment at UMUC, provisional students in the first category must submit transcripts from all colleges and universities they have attended. If the student's session grade point average at UMUC is less than 2.0, the student is placed on probation. If, while on probation, the student's session grade point average is 2.0 or better, she or he returns to provisional status. If, while on probation, the student's session and cumulative grade point averages are less than 2.0, he or she is dismissed and must follow the standard reinstatement procedures that apply to all dismissed students. The student's status is automatically changed to regular after the student has successfully completed 7 credits of graded coursework with a cumulative grade point average of 2.0 or higher.

Students educated abroad must submit official transcripts verifying completion of the equivalent of a U.S. secondary education. They are eligible for regular admission status once UMUC has verified that they have completed the equivalent of a U.S. high school education.

More details on the admission of noncitizens and foreign-educated students are on p. 228.

ADMISSION AND ENROLLMENT

Procedures for Admission

To apply for admission, students must complete an undergraduate admission application and pay the nonrefundable fee. Before attempting to register, students must have been officially admitted to the university. Applications for admission may be submitted online through MyUMUC *(https://my.umuc.edu).* Deadlines for admission and registration are listed in the current undergraduate schedule of classes.

Determination of Residency for Tuition Purposes

An initial determination of in-state or out-of-state status for tuition purposes is made when a student applies for admission. The determination made at that time remains in effect thereafter unless it is successfully challenged. The student is responsible for providing the information necessary to establish eligibility for in-state status. Official criteria for determining residency are in the appendices.

Further information on tuition and fees may be found on p. 230.

Reenrollment

Students who have not attended UMUC for two years must file a new application with Undergraduate Admissions before they will be allowed to register. However, they need not pay another application fee.

Transfer from UMUC Europe or UMUC Asia

Students who previously attended UMUC overseas and who wish to attend UMUC in the United States must complete a divisional transfer form. This form is located on the Web sites of the overseas divisions. There is no fee for divisional transfers.

FORWARDING OF OVERSEAS STUDENTS' RECORDS

Records of students formerly enrolled in UMUC Europe or UMUC Asia are retained in the Office of Admission and Registration of that program. If such a student later enrolls in UMUC stateside, the student's records are then requested by Undergraduate Student Affairs. (**Note:** Records of students who attended UMUC at its former campus in Schwäbisch Gmünd, Germany, are now retained at UMUC headquarters in Adelphi, Maryland.)

Admission of College Graduates

A student who has received a bachelor's degree from a regionally accredited U.S. institution is automatically admissible to UMUC as a regular (undergraduate) student upon submission of the admission application and fee. A former graduate student in the University System of Maryland whose time limit in a program has expired may also be admitted as a regular (undergraduate) student. Students who have been admitted to UMUC as graduate students may take undergraduate courses at the undergraduate rate of tuition. Courses taken while in regular (undergraduate) status, however, cannot ordinarily be applied to a graduate degree program. Students may be admitted as either undergraduate or graduate, but no one may be admitted as both at the same time.

Students from Other USM Institutions

Undergraduate students from other institutions of the University System of Maryland may take undergraduate courses without applying to UMUC. Instead, they must either submit a letter of permission from their department or complete a "Notification of Registration with University of Maryland University College" form, certifying good standing and eligibility to return to the last institution attended. Graduate students from other institutions of the University System of Maryland may also take undergraduate courses without applying to UMUC, but must pay graduate tuition and related fees. Transferability of academic work completed at UMUC is determined by the student's home institution. Undergraduate courses taken by graduate students may not be applied toward graduate degree requirements.

Noncitizens and Foreign-Educated Students

Prospective students who are not U.S. citizens or who were educated abroad will need to complete the following steps:

1. If English is not the student's native language, the student may not be admitted until college-level proficiency in written English is demonstrated in one of the following ways:
   - A minimum score of 550 on a written version or 79 on the Internet-based version of the TOEFL (Test of English as a Foreign Language),
   - A minimum score of 6.5 on the International English Language Testing System (IELTS), including the academic writing and reading modules,
   - A minimum score of Grade Pre-1 on the EIKEN Test in practical English proficiency,

- A grade of C or higher in an English composition course from an accredited U.S. college or university,

or

- Graduation from a U.S. high school or regionally accredited university.

2. If the applicant has earned fewer than 24 credits at a U.S. college or university, completion of the equivalent of a U.S. secondary education must be verified by
   - An evaluation from an approved international credit evaluation agency. (Details are available online at *www.umuc.edu/internationalcredit.*)

   or

   - Official transcripts showing successful completion of the U.S. GED exam with a total score of at least 225 and no individual test score below 40 (for tests completed before January 2002) or a total score of at least 2250 and no individual test score below 410 (for tests completed after January 2002).

   Until this verification is received by UMUC, the student is admitted provisionally, for one session only, and may register for a maximum of 7 credits. Once verification is received, the student's status is changed to regular and he or she may register for up to 18 credits. Students are not permitted to register for subsequent sessions until verification is received.
3. Noncitizens who plan to study while resident in the United States (as opposed to studying online from abroad) must provide information on visa or immigration status. To do so, students should enclose with the admission application a copy of their permanent resident card, their visa and I-94 card, or an approval notice from U.S. Citizenship and Immigration Services noting their visa or immigration status.

   J-1 visa holders attending other schools must submit a letter of permission from their sponsoring institutions before registration each session.

Applicants Previously Suspended or Dismissed

An academic probation or dismissal from another institution that took place at least two years before the date when a student applies for admission has no bearing on the student's admission status. However, all students previously dismissed from UMUC must apply for reinstatement.

Applicants academically suspended or dismissed from other institutions within the previous two years, regardless of their cumulative grade point average, may be admitted as provisional students. They must fulfill the requirements for provisional status. Details are given on p. 227.

An applicant who has received a disciplinary suspension or dismissal from another institution within the last three years may not be considered for admission to UMUC until the university registrar has thoroughly reviewed the case. Such an applicant must make certain that the institution where the action was taken sends all records explaining the circumstances directly to Undergraduate Admissions. The length of time necessary for the documents to be sent and reviewed may preclude the student's registering during the session of initial application.

Concurrent Secondary Enrollment

With the recommendation of a high school guidance counselor, an academically gifted high school senior may carry a maximum of 7 credits per session at UMUC while finishing work toward a high school diploma. At least a month before a session begins, UMUC must receive the student's application for admission, the application fee, official high school transcripts, and written permission from the appropriate officials at the high school. Such a student is required to demonstrate a cumulative grade point average of at least 3.5 (B+) in high school academic subjects. After being accepted, the student may continue to register as a "concurrent secondary" student until graduation from high school. For purposes of categorization, the student is treated as having provisional status.

Golden Identification Card for Senior Citizens

Senior citizens may qualify for admission and a Golden Identification Card. Participants in the Golden Identification Card program may register for two courses that total up to 7 credits each session for credit, on a space-available basis, without paying tuition. They may enroll during the final week of registration and must pay all fees. Credits and fees associated with Portfolio must also be paid.

To qualify for the Golden Identification Card, the prospective student must meet the following criteria:

- Be a resident of Maryland,
- Be a U.S. citizen or produce a resident alien card (formerly an alien registration card),
- Be 60 years of age by the beginning of the session being applied for,

and

- Not be employed more than 20 hours a week.

Students may consult an advisor for further information.

ADMISSION AND ENROLLMENT

REGISTRATION

Ways to Register

Registration begins each session as soon as the course schedule becomes available on the Web and continues until the start of the session. Students should check the current undergraduate schedule of classes for registration deadlines.

UMUC offers a number of ways to register for most courses, including online (via MyUMUC) and on-site registration. Detailed information and instructions are available each session online at *www.umuc.edu/register* and in the undergraduate schedule of classes.

The Waiting List

If a class is already full at the time of registration, the student has the option of placing his or her name on a waiting list for that class.

WAITING LIST POLICIES

Regardless of how the student registers, the following policies apply:

- Students may put their name on the waiting list for only six courses or sections.
- Students may not attend a class for which they are on the waiting list.
- Faculty members and academic advisors are not authorized to add students to a closed class.
- If a space becomes available, the first student on the waiting list will automatically be registered for it, and the charge will appear on his or her account. An e-mail will be sent to notify the student of the enrollment. If that student is ineligible for enrollment (because he or she has not met prerequisites or is enrolled in another class that conflicts in time), the space will go to the next person on the waiting list.

Students who no longer want a class should remove their name from the waiting list to prevent the possibility of automatic enrollment.

Withdrawals or Dropped Courses

Stopping payment on checks for registration fees, or not paying at registration, does not constitute an official withdrawal or relieve the student of his or her financial obligation to UMUC. Never attending or ceasing to attend class(es) does not constitute a withdrawal.

Students who officially withdraw from a course after the schedule adjustment period receive a mark of W (described on p. 221).

Undergraduate students must officially withdraw no later than two weeks (14 days) before the final class. For accelerated courses, a withdrawal must be submitted before the close of business on the first day of class.

Policies and procedures for withdrawing from a course are available online at *www.umuc.edu/register.*

FINANCIAL INFORMATION

Tuition and Fees

All tuition and applicable fees must be paid in full at registration, unless the student

- Applied for financial aid to cover tuition and fees for the session.
- Is enrolled in UMUC's interest-free monthly payment plan (details are provided at *www.umuc.edu/payoptions*).
- Submitted proof of employer-provided tuition assistance.

UMUC offers a variety of payment options. Payments can be made via

- Credit card (American Express, Discover, MasterCard, or Visa)
- Money order
- Check (made payable to University of Maryland University College)
- Electronic debit from a checking or savings account
- Cash (in person at Largo only)

Students who qualify for tuition assistance, financial aid, or veterans benefits should consult the appropriate sections of this catalog. Students interested in the monthly payment plan, administered by Sallie Mae, should contact the company at 800-635-0120 or visit *www.tuitionpay.com/umuc.* More information on payment is available online at *www.umuc.edu/payoptions.*

Current Tuition and Fees

Tuition rates and fees are published each session in the undergraduate schedule of classes and are available on the Web at *www.umuc.edu/tuition.* Students should review the fee schedule carefully to see which ones apply. Fees are commonly charged for applications for admission and graduation, laboratory use (in science and some computer courses), makeup testing, transcripts, and various options for earning credit (such as Cooperative Education, Experiential Learning, and credit by examination). There is also a service charge for dishonored checks.

Refunds

A student who withdraws from a course before the first class meeting will receive a full tuition refund. A student who withdraws after classes begin will be refunded a portion of the tuition, the amount to be determined by the date of the withdrawal. Refunds for Cooperative Education courses follow university policy and are based on the date the student registered for the course. The schedule for partial refunds is given in the current undergraduate schedule of classes.

If the tuition for a student who withdraws was paid by employer contract, the refund is returned to the employer. If the tuition assistance was a partial payment, it is returned to the employer, and excess payments are refunded to the student. Financial aid awards may be canceled or reduced for financial aid recipients who withdraw from classes. Financial aid recipients should check with a financial aid advisor when withdrawing from a course to determine the impact on their awards.

No offer of financial aid is considered an active, final award until the refund period has ended. Students who withdraw before the end of that period are liable for all costs incurred and are billed accordingly.

Dishonored Checks

For each check returned unpaid by the payer's bank (whether because of insufficient funds, stopped payment, postdating, or drawing against uncollected items), UMUC assesses a service charge of $30 (over and above any service charges levied by the financial institution).

A student who stops payment on a check for tuition is thereby neither disenrolled nor relieved of responsibility for paying tuition and fees. Anyone whose checks for tuition or fees remain dishonored may be barred from classes.

Indebtedness to the University

Students who incur debts to UMUC must clear them to be permitted to register. Requests for services (including transcripts, diplomas, commencement arrangements, and transfer credit review) are denied until all debts have been paid. Outstanding debts are collected against refunds due the student. After a reasonable period of time, uncollected debts are forwarded to the Central Collection Unit of the State Attorney General's Office.

If a student fails to pay charges incurred with UMUC, UMUC has the authority to deem that account delinquent and transfer it to the State of Maryland Central Collection Unit. UMUC has also received authorization from the Board of Regents to charge students' delinquent accounts a 17 percent collection fee and/or all attorney or court costs incurred by the university. Once a past-due balance with UMUC has been transferred to the state Central Collection Unit, the student's information is reported to a credit bureau. More information may be accessed from the Student Accounts Web page at *www.umuc.edu/studentaccounts.*

Employer-Provided Tuition Assistance

If an employer is going to pay for part or all of a student's tuition, the student must submit two copies of appropriate documentation at the time of registration. Requirements are listed at *www.umuc.edu/students/payoptions.* Documents that restrict payment or are in any way conditional will not be accepted.

If the employer does not pay UMUC, the student is responsible for payment.

UMUC cannot issue refunds for authorizing documents submitted after registration. If the document authorizes payment for books and supplies, the student must submit a separate copy to a participating bookstore (listed at *www.umuc.edu/gen/options.shtml*) when charging books, within 15 days after the end of the registration period.

WAYS OF EARNING CREDIT

UMUC is unlike any other institution of higher education in the world in its combination of access with academic quality. It opens doors to learning by taking education to students wherever they may be. Because UMUC understands the importance of lifelong learning, it has established academic policies that encourage the appropriate use of transfer credit from other institutions, as well as credit from less traditional sources. Recognizing that adult students bring to the university not only a willingness to learn but also an educational history informed by experiential learning, it incorporates the assessment of nontraditional learning (i.e., learning gained outside the classroom) into the evaluation of students.

EARNING CREDIT AT UMUC

Classroom and Online Study

UMUC uses every feasible instructional delivery mechanism or platform to extend degree opportunities to students. Most of UMUC's degree and certificate programs are available both on-site and online. Students may choose to complete their academic studies through either or both formats to suit their schedules and preferences.

UMUC courses observe the same standards of quality regardless of delivery format. Any given course maintains the same intended learning outcomes and requirements, awards the identical amount of academic credit, and may be applied toward the same undergraduate degrees whether it is delivered in a stateside classroom, overseas, or via the Internet.

Both classroom and online programs are also supported by a full range of student services and academic resources—from extensive online library databases to admission, advising, and registration—that can be accessed on-site, online, and by phone (details are on pp. 238–46).

Classroom-Based Study

Students take UMUC courses in classrooms at locations in Maryland and the national capital region; in classrooms on U.S. military bases throughout Europe and Asia through long-standing partnerships with overseas military commands; and at work sites through contractual arrangements with employers. With so many course and service locations (listed on p. 271–72) available, students in the Maryland area who prefer direct interaction can be sure of finding courses and services close to home.

On-site courses are also enriched by access to online materials and resources.

Online Study

UMUC's role as a virtual and global university means that students can access and participate in the university experience from any place in the state, the nation, or the world. UMUC's award-winning online courses and programs offer a technology-enriched experience conducted by the same excellent faculty as its on-site offerings.

In online courses, students are linked to faculty and classmates via computer and the Internet. The faculty member leads discussions, responds to student inquiries, and posts reviewed assignments in individual folders online. Students are expected to participate frequently in online discussions.

Online students should have strong reading and writing skills, as well as a basic knowledge of the Windows environment. Technical requirements for participating in online courses are provided online at *tychousa.umuc.edu/tech/min_tech.html.*

Learning Gained Through Experience

Learning acquired outside the college classroom may be assessed for credit toward a degree at UMUC. There are two ways students can make use of life experience for possible college credit: Prior Learning and Cooperative Education. Details on each method follow. Advisors can help in determining the best routes to use in fulfilling any academic plan.

Prior Learning

The Prior Learning program teaches students to identify, articulate, and gain academic credit for the college-level learning they have gained through work and life experience. Students may earn credit for college-level learning acquired outside the classroom through two avenues: course-challenge examinations and Portfolio. As many as 30 credits may be earned through a combination of course-challenge examinations and Portfolio and applied toward the bachelor's degree. However, no more than half the credits required for an undergraduate major, minor, or certificate program may be earned through Prior Learning (Portfolio and course-challenge examinations) and credit by examination (described on p. 236). Any excess credits awarded are applied where appropriate in the student's program of study.

COURSE-CHALLENGE EXAMINATIONS

UMUC credit can be earned for any undergraduate course for which UMUC can prepare and administer a suitable examination (called a course-challenge examination). Advisors and Prior Learning office staff can inform students about specific courses that may not be challenged by examination. Degree-

or certificate-seeking students at UMUC who have received a degree progress report and have a cumulative grade point average of at least 2.0 in UMUC coursework should carefully review the rules, procedures, and limitations described at *www.umuc.edu/priorlearning* before applying online.

Course-challenge exams are not intended as a substitute for independent study. Students may be required to show evidence of prior learning before being authorized to take a course-challenge exam. Credit may be applied toward a first or second bachelor's degree or toward a certificate. No exam may be taken more than twice, and course-challenge examinations may not be taken for courses for which the student has previously enrolled. Only one course in a sequence may be tested at a time, and students may not take an exam for a course that is prerequisite for a higher-level course they have already taken.

Credit earned by course-challenge examination earns a letter grade, according to the exam score, that is computed in the grade point average. However, this credit may not be applied to the requirement for graded coursework in the student's major. Students may not receive credit for introductory courses in their native language.

Exams may only be canceled before the student receives the exam. Refunds are given only if a suitable exam cannot be prepared.

More information on course-challenge examinations may be obtained by visiting the UMUC Web site at *www.umuc.edu/priorlearning* or by calling 800-888-UMUC, ext. 2890.

PORTFOLIO

Portfolio is a unique way for students to articulate and identify college-level learning they have gained from work, community or political involvement, or other noncollegiate experiences and gain credit for it. To be eligible for Portfolio, students must

- Complete a Portfolio application.
- Complete an orientation (available online).
- Meet basic standards in writing (either by having taken a college writing course or by qualifying for WRTG 101 on the writing placement test).
- Be in good academic standing at UMUC (not on academic warning or probation).
- Have submitted all transcripts, exam scores, and military documents related to coursework and experience to the Registrar's Office for a review of transfer credit.

Enrollment in EXCL 301 Learning Analysis and Planning is required. In this 3-credit course, the student prepares a portfolio describing and documenting college-level learning gained from past experiences. Because EXCL 301 is a demanding and complex course, part-time students should not register for more than one other course during the session in which they are enrolled in EXCL 301. After receiving credit for EXCL 301, students may not enroll in the class again.

EXCL 301 is graded on an S/D/F basis (explained on p. 220). If the quality of work in the portfolio merits a grade of C or higher, a grade of S is awarded and the portfolio is forwarded for credit evaluation. Faculty members from the appropriate disciplines assess the portfolio and recommend whether to award credits. Credit earned as a result of portfolio evaluation also earns a grade of S. The S grade is not computed in the grade point average and is not applicable toward honors.

If the quality of work in the portfolio merits a grade of D or lower, the portfolio will not be forwarded for credit evaluation.

Experiential-learning credits may be awarded at both the upper and lower levels. Although a maximum of 30 credits may be earned through Portfolio, the average award is between 15 and 18 credits. These credits are considered UMUC resident credit. However, they do not fulfill requirements for graded coursework and so may not exceed half the total credits for a major, minor, or certificate.

Credit for EXCL 301 is charged at the current tuition rate. Fees are also charged for enrollment in the program, portfolio evaluation, any additional evaluations, and credits awarded. Golden ID students and those receiving financial aid must pay all Portfolio fees.

Students should carefully review the requirements, rules, and procedures for Portfolio. More information may be obtained at *www.umuc.edu/priorlearning* or by calling 800-888-UMUC, ext. 2890.

Cooperative Education

Cooperative Education offers an opportunity for students to gain experience and develop new knowledge and skills in their chosen discipline while earning upper-level college credit through an integrated model that puts theory into practice, thus enabling them to accelerate completion of both their academic and career goals.

To be eligible for Co-op, students must

- Be seeking a degree or a certificate that includes a Co-op option from UMUC.
- Have completed 30 credits, including transfer credit, toward a degree (if seeking a degree).
- Have completed at least 9 credits in the discipline in which they plan to do their Co-op project.

- Have a GPA of 2.5 or better at UMUC.
- Be working in a position that offers an opportunity to apply classroom theory to practical projects that involve significant analysis and problem solving and are directly related to a given academic discipline. (Position may be paid or unpaid, part- or full-time.)

Students interested in pursuing a Cooperative Education experience must first develop a learning proposal that identifies several project tasks representing the new learning to be acquired as a result of the work experience; a faculty member in the appropriate discipline must then approve the learning proposal to ensure that it constitutes upper-level college learning. Once the learning proposal is approved, the student is given permission to register for Co-op. The learning proposal is then developed into a three-way learning contract among the employer, the student, and the faculty mentor.

Throughout the Co-op experience, students work under the supervision of the employer on completion of several of the identified project tasks and the faculty mentor on the completion of the academic assignments required to earn college credit for their work experience. The project tasks for the employer constitute the course content, which is augmented by the reflective academic assignments written for review by the faculty mentor. Students are required to communicate regularly with their faculty mentor throughout the Co-op session, which typically lasts 15 weeks.

Students may earn either 3 or 6 credits during the Co-op session. To earn 3 credits, students must devote at least 12 hours per week to tasks providing new learning (for a total of 180 hours during the Co-op session) and complete a minimum of four project tasks identified in the learning contract. To earn 6 credits, students must devote at least 20 hours per week to project tasks (for a total of 300 hours during the Co-op session) and complete five to eight project tasks identified in the learning contract.

Co-op projects may be developed in all undergraduate disciplines. Courses are listed in the UMUC catalog with the designator of the discipline and numbered 486A (for 3 credits) or 486B (for 6 credits). For example, a 3-credit Co-op in business and management would be listed as BMGT 486A, a 6-credit as BMGT 486B. Tuition for the Co-op course is charged at the current rate per credit, and an administrative fee is charged each time the student enrolls.

Students may apply up to 15 Co-op credits to their bachelor's degree (9 credits for a second bachelor's degree). Certificates that include a Co-op option typically accept no more than 3 credits of Co-op coursework. Co-op courses may not be used to satisfy general education requirements or required academic coursework in the major. However, Co-op credits may be applied to electives as well as to upper-level supplemental courses in the major or minor. A standard letter grade is awarded for successful completion of Co-op courses. It is strongly recommended that students consult with a UMUC advisor to determine how Co-op credits may help them fulfill degree requirements.

For more information, students should review the information, policies, and procedures detailed online at *www.umuc.edu/coop* or call the Cooperative Education program office at 800-888-UMUC, ext. 2890.

TRANSFERRING CREDIT FROM OUTSIDE SOURCES

UMUC accepts up to 90 credits from all sources combined toward the bachelor's degree (45 credits for the associate's degree). Sources include

- Approved two- and four-year colleges and universities
- Other higher education institutions with whom UMUC has a memorandum of understanding for acceptance of credit and/or a joint program
- Non-U.S. institutions based on UMUC review of an appropriate credit evaluation

UMUC may also award credit for

- Professional (not technical) noncollegiate coursework
- Military occupational specialties and experience
- Vocational and technical coursework
- Professional or technical coursework based on statewide agreements and alliances
- Standard examinations

Criteria for each type of credit are detailed in the following sections.

Students should be sure to discuss all previous experience and training with a new student advisor to ensure that they receive any credit that applies.

Further details and regulations are given in Appendix B and Appendix C.

Credit Limits

Each type of credit is subject to maximum allowances, including (but not limited to)

- 70 credits (45 credits for the associate's degree) from two-year institutions
- 60 credits (30 credits for the associate's degree) for study completed in military service schools and professional credit, on the basis of American Council on Education (ACE) recommendations on credit

- 60 credits (30 credits for the associate's degree) for ACE-approved innovative learning, including learning evaluated by approved standardized examinations and professional training programs
- 30 credits (15 credits for the associate's degree) for study completed in Military Occupational Specialties (MOSs), portfolio assessment, and/or course challenge exams combined (with a maximum of 15 credits from portfolio assessment from a community college)
- 21 credits (12 credits for the associate's degree) of coherently related vocational and technical coursework, applicable as elective credit only.

Transfer Credit

UMUC will not award credit for courses that repeat work done elsewhere. Students who have earned credit at other colleges or universities are responsible for determining whether courses they plan to take at UMUC would duplicate any previously earned credit. Students who are in doubt should consult an advisor before registering.

Credit toward a UMUC degree may be assigned for work completed through the kinds of institutions described in the following sections. UMUC does not accept credits for remedial, precollege, or sectarian religious courses in transfer. A student who wants to transfer credit from other institutions to UMUC should request a review of previous credit to determine the applicability of those credits to a degree from UMUC. No transfer credit is accepted without official transcripts.

Credits earned at other institutions during a period of disciplinary suspension or dismissal from UMUC are not accepted in transfer.

Credit from Other Colleges and Universities

When the grade earned was at least C (2.0), transfer credits from approved two- and four-year colleges and universities may be accepted for courses that apply to the student's curriculum and do not duplicate other courses for which credit has been awarded. Transfer credit for another institution's course-challenge examinations and prior learning program may be accepted if it is listed on the transcript with a passing grade.

Approved institutions include those accredited by the following regional associations:

- Middle States Association of Colleges and Schools, Commission on Higher Education
- Northwest Commission of Colleges and Universities
- North Central Association of Colleges and Schools, The Higher Learning Commission
- New England Association of Schools and Colleges, Commission on Institutions of Higher Education
- New England Association of Schools and Colleges, Commission on Technical and Career Institutions
- Southern Association of Colleges and Schools, Commission on Colleges
- Western Association of Schools and Colleges, Accrediting Commission for Senior Colleges and Universities
- Western Association of Schools and Colleges, Accrediting Commission for Community and Junior Colleges

Other institutions may be approved based on agreements and/or joint programs with UMUC.

Credit from Junior Colleges and Community Colleges

A total of 70 credits from approved two-year institutions (junior colleges or community colleges) may be applied toward a bachelor's degree at UMUC. A student who has already completed 70 credits may not apply further credit from a junior college or a community college to a degree from UMUC.

A student who initially enrolled in the public community colleges of Maryland will be admitted to UMUC in conformance with the policy developed and approved by the Maryland Higher Education Commission. (Details are given in the section on transfer policies in the appendices.) Students participating in one of the community college alliances with UMUC should consult with their advisors at both institutions if they plan to enroll in courses at both institutions concurrently.

Credit from Institutions Outside the United States

Study at institutions outside the United States must be evaluated by an approved international credit evaluation agency. Details are available online at *www.umuc.edu/internationalcredit.*

Educational Experiences in the Armed Services

Service Schools

UMUC grants credit for military experience and study completed in service schools on the basis of the recommendations by the American Council on Education (ACE) in its *Guide to the Evaluation of Educational Experiences in the Armed Services.* Such credit is granted only if it is applicable to the student's chosen curriculum. UMUC generally accepts recommendations of ACE for lower-level and upper-level credit. Recommendations made by ACE for vocational or technical credit are considered on the same basis as, and with the same limitations as those placed on, nonmilitary sources of credit.

Community College of the Air Force

UMUC awards credit for study at technical schools of the U.S. Air Force in accordance with recommendations from the Community College of the Air Force (CCAF). Credits must be applicable to the student's chosen curriculum at UMUC, must meet other UMUC requirements for transfer credit, and are subject to the same limitations as those placed on nonmilitary credit.

- All credit from the CCAF is lower level and is applicable only to freshman and sophomore requirements.
- Since the CCAF records satisfactorily completed courses as S (satisfactory) and specifies that S equals a grade of C or better, credit may be applied wherever appropriate in the UMUC curriculum. Courses that are vocational or technical may be used only as electives up to a maximum of 21 credits.

Servicemembers Opportunity College

UMUC is a member of the Servicemembers Opportunity Colleges Consortium and the SOC Degree Network System. The Servicemembers Opportunity Colleges (SOC), established in 1972, are a consortium of national higher education associations and more than 1,700 institutional members. SOC Consortium institutional members subscribe to principles and criteria to ensure that quality academic programs are available to military students, their family members, civilian employees of the Department of Defense and Coast Guard, and veterans.

The SOC Degree Network System consists of a subset of SOC Consortium member institutions selected by the military services to deliver specific associate's and bachelor's degree programs to servicemembers and their families. Institutional members of the SOC Degree Network System agree to special requirements and obligations that provide military students, their spouses, and their college-age children with opportunities to complete college degrees without suffering loss of academic credit due to changes of duty station.

SOC operates the two- and four-year Degree Network System for the Army (SOCAD), Navy (SOCNAV), Marine Corps (SOCMAR), and Coast Guard (SOCCOAST). Information and the SOC Degree Network System-2 and -4 Handbooks are available at the SOC Web site at *www.soc.aascu.org* and on the SOCAD, SOCNAV, SOCMAR, and SOCCOAST home pages.

Technical and Professional Credit

Vocational and Technical Credit

Vocational and technical college-level credit from regionally accredited institutions or ACE-approved organizations, when applicable, may be accepted as elective credit only.

This credit may be applied toward a degree at UMUC, up to the following limits:

- Associate's degree: A maximum of 12 credits.
- Bachelor's degree: A maximum of 21 credits of coherently related work.

Noncollegiate Courses

UMUC will accept for credit professional (not technical) noncollegiate courses applicable to the student's curriculum that have been evaluated by either (1) ACE (if the courses are listed in the *National Guide to Educational Credit for Training Programs)* or (2) the University of the State of New York National Program on Noncollegiate Sponsored Instruction (if listed in its *College Credit Recommendations).*

Credit by Examination

UMUC may award as many as 60 credits by examination toward the bachelor's degree (30 credits toward the associate's degree), provided that (1) there is no duplication of other academic credit, and (2) the scores presented meet UMUC standards.

Examinations may include the Advanced Placement examinations administered by the College Board, the College-Level Examination Program (CLEP), Defense Activity for Non-Traditional Education Support (DANTES) examinations, and Excelsior College Examinations. UMUC also accepts credit for professional examinations listed in the *ACE Guide to Educational Credit by Examination.* As many as 30 credits by examination awarded by other approved institutions may be accepted for courses that appear on an official transcript with a grade of C (2.0) or better. Students may not receive credit for introductory courses in their native language. Students who have questions about credit by examination are encouraged to consult an advisor.

Advanced Placement

Advanced placement and college credit may be granted to students on the basis of scores on a College Board Advanced Placement (AP) examination. These examinations are normally administered to eligible high school seniors during the May preceding matriculation in college.

A student intending to transfer AP credit that was awarded at another college or similar institution must have a transcript of those scores sent directly to UMUC from the College Board.

When those scores have been received, an advisor will determine whether they meet the standards established at UMUC for granting AP credit and how much credit may be awarded.

Credit earned by advanced placement may be used to fulfill major, minor, or elective requirements.

College-Level Examination Program

Up to 30 credits may be awarded for general examinations in the College-Level Examination Program (CLEP). The scores must meet UMUC standards. UMUC may award 6 credits each for the examinations in English, mathematics, natural science, social sciences and history, and humanities.

Successful completion of certain subject-area examinations is another way of earning college credit. Advisors can furnish details.

DANTES Examinations

Credit may be awarded for successfully completing certain Subject Standardized Tests of DANTES (formerly known as USAFI). Advisors have information on which tests are acceptable.

Excelsior College Examinations

Students may earn credit for successfully completing subject tests offered by Excelsior College. Tests are available in various areas of the arts and sciences, as well as in business. Scores must meet UMUC standards. Advisors can furnish details.

SERVICES AND RESOURCES

AVAILABILITY OF SERVICES

UMUC provides services and resources to help students all over the world complete their educational programs—through automated systems and resources available online or by telephone, by e-mail and telephone communication, and in person at sites throughout the Maryland area, as well as at many military sites worldwide (listed on pp. 271–72). A number of offices are responsible for the delivery of these services, including Career Services, Student Financial Services, Information and Library Services, Information Technology, Enrollment Management, and Student Affairs.

Among these, the offices of Enrollment Management and Student Affairs respond to most of the student's academic needs throughout his or her college career, providing general information; admission assistance; academic advising; registration, graduation, and transcript services; veterans benefits assistance; and services for disabled students.

In the Maryland area, services are available at the following locations:

Aberdeen Proving Ground

Phone 410-272-8269

Andrews (Joint Base Andrews Naval Air Facility Washington)

Phone 301-981-3123

Arundel Mills

Phone 410-777-1882

Bethesda National Naval Medical Center

Phone 301-654-1377

Bolling Air Force Base

Phone 202-563-3611

Dorsey Station

Phone 443-459-3500

Eastern Shore Higher Education Center

410-822-5400

Fort Belvoir

Phone 703-781-0059

Fort Detrick

Phone 301-738-6090

Fort Meade

Phone 410-551-0431 or 301-621-9882

Fort Myer

Phone 202-563-3611

Hagerstown (University System of Maryland)

Phone 240-527-2711

Henderson Hall, Navy Annex

Phone 202-563-3611

Largo (UMUC Academic Center)

umucinfo@umuc.edu

Phone 800-888-UMUC

Navy College at Anacostia

Phone 202-563-3611

Patuxent River Naval Air Station

Phone 301-737-3228

Quantico (Marine Corps Base Quantico)

Phone 703-630-1543

Shady Grove

Phone 301-738-6090

Southern Maryland Higher Education Center

Phone 301-737-2500, ext. 215

Waldorf Center for Higher Education

Phone 301-632-2900

Walter Reed Army Medical Center

Phone 202-782-3023

GENERAL INFORMATION

UMUC phone representatives are available all day, every day, at 800-888-UMUC to provide answers to general questions and to help callers navigate UMUC's Web site *(www.umuc.edu).* Representatives can also make sure that callers are on the UMUC mailing list to receive upcoming class schedules, open house invitations, and other important announcements.

ADMISSION ASSISTANCE

New student advisors serve individuals who are inquiring about becoming UMUC students at some future time, are admitted but have not yet registered, have not attended UMUC for two or more years and need to be readmitted (at no charge), or attended UMUC overseas. They can help prospective students apply for admission, identify financial aid opportunities, plan their curriculum, and register for their first session.

New student advisors can also help qualified senior citizens apply for Golden Identification benefits. More information is on p. 229.

Students may contact a new student advisor by phone at 800-888-UMUC or by e-mail at *enroll@umuc.edu.* More detailed information on admission is available on p. 227.

AUTOMATED SERVICES

A number of automated services are available online to current students.

Through MyUMUC (at *https://my.umuc.edu)*, students have access to many of their personal UMUC records. The system enables them to register and pay for courses, change personal information (such as home address or phone numbers), view and print reports (such as their class schedule, grade report, statement of account, unofficial transcript, and degree progress report), find out the name of their assigned academic advisor, check on the status of their financial aid application, and register for final examinations for online courses.

To access services, students must enter their identification number and personal password.

ACADEMIC ADVISING

Academic advisors provide enrolled students the information needed to plan an academic program. This assistance can include a review of potential transfer credit, help with clarification of education and career goals, and aid in selecting appropriate courses. Advising services are available at times and places convenient to students. Students who are close to UMUC's Academic Center at Largo, Maryland, or one of the UMUC sites in the Maryland region have the option to schedule an appointment to discuss their needs with an advisor in person by calling between 8:30 a.m. and 5 p.m. eastern time, Monday through Friday. Many students, however, choose to communicate with their advisor by phone, fax, or e-mail.

Students can access their advisor's contact information through MyUMUC.

Initial Estimate of Transfer Credit

Prospective or newly admitted students can have a review of their potential transfer credit done by a new student advisor. This review is an estimate of the academic credit UMUC might accept toward a particular degree and of the requirements that would remain to be fulfilled. (Sources of credit are described on p. 232 and online at *www.umuc.edu/students/ugp_ss/transfer.html.)* This review is not binding on either the student or UMUC and is subject to change.

Review of International Records

Students who are seeking a review of potential transfer credit from international postsecondary educational institutions need to

- Be admitted and be seeking an undergraduate degree at UMUC.
- Mail their official international transcripts to the international credit evaluation services selected by UMUC. (Forms are available online at *www.umuc.edu/internationalcredit.)*
- Pay fees associated with the international evaluation.
- Have all official transcripts from any U.S. institution previously attended sent to UMUC.

Degree Progress Report

To access information about degree progress, students need to submit official transcripts from all colleges and universities previously attended, including other institutions of the University System of Maryland, whether or not transfer credit is requested or granted. UMUC may deny transfer credit from any institution not listed on the application for admission. Sources of

transfer credit not listed at the time of admission or approved by an advisor after admission cannot be applied toward the UMUC degree.

A degree progress report

- Includes all transfer credits applicable to the degree program.
- Lists all courses completed at UMUC.
- Incorporates other types of academic credit.
- Remains in effect only while the student remains continuously enrolled.

In the degree progress report, a student's most recent courses are applied to requirements first. Courses that could apply to multiple requirements are assigned to the first relevant category in the following order: general education requirements, then requirements for the selected academic major and minor, and finally electives. Verification of other degree-wide requirements (such as minimum number of upper-level credits) follows and may affect the remaining credits needed for the degree.

Students are responsible for submitting all pertinent academic documents (such as academic transcripts, confirmation of credit conferred by examination, or records of credit from military service schools) during their first session at UMUC. To be considered official, documents must be sent directly from the issuer to the following address:

Undergraduate Student Affairs
University of Maryland University College
3501 University Boulevard East
Adelphi, MD 20783-8070

DISABLED STUDENT SERVICES

Reasonable accommodations are available for students who have disabilities and are enrolled in any program offered at UMUC.

To allow for adequate planning, students who need accommodations should contact Disability Services at least four to six weeks before the beginning of the session.

Students must request accommodations each time they register. The first time a student requests accommodation, current (within three years) documentation of a disability must be submitted. Depending on the disability, documentation may include secondary school records; medical, psychiatric, or psychological reports and diagnoses; or a psychoeducational evaluation. The documentation must provide clear and specific evidence of a disability and recommended accommodations from a qualified licensed professional.

Note: All UMUC students are required to comply with university policies and procedures and meet the academic requirements of all undergraduate certificate and degree programs. Students with disabilities should review the requirements listed in this catalog (beginning on p. 12 for bachelor's degree programs, p. 88 for certificate programs). Students should not apply to a UMUC certificate or degree program with the expectation that any academic requirement will be waived or that substitutions will be allowed.

For more information, students should visit *www.umuc.edu/diversity/dss.html.* Disability Services may be contacted by phone at 800-888-UMUC, ext. 2287, or 240-684-2277 (TTY) or by e-mail at *disabilityservices@umuc.edu.*

FINANCIAL AID

UMUC's Financial Aid Department administers a variety of financial assistance programs—including grants, scholarships, federal work-study, and loans—to help students meet the costs of their educational goals. Aid is available for students who demonstrate financial need, academic merit, or both.

Regardless of income level, all students are encouraged to apply for assistance; many financing alternatives are available.

General Eligibility Requirements

An eligible applicant for UMUC assistance must

- Be admitted to UMUC as a degree-seeking or eligible certificate-seeking student.
- Be a U.S. citizen or an eligible noncitizen.
- Be enrolled for 3 or more credits for most federal and institutional aid programs. Federal loan programs require enrollment of at least 6 credits. Audited courses, some repeated courses, credit by examination, and Portfolio credits cannot be counted.
- Demonstrate satisfactory academic progress toward a degree or certificate according to UMUC policy.
- Have a high school diploma or GED.
- Possess a valid Social Security number.
- Register with Selective Service, if required to do so.
- Not be in default on any federal student loans, nor have borrowed in excess of loan limits, nor owe a refund on any grant under Title IV federal student aid programs.
- Not be ineligible based on a drug conviction.

Financial Aid Programs

Most aid programs are available to both full- and part-time students. Amounts and eligibility for financial aid vary from year to year. Following is a brief description of programs available for the upcoming award year.

Grants and Scholarships

Gift assistance, for which no repayment is required, is offered by the federal government, the state of Maryland, UMUC, and private donors. The UMUC Financial Aid Office administers several programs: Federal Pell Grants, Federal Supplemental Educational Opportunity Grants (SEOG), UMUC scholarships and grants, and Maryland state scholarships and grants.

The **Federal Pell Grant** is a grant program for high-need, first-time undergraduates. Students may be eligible to receive up to $2,775 per semester; awards vary by need level and enrollment status.

The **Federal Supplemental Educational Opportunity Grant (SEOG)** offers need-based awards for high-need, first-time undergraduates. The amount and number of awards vary depending on the availability of funds allocated by the U.S. Department of Education. Typical awards will range from $300 to $600 per semester.

The **UMUC President's Grant** offers grants to students who demonstrate financial need. Typical awards will range from $100 to $600 per semester, based on need.

UMUC scholarship programs, which include the UMUC President's Scholarship and the UMUC Community College Scholarship Program, offer a number of institutional scholarships as well as scholarships from corporate donors and foundations. A separate scholarship application must be completed online via MyUMUC (*https://my.umuc.edu)* for consideration. Requirements vary according to the individual scholarship program. Typical awards range from $200 to $1,500 per semester. Students may receive one UMUC scholarship/grant per academic year. Employees of UMUC and their dependents, as well as persons who receive remission of fees from other institutions, are not eligible to receive UMUC scholarships or grants. More information is available online at *www.umuc.edu/scholarships.*

Maryland state grant and scholarships provide financial assistance to Maryland residents based on financial need. For more information, students should contact the Maryland Office of Student Financial Assistance at 410-260-4565 or 800-974-1024 or visit *www.mhec.state.md.us.* The priority filing deadline for all state aid programs is March 1.

Maryland Part-Time Grants offer assistance to Maryland residents enrolled for at least 6, but fewer than 12, credits per semester. Awards are based on financial need. Typical awards are $500 to $1,000 per semester. Funds for these grants are allocated to UMUC on an annual basis.

Many UMUC students receive **private scholarships** offered by corporations, associations, foundations, and other organizations that offer awards on a competitive basis to students who meet specific criteria. Scholarship links and search tools are available through the Web at *www.umuc.edu/financialaid.*

Loans

Loan programs are available to students enrolled for at least 6 credits per semester. Students who take loans to pay for college expenses must repay the principal and interest in accordance with the terms of the promissory note.

The **Federal Perkins Loan** program offers need-based, low-interest federal loans. UMUC is the lender. Award amounts typically range between $500 and $2,000 per semester. The current interest rate is 5 percent. Repayment is made to UMUC and begins nine months after the borrower leaves school or attendance drops below half time.

The **William D. Ford Federal Direct Loan** program offers low-interest federal loans to students. Loan amounts vary based on grade level and dependency status. Repayment begins six months after the student leaves school or attendance drops below half time. For annual award amounts and general repayment terms, students should visit *www.umuc.edu/financialaid* and click on types of financial aid available.

The **Federal Direct PLUS Loan** program enables parents with good credit histories to borrow for a dependent student enrolled for at least 6 credits per semester. Parents are eligible to borrow up to the cost of education less other financial aid received by the student. Repayment begins approximately 60 days after disbursement.

Private student loan programs are also an option for UMUC students. Students whose financial aid awards do not meet their financial need may be able to borrow up to their cost of attendance through private student loan programs offered by many banks and other lenders. These education loans are not federal loans; students borrow directly from and make payments to the lender. Students who are interested in a private student loan should contact the bank of their choice or visit UMUC's Web page on private student loans at *www.umuc.edu/financialaid* and click on types of financial aid available for more information.

Employment

UMUC recognizes the importance of flexible, part-time employment for students who are in transition or who have financial need.

The **Federal Work-Study** program is a need-based program that provides jobs to assist students in meeting college costs. The amount of award varies according to financial need and availability of funds. Funds are paid biweekly, based on hours worked. Students must apply and be hired for employment at UMUC or in a community-service setting.

UMUC Financial Aid Standards for Satisfactory Academic Progress

Federal regulations require students receiving financial aid to maintain satisfactory academic progress toward their degree or certificate. Students who fail to meet the minimum academic standard are placed on financial aid probation for one standard semester, during which they may receive financial aid. If a student fails to meet the minimum requirements during probation, the student is denied aid the following semester and financial aid is not disbursed. Students should refer to the appendices for details of the appeal process and the complete Satisfactory Academic Progress policy for financial aid students.

The Financial Aid Application Process

Students must complete the Free Application for Federal Student Aid (FAFSA) to be considered for any type of financial aid at UMUC. The FAFSA must also be completed for students to be considered for need-based Maryland state scholarships.

To be given high priority for their financial aid application and a determination of eligibility early enough for funds to be reserved by registration, students should complete their FAFSA by the priority filing deadlines listed below.

Students meeting these dates will have the opportunity to be considered for the various grant and scholarship programs with limited funds. Those who do not meet these deadlines may not receive their financial aid in time for registration.

Students who apply late may still receive aid, depending on their eligibility and the availability of funds. Eligibility for both loans and grants can be authorized even after the semester has begun.

Program or Period Being Applied for	Priority Deadline for Filing Financial Aid Forms
Maryland State Scholarships	March 1
Full Academic Year or Fall Semester Only	June 1
Spring Semester Only	November 1
Summer Semester	April 1

Federal Return of Funds Policy

Students receiving federal financial aid have the responsibility to follow the institution's withdrawal procedures, which are outlined on the UMUC Web site *(www.umuc.edu)*. The U.S. Department of Education requires the university to calculate a return of Title IV funds for all federal financial aid students who withdraw from all classes. Students who stop attending all classes without officially withdrawing are also subject to a return of funds calculation at the end of the semester based on the last documented date of attendance. For further information, students should visit *www.umuc.edu/financialaid.*

For Further Information

All financial aid information and forms also are available at *www.umuc.edu/financialaid* on the UMUC Web site. Students with additional questions should visit the financial aid Online Support Center at *finaid.umuc.edu* to e-mail, chat, request a call, or review an extensive list of frequently asked questions. Students may also contact the Financial Aid Office by phone at 800-888-UMUC.

VETERANS BENEFITS

Veterans Benefits Programs

Students may apply for the following educational assistance programs administered by the U.S. Department of Veterans Affairs:

- The Montgomery GI Bill–Active Duty Educational Assistance Program (MGIB, Chapter 30)
- Vocational Rehabilitation (Chapter 31)
- The Post–Vietnam Era Educational Assistance Program (Chapter 32)
- The Post-9/11 GI Bill (Chapter 33)
- The Survivors' and Dependents' Educational Assistance Program (Chapter 35)
- Montgomery GI Bill–Selected Reserve Educational Assistance Program (Chapter 106)
- Montgomery GI Bill–Reserve Educational Assistance Program (Chapter 1607)

Detailed information on all assistance programs is available on the UMUC Web site at *www.umuc.edu/vabenefits* or on the Department of Veterans Affairs Web site at *www.vba.va.gov/VBA.*

Application Procedures

Students who are eligible for educational benefits from the U.S. Department of Veterans Affairs should review the online information and application procedures (at *www.umuc.edu/vabenefits*). Every educational assistance program requires different paperwork and documentation to process a claim. Initial applications for benefits may be submitted online directly to the U.S. Department of Veterans Affairs. All students must also complete a UMUC Veterans Certification form each session they wish to receive benefits. The U.S. Department of Veterans Affairs processes claims and issues payment six to eight weeks after receiving completed paperwork.

Amounts and Methods of Payment

The amount of money a student may receive from the U.S. Department of Veterans Affairs depends on the educational assistance program for which the student is eligible, the number of credits for which the student is registered, the length of the session, and (for certain programs) the number of dependents the student has. The current monthly payment for each educational assistance program is available online at *www.umuc.edu/vabenefits.*

Benefits are paid directly to students on a monthly basis. The money may be used to help with tuition, books, or other costs of college education. Tuition is due upon registration, regardless of eligibility for benefits.

The U.S. Department of Veterans Affairs offers an accelerated program, which provides a lump-sum payment of 60 percent of the student's tuition and fees for certain high-cost, high-tech programs. Only undergraduate students who are paying nonresident fees and are enrolled for 17 credits or more are eligible for accelerated payment.

Evaluation of Prior Training

When a student files a claim for educational benefits, the U.S. Department of Veterans Affairs requires previous training to be evaluated so that the student receives correct transfer credit. (Information about types of training that qualify begins on p. 235; these include military training and service schools, postsecondary education, certain correspondence courses, and credit by examination.) Each student must have an evaluation completed during the first session. Students who do not comply may find future benefits delayed. After their first registration, eligible students are provided with information on the necessary procedure.

Students' Responsibilities

Students receiving benefits are expected to follow all regulations and procedures of the U.S. Department of Veterans Affairs while attending UMUC.

At UMUC, all regulations of the U.S. Department of Veterans Affairs are enforced. Students should be aware of the following requirements and consequences:

- Each student is expected to make satisfactory progress toward a degree or certificate; everyone must comply with the academic standards of UMUC.
- Each student must report all changes in enrollment—including drops, adds, withdrawals, changes to audit, and changes in degree objective.
- Registering for a course and then not attending, or ceasing to attend without officially withdrawing, is a misuse of federal funds that is punishable by law.
- Payment of benefits will be disallowed for any course in which a nonpunitive grade (i.e., a grade of I, W, or AU) is assigned.
- Payment of benefits will be disallowed for repeating a course for which transfer credit has been granted or for which a passing grade of A, B, C, D, P, or S was assigned.
- Payment of benefits will be disallowed for any course in which a grade of FN is assigned.
- Payment of benefits will be disallowed for any course that is not a requirement in a student's degree or certificate program.

Tutorial Assistance

Veterans, active-duty military personnel, and reservists receiving funding assistance from the U.S. Department of Veterans Affairs may qualify for tutorial assistance. Students enrolled at least half time may qualify. Payments are allowed when students demonstrate deficiency in courses that are required for their degree programs.

Work-Study Allowance

Students who are registered at least three-quarters time (9 credits) and who need money to attend school may participate in work-study. Recipients of benefits under the provisions of Chapters 30, 31, 32, 35, and 106 may be eligible. Students may work up to 400 hours during a session and receive either the federal minimum wage or the state minimum wage, whichever is greater.

For Further Information

Information and applications are available from the student's advisor or at *www.umuc.edu/vabenefits* on the UMUC Web site.

SERVICES AND RESOURCES

GRADUATION SERVICES

A graduation ceremony is held in May each year. Students who completed degree requirements the previous August and December, as well as those who complete their requirements that May, are invited to participate.

Students who expect to complete the requirements for a degree are responsible for making sure they have completed a degree progress report (details on p. 239), filing an application for a diploma (available online at *https://my.umuc.edu)* with Undergraduate Student Affairs, and paying the appropriate fee (currently $50). This may be done at the time of the final session's registration or up to the following dates:

December graduation	October 1
May graduation	February 15
August graduation	June 15

Students whose applications for a diploma are received after the deadlines will be considered for receiving degrees at the next graduation. Students who do not complete degree requirements in the session in which they first applied for graduation must complete a new application for diploma and pay the fee for the session in which they will graduate.

Students pursuing certificates must apply for certificates by the same deadlines. The application form is available online at *https://my.umuc.edu.*

TRANSCRIPT SERVICES

Official academic records are maintained by Undergraduate Student Affairs at UMUC. Official transcripts show coursework taken through UMUC. For students who have received an official evaluation and have regular status, transfer credit from other institutions (including others in the University System of Maryland) is listed as well. Students' records are considered confidential. Therefore, UMUC releases transcripts only upon receiving a signed request from the student and payment of the appropriate fee. (For students who submit requests online, the student and personal identification numbers are considered an official signature.)

Procedures and forms for requesting transcripts are available online at *www.umuc.edu/students/transreq.html.* A fee is charged for each UMUC transcript that is issued; an additional fee is charged for rush processing. Transcripts should be requested at least two weeks before they will actually be needed. No transcripts will be released until all financial obligations to the university have been satisfied.

STUDENT ADVISORY COUNCIL

The Student Advisory Council provides an avenue for students to express their concerns about UMUC or their academic career. The council consists of 12 members, elected by their fellow students, who act in an advisory capacity to the university president, provost, deans, and other officials on behalf of all students.

Students who would like to see certain issues addressed or who have questions should contact their council representative by e-mail at *stac@umuc.edu.*

More information on shared governance is available in the appendices of this catalog and online at *www.umuc.edu/gov.*

OTHER RESOURCES

Bookstores

Students can order required textbooks and software for all courses from MBS Direct online through the UMUC Virtual Bookstore *(www.umuc.edu/bookstore)* or by mail. MBS guarantees availability of new and used inventory, discounts for online sales, no sales tax, and an easy return and buyback program. Orders are shipped via UPS within 24 hours of receipt, Monday through Friday. Overnight and two-day delivery is available for an additional fee. Payment by personal check, MasterCard, Visa, American Express, and Discover is accepted. Some employer contracts may be accepted.

The University Book Center/Barnes & Noble in College Park also carries materials for UMUC classes held on the College Park campus. Walk-in customers should inquire at the customer service desk. Most major credit cards and some employer-provided assistance documents are accepted. Students should call 800-343-6621 for additional information and store hours.

Career Services

Career Services provides personalized assistance with clarifying skills, interests, and work-related values; making career- or life-related decisions; researching career options; planning for graduate school; and searching for employment. Through the Career Services Web page at *www.umuc.edu/careerservices,* students can access a variety of career and job search information and materials. Career Services offers job fairs, employability skills workshops such as résumé writing, tutorials, and access to CareerQuest, UMUC's online job and internship database.

Services are available by telephone, online via e-mail, or in person by appointment or on a walk-in basis. More information can be found on the Career Services Web page.

Computer Labs and Services

Computer labs are available at many UMUC sites (including Dorsey Station, Largo, Shady Grove, and Waldorf). These labs are available primarily for the use of students completing coursework but are also open to faculty members, staff, and alumni on a first-come, first-served basis on presentation of a valid UMUC ID. Students must bring media to save data or documents. Acceptable media include flash drives, floppy disks, and zip disks.

Lab assistants are available during scheduled hours to help users with resident software programs but cannot provide tutoring.

Students may also access host computers at UMUC via the Internet using Telnet. Two host systems are accessible: Nova and Polaris. Students must have an account for the particular system they wish to use. For most students taking courses in computing, accounts are set up automatically as part of the coursework and are valid for the duration of the class.

Students who are considering enrolling in online courses offered via WebTycho, the university's proprietary course delivery system, should review the technical requirements at *tychousa.umuc.edu/tech/min_tech.html* for the most current detailed information.

Technical support for students taking online courses is available 24 hours a day, seven days a week, at *tychousa.umuc.edu/wtdocs/wthelp/index.html* or 800-807-4862.

Drug and Alcohol Awareness

As required by federal law, UMUC provides referral services for students with concerns about the use or abuse of alcohol and drugs. Students may discuss referrals with their advisor.

Information and Library Services

UMUC's Information and Library Services serves to educate students, faculty, and staff in the use of library and information services, emphasizing the critical importance of information literacy knowledge and skills for success in today's information-rich world. The office also develops and manages extensive online library resources and user-centered services for UMUC students, faculty, and staff worldwide.

Library Resources

Information and Library Services provides access to a rich collection of research materials on a variety of topics (e.g., business, social science, science, arts and humanities, and computer and information systems). Students can access an extensive array of subscription research databases containing tens of thousands of full-text articles, as well as thousands of electronic books, through the Information and Library Services home page at *www.umuc.edu/library* or through WebTycho. Information and Library Services has also created subject-specific resource guides to serve as a jumping-off point for research. Each guide includes subject-relevant research databases, books, Web sites, and (where applicable) other Web 2.0 technologies.

Currently enrolled students in the continental United States also have borrowing privileges at the 16 University System of Maryland and affiliated institutions (USMAI) libraries. The library collections can be searched and books can be requested through the USMAI online catalog, available via the library home page. All UMUC students may use the DocumentExpress service to request that journal articles or book chapters not available online in full text be sent to them electronically.

Library Instruction and Research Assistance

To help students gain the in-depth research skills needed to locate, evaluate, and use the rich research resources available to them, Information and Library Services offers library instruction, both in person and via WebTycho. This instruction serves to complement and reinforce skills and information provided in LIBS 150 Information Literacy and Research Methods. Faculty members may contact Information and Library Services to request a library instruction session. In addition, students can obtain individualized research assistance by contacting Information and Library Services or by visiting the Peck Virtual Library Classroom (VLIB 101) within WebTycho, which serves as an additional free resource to help students improve their research skills.

Reference and research assistance is available 24 hours a day, seven days a week, through the library Web page under Ask a Librarian. For a complete list of library services, students should visit *www.umuc.edu/library* or call Information and Library Services at 800-888-UMUC, ext. 2020, during regularly scheduled office hours.

Tutoring, Mentoring, and Academic Clubs

A variety of online, on-site, and referral services are available to students who are interested in academic help and support beyond the classroom. Tutors are available in selected classes. Alumni and experienced students are available to work with students online during their studies at UMUC. These mentors can offer guidance on general study strategies, career paths, and other topics that are important to academic success. Academic clubs also offer students with similar interests the opportunity to meet, ask questions of faculty, and discuss related topics in an online forum. All UMUC students are eligible to join any of more than a dozen clubs focused on disciplines such as accounting, English, communications, computing, history, human resources, and

psychology. Students should visit *www.umuc.edu/studentsuccess* to find out more about student tutors, mentors, and academic clubs.

Writing Resources and Tutoring

UMUC's online Effective Writing Center *(www.umuc.edu/writingcenter)* is available to all UMUC students 24 hours a day. The center's experienced, trained advisors help students develop key writing skills by providing individual online tutoring, self-study modules, and other writing resources.

Student can submit assignments for review and access a wide variety of information. In addition to providing writing advice, the Effective Writing Center hosts an online interactive tutorial on "How to Avoid Plagiarism" and the "Online Guide to Writing and Research"—both of which are required in many courses.

By special agreement with the Effective Writing Center, students may also receive writing tutoring at the University of Maryland, College Park Writing Center, located in 0125 Taliaferro Hall. Students should call 301-405-3785 for more information or for an appointment.

Alumni Association

The UMUC Alumni Association, founded in 1990, fosters and perpetuates lifelong relationships between alumni and the university. Its mission is to support, enhance, and promote UMUC and its community of students, faculty, staff, and alumni worldwide.

Membership in the Alumni Association is free and open to all UMUC graduates. The association invites graduates to stay connected with fellow alumni, students, and faculty through volunteer service, social events, and philanthropy. Benefit programs and resources include career services, affinity partner discounts, special alumni events, and on-site library access.

Membership in the UMUC Alumni Association offers an exceptional opportunity to expand personal and professional net works. UMUC currently has more than 130,000 graduates in 47 states and 24 countries. UMUC alumni work in nearly all major international and Fortune 500 organizations, federal agencies, branches of the military, and private industry.

More information on the Alumni Association and how to activate membership is available at *www.umucalumni.org*.

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The full list of undergraduate faculty, including the disciplines they teach and their academic credentials, is available online at *www.umuc.edu/faculty.*

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APPENDICES

STATEMENTS ON POLICIES AND PROCEDURES

Appendix A

Procedures for Student Residency Classification for Admission, Tuition, and Charge-DIfferential Purposes

I. PROCEDURES

These procedures implement VIII-2.70—the University System of Maryland ("USM") Policy on Student Classification for Admission and Tuition Purposes ("the USM policy"), amended by the Board of Regents on February 15, 2008.

II. INITIAL DETERMINATION

An initial determination of in-state status will be made by UMUC at the time a student's application for admission is under consideration by the admissions staff. If the student does not provide all information necessary for an initial residency determination or the information given is inconsistent, ambiguous, or otherwise questionable, the student will be assigned out-of-state status. The determination made at that time, and any determination made thereafter, shall prevail for each semester or term until the determination is successfully challenged. If a student inadvertently is misclassified as a Maryland resident, the student will be billed at the out-of-state rate for all subsequent semesters.

III. CHANGE IN RESIDENCY STATUS

A. A change in residency status must be requested in writing by submitting a Petition for Change in Classification for Tuition (the "petition"). The petition is available on the UMUC Web site (*www.umuc.edu/changeresidency*). Students must submit the petition and supporting documentation (as indicated on the petition) to the residency evaluator by the last published date to register for courses for the semester or term in which the student is seeking a change in residency status as follows.

   1. The deadlines for submitting a petition for an upcoming semester or term are available in UMUC's academic calendar at *www.umuc.edu/calendar.*

   2. Students seeking a change in residency status who are planning to take a co-op course (where there is no published date to register) must submit their petition and supporting documentation prior to the date they register for the co-op course in order to qualify for in-state tuition for that co-op course.

B. Students may not be required to submit a petition if the student was

   1. Classified as out-of-state because he or she failed to submit required documentation such as military ID or orders or verification of USM employment. In this situation, the student can be reclassified as in-state upon submission of the required documentation.

   2. Admitted to UMUC as out-of-state because of an error made by a UMUC staff member. In this situation, the student can be reclassified as in-state back to the point that the error occurred upon discovery and verification of the error.

   3. Initially admitted as out-of-state, but leaves UMUC for two or more years and must reapply to UMUC before being able to take additional courses. In this situation, a determination of residency classification will be made based upon the information given on the new admissions application.

C. Once a petition is submitted, the residency evaluator will review it and the supporting documentation. If the residency evaluator determines that the petition contains any inconsistent information, is incomplete, or requires any additional information, the evaluator will contact the petitioning student to obtain all the information necessary to complete the petition for a comprehensive review. If any outstanding information is not submitted to UMUC within 30 days of the date of the residency evaluator's request, the student's petition may not be considered for the current semester or term.

D. If it is determined that the student meets all of the requirements for in-state residency, the student's classification will be changed. If the student has already paid the out-of-state tuition rates for the applicable semester or term, a refund or account credit (if there is a balance due on the student's account) will be generated.

E. If UMUC determines that the student does not meet all of the requirements for in-state residency, the student may appeal the decision in writing to the president's designee, the provost and chief academic officer ("provost"), for a waiver of the criterion that the student does not meet. The provost may waive any residency criterion set forth in Section II of the USM residency policy if it is determined that the application of the criterion creates an unjust result.

** Annotated Code of Maryland, Education Article, §12-101.*

IV. CRITERIA

Students must meet the criteria provided in Section II of the USM policy to be eligible for in-state status. Additional information about some of those criteria follows:

A. Students in the United States holding specific visa classifications satisfy criterion Section II.H of the USM policy as determined by the Office of the Attorney General. Students may contact the residency evaluator to ask about their eligibility.

B. Students who do not owe Maryland income taxes or are exempt from U.S. federal, state, or local taxes because of the student's visa status will not be required to meet Section II.C of the USM policy.

C. Students in the "uniformed services" (e.g., NOAA, Public Health Service) but not in the "armed forces," do not automatically qualify for in-state residency under Section IV.E of the USM policy.

D. Students who maintain Maryland as their permanent address, but who are temporarily residing outside of Maryland for no more than 12 months, may be considered to meet Section II.A of the USM policy if they submit the following documentation to the residency evaluator:

   1. A statement indicating the length and purpose of the temporary absence;
   2. If licensed to drive, a copy of his or her Maryland driver's license;
   3. If employed, a copy of a recent paycheck stub showing Maryland taxes being withheld; and
   4. A copy of a lease or deed for the student's Maryland residence.

E. Students who separated from the military prior to applying for admission to UMUC and who claimed Maryland as their home state of record while in the military satisfy II.D, II.E, and II.F of the USM policy if (i) the student was prevented from living in Maryland while on active duty; (ii) the student now lives in Maryland; (iii) the student has a Maryland driver's license; (iv) the student has registered his or her car in Maryland, if applicable; and (v) the student is registered to vote in Maryland. These students are not required to comply with these requirements for the period of twelve (12) consecutive months immediately prior to and including the last date to register for courses in the semester or term for which the student seeks in-state status.

F. Students who must register their vehicles outside of Maryland for business purposes satisfy criteria Section II.D.

V. ALTERATION OF IN-STATE STATUS

A. Students shall notify the residency evaluator, in writing, within 15 days of any change in circumstances that may alter in-state status.

B. In the event incomplete, false, or misleading information is presented, UMUC may, at its discretion, revoke in-state status and take other disciplinary actions provided by UMUC's Code of Student Conduct. If in-state status is gained because of false or misleading information or because UMUC is not notified within 15 days of any change in circumstances that may alter in-state status, UMUC reserves the right to retroactively assess all out-of-state charges for each semester or term affected.

Appendix B

Policies of the Maryland Higher Education Commission on General Education and Transfer from Public Institutions in Maryland

(Code of Maryland Regulations Title 13B, Subtitle 06, Chapters 1–10)

I. SCOPE AND APPLICABILITY

This chapter applies only to public institutions of higher education.

II. DEFINITIONS

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined

1. "AA degree" means the Associate of Arts degree.
2. "AAS degree" means the Associate of Applied Sciences degree.
3. "Arts" means courses that examine aesthetics and the development of the aesthetic form and explore the relationship between theory and practice. Courses in this area may include fine arts, performing and studio arts, appreciation of the arts, and history of the arts.
4. "AS degree" means the Associate of Sciences degree.
5. "Biological and physical sciences" means courses that examine living systems and the physical universe. They introduce students to the variety of methods used to collect, interpret, and apply scientific data, and to an understanding of the relationship between scientific theory and application.
6. "English composition courses" means courses that provide students with communication knowledge and skills appropriate to various writing situations, including intellectual inquiry and academic research.
7. "General education" means the foundation of the higher education curriculum providing a coherent intellectual experience for all students.
8. "General education program" means a program that is designed to
   a. Introduce undergraduates to the fundamental knowledge, skills, and values that are essential to the study of academic disciplines;
   b. Encourage the pursuit of lifelong learning; and
   c. Foster the development of educated members of the community and the world.
9. "Humanities" means courses that examine the values and cultural heritage that establish the framework for inquiry into the meaning of life. Courses in the humanities may include the language, history, literature, and philosophy of Western and other cultures.
10. "Mathematics" means courses that provide students with numerical, analytical, statistical, and problem-solving skills.
11. "Native student" means a student whose initial college enrollment was at a given institution of higher education and who has not transferred to another institution of higher education since that initial enrollment.
12. "Parallel program" means the program of study or courses at one institution of higher education that has objectives comparable to those at another higher education institution, for example, a transfer program in psychology in a community college is definable as a program parallel to a baccalaureate psychology program at a four-year institution of higher education.
13. "Receiving institution" means the institution of higher education at which a transfer student currently desires to enroll.
14. "Recommended transfer program" means a planned program of courses, both general education and courses in the major, taken at a community college, that is applicable to a baccalaureate program at a receiving institution—and ordinarily the first two years of the baccalaureate degree.
15. "Sending institution" means the institution of higher education of most recent previous enrollment by a transfer student at which transferable academic credit was earned.
16. "Social and behavioral sciences" means courses that examine the psychology of individuals and the ways in which individuals, groups, or segments of society behave, function, and influence one another. The courses include, but are not limited to, subjects that focus on
    a. History and cultural diversity;
    b. Concepts of groups, work, and political systems;
    c. Applications of qualitative and quantitative data to social issues; and
    d. Interdependence of individuals, society, and the physical environment.
17. "Transfer student" means a student entering an institution for the first time, having successfully completed a minimum of 12 semester hours at another institution that are applicable for credit at the institution the student is entering.

III. ADMISSION OF TRANSFER STUDENTS TO PUBLIC INSTITUTIONS

A. Admission to Institutions

1. A student attending a public institution who has completed an AA, AAS, or AS degree, or who has completed 56 or more semester hours of credit, shall not be denied direct transfer to another public institution if the student attained a cumulative grade point average of at least 2.0 on a 4.0 scale or its equivalent in parallel courses, except as provided in Section A.4 below.
2. A student attending a public institution who has not completed an AA, AAS, or AS degree, or who has completed fewer than 56 semester hours of credit, is eligible to transfer to a public institution regardless of the number of credits earned if the student
   a. Satisfied the admission criteria of that receiving public institution as a high school senior; and
   b. Attained at least a cumulative grade point average of 2.0 on a 4.0 scale or its equivalent in parallel courses.
3. A student attending a public institution who did not satisfy the admission criteria of a receiving public institution as a high school senior, but who has earned sufficient credits at a public institution to be classified by the receiving public institution as a sophomore, shall meet the stated admission criteria developed and published by the receiving public institution for transfer.
4. If the number of students seeking admission exceeds the number that can be accommodated at a receiving public institution, admission decisions shall be
   a. Based on criteria developed and published by the receiving public institution; and
   b. Made to provide fair and equal treatment for native and transfer students.

B. Admission to Programs

1. A receiving public institution may require higher performance standards for admission to some programs if the standards and criteria for admission to the program
   a. Are developed and published by the receiving public institution; and
   b. Maintain fair and equal treatment for native and transfer students.
2. If the number of students seeking admission exceeds the number that can be accommodated in a particular professional or specialized program, admission decisions shall be
   a. Based on criteria developed and published by the receiving public institution; and
   b. Made to provide fair and equal treatment for native and transfer students.
3. Courses taken at a public institution as part of a recommended transfer program leading toward a baccalaureate degree shall be applicable to related programs at a receiving public institution granting the baccalaureate degree.

C. Receiving Institution Program Responsibility

1. The faculty of a receiving public institution shall be responsible for development and determination of the program requirements in major fields of study for a baccalaureate degree, including courses in the major field of study taken in the lower division.
2. A receiving public institution may set program requirements in major fields of study that simultaneously fulfill general education requirements.
3. A receiving public institution, in developing lower-division coursework, shall exchange information with other public institutions to facilitate the transfer of credits into its programs.

IV. GENERAL EDUCATION REQUIREMENTS FOR PUBLIC INSTITUTIONS

A. While public institutions have the autonomy to design their general education program to meet their unique needs and mission, that program shall conform to the definitions and common standards in this chapter. A public institution shall satisfy the general education requirement by

1. Requiring each program leading to the AA or AS degree to include no fewer than 30 and no more than 36 semester hours, and each baccalaureate degree program to include no fewer than 40 and no more than 46 semester hours of required core courses, with the core requiring, at a minimum, coursework in each of the following five areas:
   a. Arts and humanities,
   b. Social and behavioral sciences,
   c. Biological and physical sciences,
   d. Mathematics, and
   e. English composition

   or

2. Conforming with COMAR 13B.02.02.16D(2)(b)-(c).

B. Each core course used to satisfy the distribution requirements of Section A.1 of this regulation shall carry at least 3 semester hours.

C. General education programs of public institutions shall require at least
   1. One course in each of two disciplines in arts and humanities;
   2. One course in each of two disciplines in social and behavioral sciences;
   3. Two science courses, at least one of which shall be a laboratory course;
   4. One course in mathematics at or above the level of college algebra; and
   5. One course in English composition.

D. Interdisciplinary and Emerging Issues
   1. In addition to the five required areas in Section A of this regulation, a public institution may include up to 8 semester hours in a sixth category that addresses emerging issues that institutions have identified as essential to a full program of general education for their students. These courses may
      a. Be integrated into other general education courses or be presented as separate courses; and
      b. Include courses that
         (i) Provide an interdisciplinary examination of issues across the five areas; or
         (ii) Address other categories of knowledge, skills, and values that lie outside of the five areas.
   2. Public institutions may not include the courses in this section in a general education program unless they provide academic content and rigor equivalent to the areas in Section A.1 of this regulation.

E. General education programs leading to the AAS degree shall include at least 20 semester hours from the same course list designated by the sending institution for the AA and AS degrees. The AAS degree shall include at least one 3-semester-hour course from each of the five areas listed in Section A.1 of this regulation.

F. A course in a discipline listed in more than one of the areas of general education may be applied only to one area of general education.

G. A public institution may allow a speech communication or foreign language course to be part of the arts and humanities category.

H. Composition and literature courses may be placed in the arts and humanities area if literature is included as part of the content of the course.

I. Public institutions may not include physical education skills courses as part of the general education requirements.

J. General education courses shall reflect current scholarship in the discipline and provide reference to theoretical frameworks and methods of inquiry appropriate to academic disciplines.

K. Courses that are theoretical may include applications, but all applications courses shall include theoretical components if they are to be included as meeting general education requirements.

L. Public institutions may incorporate knowledge and skills involving the use of quantitative data, effective writing, information retrieval, and information literacy when possible in the general education program.

M. Notwithstanding Section A.1 of this regulation, a public four-year institution may require 48 semester hours of required core courses if courses upon which the institution's curriculum is based carry 4 semester hours.

N. Public institutions shall develop systems to ensure that courses approved for inclusion on the list of general education courses are designed and assessed to comply with the requirements of this chapter.

V. TRANSFER OF GENERAL EDUCATION CREDIT

A. A student transferring to one public institution from another public institution shall receive general education credit for work completed at the student's sending institution as provided by this chapter.

B. A completed general education program shall transfer without further review or approval by the receiving institution and without the need for a course-by-course match.

C. Courses that are defined as general education by one institution shall transfer as general education even if the receiving institution does not have that specific course or has not designated that course as general education.

D. The receiving institution shall give lower-division general education credits to a transferring student who has taken any part of the lower-division general education credits described in Regulation IV of this chapter at a public institution for any general education courses successfully completed at the sending institution.

E. Except as provided in Regulation IV.M of this chapter, a receiving institution may not require a transfer student who has completed the requisite number of general education credits at any public college or university to take, as a condition of graduation, more than 10–16 additional semester hours of general education and specific courses required of all students at the receiving institution, with the total number not to exceed 46 semester hours. This provision does not relieve students of the obligation to complete specific academic program requirements or course prerequisites required by a receiving institution.

F. A sending institution shall designate on or with the student transcript those courses that have met its general education requirements, as well as indicate whether the student has completed the general education program.

G. AAS Degrees

1. While there may be variance in the numbers of hours of general education required for AA, AS, and AAS degrees at a given institution, the courses identified as meeting general education requirements for all degrees shall come from the same general education course list and exclude technical or career courses.

2. An AAS student who transfers into a receiving institution with fewer than the total number of general education credits designated by the receiving institution shall complete the difference in credits according to the distribution as designated by the receiving institution. Except as provided in Regulation IV.M of this chapter, the total general education credits for baccalaureate-degree-granting public receiving institutions may not exceed 46 semester hours.

H. Student Responsibilities

A student is held

1. Accountable for the loss of credits that

a. Result from changes in the student's selection of the major program of study,

b. Were earned for remedial coursework, or

c. Exceed the total course credits accepted in transfer as allowed by this chapter.

2. Responsible for meeting all requirements of the academic program of the receiving institution.

VI. TRANSFER OF NONGENERAL EDUCATION PROGRAM CREDIT

A. Transfer to Another Public Institution

1. Credit earned at any public institution in the state is transferable to any other public institution if the

a. Credit is from a college- or university-parallel course or program,

b. Grades in the block of courses transferred average 2.0 or higher, and

c. Acceptance of the credit is consistent with the policies of the receiving institution governing native students following the same program.

2. If a native student's D grade in a specific course is acceptable in a program, then a D earned by a transfer student in the same course at a sending institution is also acceptable in the program. Conversely, if a native student is required to earn a grade of C or better in a required course, the transfer student shall also be required to earn a grade of C or better to meet the same requirement.

B. Credit earned in or transferred from a community college is limited to

1. One-half the baccalaureate degree program requirement but may not be more than 70 semester hours, and

2. The first two years of the undergraduate education experience.

C. Nontraditional Credit

1. The assignment of credit for AP, CLEP, or other nationally recognized standardized examination scores presented by transfer students is determined according to the same standards that apply to native students in the receiving institution, and the assignment shall be consistent with the state minimum requirements.

2. Transfer of credit from the following areas shall be consistent with COMAR 13B.02.02. and shall be evaluated by the receiving institution on a course-by-course basis:

a. Technical courses from career programs,

b. Course credit awarded through articulation agreements with other segments or agencies,

c. Credit awarded for clinical practice or cooperative education experiences, and

d. Credit awarded for life and work experiences.

3. The basis for the awarding of the credit shall be indicated on the student's transcript by the receiving institution.

4. The receiving institution shall inform a transfer student of the procedures for validation of coursework for which there is no clear equivalency. Examples of validation procedures include ACE recommendations, portfolio assessment, credit through challenge examinations, and satisfactory completion of the next course in sequence in the academic area.

5. The receiving baccalaureate-degree-granting institution shall use validation procedures when a transferring student successfully completes a course at the lower-division level that the receiving institution offers at the upper-division level. The validated credits earned for the course shall be substituted for the upper-division course.

D. Program Articulation

1. Recommended transfer programs shall be developed through consultation between the sending and receiving institutions. A recommended transfer program represents an agreement between the two institutions that allows students aspiring to the baccalaureate degree to plan their programs. These programs constitute freshman/sophomore-level coursework to be taken at the community college in fulfillment of the receiving institution's lower-division coursework requirement.
2. Recommended transfer programs in effect at the time that this regulation takes effect, which conform to this chapter, may be retained.

VII. ACADEMIC SUCCESS AND GENERAL WELL-BEING OF TRANSFER STUDENTS

A. Sending Institutions

1. Community colleges shall encourage their students to complete the associate's degree or to complete 56 hours in a recommended transfer program that includes both general education courses and courses applicable toward the program at the receiving institution.
2. Community college students are encouraged to choose as early as possible the institution and program into which they expect to transfer.
3. The sending institution shall
   a. Provide to community college students information about the specific transferability of courses at four-year colleges;
   b. Transmit information about transfer students who are capable of honors work or independent study to the receiving institution; and
   c. Promptly supply the receiving institution with all the required documents if the student has met all financial and other obligations of the sending institution for transfer.

B. Receiving Institutions

1. Admission requirements and curriculum prerequisites shall be stated explicitly in institutional publications.
2. A receiving institution shall admit transfer students from newly established public colleges that are functioning with the approval of the Maryland Higher Education Commission on the same basis as applicants from regionally accredited colleges.
3. A receiving institution shall evaluate the transcript of a degree-seeking transfer student as expeditiously as possible, and notify the student of the results no later than midsemester of the student's first semester of enrollment at the receiving institution, if all official transcripts have been received at least 15 working days before midsemester. The receiving institution shall inform a student of the courses that are acceptable for transfer credit and the courses that are applicable to the student's intended program of study.
4. A receiving institution shall give a transfer student the option of satisfying institutional graduation requirements that were in effect at the receiving institution at the time the student enrolled as a freshman at the sending institution. In the case of major requirements, a transfer student may satisfy the major requirements in effect at the time when the student was identifiable as pursuing the recommended transfer program at the sending institution. These conditions are applicable to a student who has been continuously enrolled at the sending institution.

VIII. PROGRAMMATIC CURRENCY

A. A receiving institution shall provide to the community college current and accurate information on recommended transfer programs and the transferability status of courses. Community college students shall have access to this information.

B. Recommended transfer programs shall be developed with each community college whenever new baccalaureate programs are approved by the degree-granting institution.

C. When considering curricular changes, institutions shall notify each other of the proposed changes that might affect transfer students. An appropriate mechanism shall be created to ensure that both two-year and four-year public colleges provide input or comments to the institution proposing the change. Sufficient lead time shall be provided to effect the change with minimum disruption. Transfer students are not required to repeat equivalent coursework successfully completed at a community college.

IX. TRANSFER MEDIATION COMMITTEE

A. There is a Transfer Mediation Committee, appointed by the Secretary, which is representative of the public four-year colleges and universities and the community colleges.

B. Sending and receiving institutions that disagree on the transferability of general education courses as defined by this chapter shall submit their disagreements to the Transfer Mediation Committee. The Transfer Mediation Committee shall address general questions regarding existing or past courses only, not individual student cases, and shall also address questions raised by institutions about the acceptability of new general education courses. As appropriate, the committee shall consult with faculty on curricular issues.

C. The findings of the Transfer Mediation Committee are considered binding on both parties.

X. APPEAL PROCESS

A. Notice of Denial of Transfer Credit by a Receiving Institution

1. Except as provided in Section A.2 of this regulation, a receiving institution shall inform a transfer student in writing of the denial of transfer credit no later than midsemester of the transfer student's first semester, if all official transcripts have been received at least 15 working days before midsemester.
2. If transcripts are submitted after 15 working days before midsemester of a student's first semester, the receiving institution shall inform the student of credit denied within 20 working days of receipt of the official transcript.
3. A receiving institution shall include in the notice of denial of transfer credit
   a. A statement of the student's right to appeal, and
   b. A notification that the appeal process is available in the institution's catalog.
4. The statement of the student's right to appeal the denial shall include notice of the time limitations in Section B of this regulation.

B. A student believing that the receiving institution has denied the student transfer credits in violation of this chapter may initiate an appeal by contacting the receiving institution's transfer coordinator or other responsible official of the receiving institution within 20 working days of receiving notice of the denial of credit.

C. Response by Receiving Institution

1. A receiving institution shall
   a. Establish expeditious and simplified procedures governing the appeal of a denial of transfer of credit, and
   b. Respond to a student's appeal within 10 working days.
2. An institution may either grant or deny an appeal. The institution's reasons for denying the appeal shall be consistent with this chapter and conveyed to the student in written form.
3. Unless a student appeals to the sending institution, the written decision in Section C.2 of this regulation constitutes the receiving institution's final decision and is not subject to appeal.

D. Appeal to Sending Institution

1. If a student has been denied transfer credit after an appeal to the receiving institution, the student may request that the sending institution intercede on the student's behalf by contacting the transfer coordinator of the sending institution.
2. A student shall make an appeal to the sending institution within 10 working days of having received the decision of the receiving institution.

E. Consultation Between Sending and Receiving Institutions

1. Representatives of the two institutions shall have 15 working days to resolve the issues involved in an appeal.
2. As a result of a consultation in this section, the receiving institution may affirm, modify, or reverse its earlier decision.
3. The receiving institution shall inform a student in writing of the result of the consultation.
4. The decision arising out of a consultation constitutes the final decision of the receiving institution and is not subject to appeal.

XI. PERIODIC REVIEW

A. Report by Receiving Institution

1. A receiving institution shall report annually the progress of students who transfer from two-year and four-year institutions within the state to each community college and to the Secretary of the Maryland Higher Education Commission.
2. An annual report shall include ongoing reports on the subsequent academic success of enrolled transfer students, including graduation rates, by major subject areas.
3. A receiving institution shall include in the reports comparable information on the progress of native students.

B. Transfer Coordinator

A public institution of higher education shall designate a transfer coordinator, who serves as a resource person to transfer students at either the sending or receiving campus. The transfer coordinator is responsible for overseeing the application of the policies and procedures outlined in this chapter and interpreting transfer policies to the individual student and to the institution.

C. The Maryland Higher Education Commission shall establish a permanent Student Transfer Advisory Committee that meets regularly to review transfer issues and recommend policy changes as needed. The Student Transfer Advisory Committee shall address issues of interpretation and implementation of this chapter.

Appendix C

Statement on Transferring Undergraduate College-Level Credits to UMUC

University of Maryland University College actively subscribes to the policy of the Maryland Higher Education Commission on the transfer of undergraduates within Maryland (found in Appendix B) and welcomes transfer students. UMUC is also a designated four-year Servicemembers Opportunity College (SOC); the SOC institutions have developed degree networks corresponding to Army, Navy, Coast Guard, and Marine career specialties. UMUC grants transfer credit for courses graded C or higher if they are applicable to an Associate of Arts (AA), a Bachelor of Arts (BA), a Bachelor of Science (BS), or a Bachelor of Technical and Professional Studies (BTPS) degree.

Credit earned elsewhere during a period of disciplinary dismissal or suspension may not be applied toward a degree from UMUC.

Students must submit official transcripts from all colleges and universities previously attended in order to receive a degree progress report, which includes transfer credit. (More information on credit evaluation is given on p. 239.)

MAXIMUM NUMBER OF TRANSFER CREDITS ACCEPTED

UMUC accepts up to 90 semester hours (45 semester hours for the associate's degree) of transfer credit from all sources combined toward the bachelor's degree. No more than 70 of the 90 semester hours may be accepted from two-year institutions (details on p. 235).

MAXIMUM NUMBER OF CREDITS ALLOWED FOR INNOVATIVE LEARNING

UMUC allows up to 60 semester hours of credit (one-half the total credit required for the bachelor's degree) for innovative learning that is applicable to the student's curriculum (subject to limitations as follows):

- Up to 30 semester hours of credit for a combination of portfolio assessment, course-challenge examinations, or military occupational specialties, i.e., MOS, NER, etc. (details on pp. 232–37).
- Up to 60 semester hours of credit for learning evaluated by means of standardized examinations such as the Advanced Placement examinations administered by the College Board, the College-Level Examination Program (CLEP), DANTES examinations, or the Excelsior College Testing Program, if (1) there is no duplication of other academic credit and (2) the scores presented meet the standards of UMUC (details on p. 236).
- Up to 15 semester hours of cooperative education credit (details on p. 233). However, cooperative education credit does not count toward requirements for graded coursework within the academic major, minor, or certificate. Students seeking a second bachelor's degree may receive up to 9 semester hours of cooperative education credit.

- Up to 60 semester hours of credit for study completed in military service schools based on recommendations made by the American Council on Education (ACE) in its *Guide to the Evaluation of Educational Experiences in the Armed Services* (details on p. 235).
- Up to 60 semester hours of credit for professional (not technical) courses that have been evaluated by either (1) the ACE *National Guide to Educational Credit for Training Programs* or (2) the University of the State of New York National Program on Noncollegiate Sponsored Instruction (PONSI) *College Credit Recommendations* (details on p. 236).
- Up to 21 semester hours of coherently related vocational and technical credit from regionally accredited or ACE-evaluated institutions (details on p. 236).

MINIMUM NUMBER OF CREDITS REQUIRED FOR INSTRUCTION IN THE MAJOR AND FOR THE DEGREE

UMUC requires students to complete 120 semester hours of credit for the bachelor's degree. Regardless of the number of transfer credits they present, students must complete a minimum of 30 credits at UMUC. Students must earn at least one-half of the credits required for the major, minor, or certificate through graded coursework. Graded coursework does not include credit earned through portfolio assessment, examination, or internship/Cooperative Education.

GRADE LEVEL ACCEPTABLE FOR TRANSFER

UMUC may accept transfer credits from regionally accredited two- and four-year colleges and universities for courses graded C or above, if they apply to the student's curriculum. The grade of C-minus is not acceptable in transfer.

Statement on Transfer of General Education Requirements

A student who has satisfactorily completed a course identified as a general education requirement at a Maryland community college will have met UMUC's general education requirement, as stated in Appendix B. For other students, courses are evaluated on a case-by-case basis. UMUC has included its evaluation of many Maryland community college courses in its section of the University System of Maryland's computerized articulation system (ARTSYS). This software is available at all two- and four-year Maryland public institutions and at *artweb.usmd.edu* on the Web. Students should see an advisor for details.

Appendix D

Policy on Nondiscrimination

UMUC is committed to ensuring that all individuals have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by UMUC and/or University System of Maryland policy or by federal, state, or local authorities. UMUC does not discriminate against or harass any person because of race, religion, color, creed, gender, marital status, age, national origin, ancestry, political affiliation, mental or physical disability, sexual orientation, or veteran status (including Vietnam Era veterans). All inquiries regarding UMUC's Nondiscrimination Statement or compliance with applicable statutes and regulations should be directed to the director, Diversity Initiatives, Office of the President, 3501 University Boulevard East, Adelphi, MD 20783-8000 (Phone: 301-985-7940; Fax: 301-985-7678; E-mail: *diversity-initiatives@umuc.edu;* Web site: *www.umuc.edu/diversity).*

In accordance with this Nondiscrimination Statement and UMUC's commitment to equal access, UMUC has revised Policy 40.3 (Policy and Procedures on Affirmative Action, Equal Opportunity, and Sexual Harassment). Students may access the revised policy and procedures online at *www.umuc.edu/policy/admin04030.shtml* or may contact the Office of Diversity Initiatives to have a copy mailed to them.

Appendix E

Policy on Religious Observances

(UMUC Policy 51.00)

I. UMUC conforms to the Board of Regents Policy III-5.10 Concerning the Scheduling of Academic Assignments on Dates of Religious Observance, approved on January 11, 1990.

II. So that the academic programs and services of UMUC shall be available to all qualified students who have been admitted to its programs, regardless of their religious beliefs, students shall not be penalized because of observances of their religious holidays. Students who miss a course session because of an observance of their religious beliefs must be allowed

A. To make up any examinations, other written tests, or class work;

B. To have access to any handouts or other material distributed in class; and

C. To have the opportunity to obtain or review any duplicated lecture notes or slides presented in class.

III. UMUC prohibits scheduling examinations on the following religious holidays: Rosh Hashanah, Yom Kippur, and Good Friday.

Appendix F

Financial Aid Satisfactory Academic Progress Standard for Undergraduate Students

(UMUC Policy 220.30)

I. INTRODUCTION

A. These guidelines have been developed in accordance with federal financial aid statutes and regulations governing student eligibility. Students who receive financial aid must demonstrate financial need and make satisfactory academic progress as determined by University of Maryland University College pursuant to federal law.

B. Financial aid recipients are required to be in good standing and to maintain satisfactory academic progress toward their degree requirements for each semester in which they are enrolled. In addition to meeting the academic standards outlined in UMUC Policy 158.00 Academic Level of Progress, financial aid recipients are required to meet the satisfactory academic progress standards outlined in this policy. Satisfactory academic progress for financial aid recipients, as described below, is evaluated annually, in June. Failure to maintain satisfactory academic progress, as described below, may result in cancellation of financial aid awards, and the student may have to repay any funds already received. Students who are in Financial Aid Probation status will also be evaluated following the fall session.

II. MINIMUM STANDARDS FOR UNDERGRADUATE STUDENTS

A. UMUC's institutional requirements for minimum satisfactory academic progress requirements for financial aid recipients are defined as follows:

1. Minimum cumulative grade point average (GPA).

   The student must maintain a minimum cumulative GPA of 2.0.

2. Minimum completion rate.

   The student must maintain a minimum cumulative completion rate of two-thirds of credits attempted (66 percent).

3. Maximum timeframe to completion—Federally mandated maximum timeframe to complete the program or degree.

   The student must complete his or her educational program within a time frame no longer than 150 percent of the published length of the educational program, as measured by credits attempted and including transfer credits (for example, the student must complete his or her program after attempting a maximum of 180 credits for a 120-credit program).

B. Federal regulations require that UMUC track the academic progress of financial aid recipients from the first date of enrollment at UMUC, whether or not financial aid was received.

C. Students who do not earn their degree within the maximum timeframe to completion, outlined above, will be placed in Financial Aid Denied status, not Financial Aid Probation. No financial aid will be disbursed for the student during subsequent semesters/periods of enrollment unless the student has made an appeal of the Financial Aid Denied status and the appeal (described in section VI) is granted.

III. TREATMENT OF W, I, AU, F, S, P, RT, H, AND G GRADES; NO GRADE REPORTED; AND REPEATED COURSEWORK

A. Course withdrawals (W) after the drop/add period are not included in the GPA calculation, but are considered a noncompletion of attempted coursework.

B. Incomplete (I) grades are not included in the GPA calculation and are considered a noncompletion of attempted coursework until the I grade is replaced with a permanent grade and academic progress can be re-evaluated.

C. An audit (AU) grade or a course taken out of sequence grade (H) is not considered attempted coursework and is not included in completion rate determinations.

D. A satisfactory grade (S), a passing grade (P), or a repeat through transfer grade (RT) is treated as attempted credits, which are earned but not included in calculation of the GPA.

E. F grades will be treated as attempted credits that were not earned, and so will be included both in the calculation of the GPA and minimum completion rate. This is true for both F grades (failure, academic) and for FN grades (failure due to nonattendance).

F. If a G grade (grade pending) or no grade is assigned, for any reason, it will not be included in the GPA calculation and will be considered a noncompletion of attempted coursework until a grade is assigned and academic progress can be re-evaluated.

G. The highest grade earned in a course that is repeated will count in the GPA computation, but every repeated attempt will be included in the completion rate determinations.

IV. FINANCIAL AID PROBATION STATUS

A. Undergraduate students who fail to meet the minimum 2.0 cumulative GPA standard or fail to complete at least two-thirds of cumulative credits attempted will be placed on Financial Aid Probation for the subsequent semester/period of enrollment.

B. Financial aid is received during the probationary period.

V. FINANCIAL AID DENIED STATUS

A. Undergraduate students who, while on Financial Aid Probation status, fail to maintain the minimum completion rate of 66 percent and/or fail to maintain a minimum cumulative GPA of 2.0 will be placed in Financial Aid Denied status for the following semester/period of enrollment. No financial aid will be disbursed during subsequent semesters/periods of enrollment until the student is removed from Financial Aid Denied status.

B. Undergraduate students who do not earn their degree within the maximum timeframe to completion will also be placed in Financial Aid Denied status. No aid will be disbursed during subsequent semesters/periods of enrollment unless the student has made an appeal and the appeal is granted for that semester/period of enrollment (section VII of this policy describes appeal procedures). There are no exceptions to this requirement.

VI. REINSTATEMENT OF AID AFTER FINANCIAL AID DENIED STATUS

A. Reinstatement of financial aid after a student is placed in Financial Aid Denied status is achieved in one of the following ways:

1. The student submits a written letter of appeal in accordance with the appeal process, and the Financial Aid Appeals Committee grants the appeal. The student is placed on Financial Aid Probation for the semester/period of enrollment rather than in Financial Aid Denied status.
2. The student attends UMUC, pays for tuition and fees without the help of student financial aid, and does well enough in the coursework to satisfy all the satisfactory academic progress standards. The student regains aid eligibility. Students who are in Financial Aid Denied status for failure to graduate within the maximum timeframe to completion cannot regain eligibility this way. Students who are beyond the maximum timeframe to completion cannot regain financial aid eligibility except on a semester/period of enrollment–by–semester/period of enrollment basis through the appeal process.

VII. APPEAL PROCESS

A. The student must submit an appeal of Financial Aid Denied status in writing to the Financial Aid Office.

B. The Financial Aid Appeals Committee will review the appeal and notify the student in writing of their decision after the Appeals Committee meets and makes its determination.

Appendix G

Policy on Disclosure of Student Records

(UMUC Policy 210.14)

I. INTRODUCTION

UMUC complies with the Family Educational Rights and Privacy Act (FERPA) of 1974 (also known as "the Buckley Amendment"), which protects the privacy of education records.

In accordance with FERPA, this policy informs students of their rights to

A. Inspect and review their education records;

B. Seek an amendment of their education records, where appropriate;

C. Limit disclosure to others of personally identifiable information from education records without the student's prior written consent; and

D. File formal complaints alleging a violation of FERPA with the Department of Education.

II. DEFINITIONS

A. "Student" is an individual who is attending or who has attended UMUC. A "student" does not include any applicant for admission to UMUC who does not matriculate, even if he or she previously attended UMUC.

B. "Education records" are records that contain information directly related to a student that are maintained by UMUC or by a third party on behalf of UMUC. The following records are not education records:

1. Campus police or security ("law enforcement unit") records maintained solely for law enforcement purposes and maintained by that law enforcement unit.
2. Employment records, except where a currently enrolled student is employed as a result of his or her status as a student.
3. Records of a physician, psychologist, or other recognized professional or paraprofessional if made or used only for treatment purposes and available only to persons providing treatment.
4. Records that contain only information relating to a person's activities after that person is no longer a student at UMUC.

III. INSPECTION AND REVIEW OF

Education Records by Students

A. Right of Access

1. Each student has a right of access to his or her education records, except financial records of the student's parents and confidential letters of recommendation received prior to January 1, 1975.
2. A student may, by a signed writing, waive his or her right of access to confidential recommendations in three areas: admission to any educational institution, job placement, and receipt of honors and awards. UMUC will not require such waivers as a condition for admission or receipt of any service or benefit normally provided to students. If the student chooses to waive his or her right of access, he or she will be notified, upon written request, of the names of all persons making confidential recommendations. Such recommendations will be used only for the purpose for which they were specifically intended. A waiver may be revoked in writing at any time; and the revocation will apply to all subsequent recommendations, but not to recommendations received while the waiver was in effect.

B. Custodians of Education Records

The custodian of education records is

1. For UMUC Adelphi: the registrar located in Adelphi, Maryland.
2. For UMUC Asia: the registrar located in Tokyo, Japan.
3. For UMUC Europe: the registrar located in Heidelberg, Germany.
4. For the former campus at Mannheim: the registrar located in Heidelberg, Germany.
5. For the former campus at Schwäbisch Gmünd: the registrar located in Adelphi, Maryland.

C. Procedure to Request Review and/or Inspection of Education Records

Requests for review and/or inspection of education records should be made in writing to the appropriate custodian of records, as defined above. The custodian of records or designee will comply with a request for access within a reasonable time by arranging for the student to review his or her records in the presence of a staff member. If facilities permit, a student may obtain copies of his or her records by paying reproduction costs. The fee for copies is 50 cents per page. UMUC will not provide copies of any transcripts in the student's records other than the student's current UMUC transcript. Official transcripts (with the seal of UMUC) will be provided for a separate fee.

IV. AMENDMENT OF EDUCATION RECORDS

Students may request an amendment of their education records in accordance with this procedure:

A. Request to Amend Education Records

A student who believes that his or her education record is inaccurate, misleading, or in violation of the student's rights of privacy may ask the custodian of the education records to amend the record. The custodian of the education records or designee will decide whether to amend the record within a reasonable time after the request. If the custodian of the education records or designee decides not to amend the record, he or she will inform the student of the right to a hearing.

B. Hearings

1. A student may submit a written request for a hearing to challenge the content of his or her education records to the university registrar. The written request must state what records the student believes are inaccurate, misleading, or in violation of the privacy rights of the student.
2. A hearing will be conducted by the university registrar or designee. The hearing may take place via telephone or video conferencing. The student will be given an opportunity to present evidence relevant to the issues raised and may be assisted or represented by individuals of his or her choice at his or her own expense, including an attorney.
3. Within a reasonable period of time after the conclusion of a hearing, the university registrar will notify the student in writing of his or her decision. The written decision will include a summary of the evidence and the reasons for the decision.
   a. If the university registrar determines that the education record is inaccurate, misleading, or in violation of the privacy of the student, the education records will be amended. The university registrar will inform the student of the amendment in writing.
   b. If, as a result of the hearing, the university registrar decides that the education record is not inaccurate, misleading, or otherwise in violation of the privacy rights of the student, he or she will inform the student of the right to place a statement in the record commenting on the contested information in the record or stating why he or she disagrees with the decision of the agency or institution, or both. Any such explanation will be kept as part of the student's record as long as the contested portion of the record is kept and will be disclosed whenever the contested portion of the record is disclosed.

V. DISCLOSURES

UMUC will not disclose education records or the personally identifiable information contained therein unless permitted by FERPA and under the following circumstances:

A. Prior Written Consent

The custodian of the records will provide the education records or personally identifiable information contained therein if the student provides prior written consent that the information may be disclosed. The consent must

1. Specify the records that may be disclosed;
2. State the purpose for the disclosure;
3. Identify to whom the disclosure is to be made; and
4. Be signed and dated by the student.

At the student's request and expense, a copy of the records disclosed will be provided to the student.

B. Directory Information

1. UMUC designates the following categories of information as directory information:
   a. Name;
   b. Major field of study;
   c. Dates of attendance;
   d. Degrees and awards received;
   e. Previous educational institution most recently attended; and
   f. Birth date.
2. Directory information may be disclosed in the absence of consent unless the student files a written notice, within three weeks of the first day in which the student is enrolled, informing UMUC not to disclose any or all of the categories. To prevent automatic disclosure of directory information, this notice must be filed annually within the time allotted above, with the appropriate custodian of the education records, as defined in this policy.

C. Additional Disclosures Without Prior Consent

Prior consent is not required for disclosure of education records or the personally identifiable information contained therein in the following circumstances:

1. The disclosure is to other school officials generally within the University System of Maryland (USM) or UMUC who have legitimate educational interests.
   a. "School officials" include
      i. Internal and external instructional or administrative personnel who are or may be in a position to use the information in furtherance of a legitimate educational objective, such as to provide student services or to pursue a debt owed to UMUC. This includes, but is not limited to, faculty, staff members, and security personnel.
      ii. A contractor, consultant, volunteer, or other party to whom UMUC has outsourced institutional services or functions instead of employees while under the direct control of UMUC. The contractor, consultant, volunteer, or other party will not redisclose personally identifiable information and will destroy the information when it is no longer needed for those purposes.
   b. "Legitimate educational interests" include interests directly related to the academic environment.
2. The disclosure is to officials of other schools in which a student seeks to enroll or is enrolled for purposes related to the student's enrollment or transfer. Upon his or her request and at his or her expense, the student is provided with a copy of the records that have been transferred.
3. The disclosure is to authorized representatives of the comptroller general of the United States, the secretary of the U.S. Department of Education, and state or local educational authorities.
4. The disclosure is to authorized persons and organizations in connection with a student's application for or receipt of financial aid, but only to the extent necessary for such purposes as determining eligibility, amount, conditions, and enforcement of terms and conditions.
5. The disclosure is to state and local officials to whom, according to effective state law adopted prior to November 19, 1974, such information is specifically required to be reported.
6. The disclosure is to organizations conducting educational studies for the purpose of developing, validating, or administering predictive tests, administering student aid programs, and improving instruction, pursuant to a written agreement. The studies shall be conducted so as not to permit personal identification of students or parents to individuals other than the representatives of the organization conducting the study who have legitimate interests in the informa-

tion and so that the information is destroyed or returned to UMUC when it is no longer needed for those purposes.

7. The disclosure is to accrediting organizations for purposes necessary to carry out their functions.
8. The disclosure is to the parent of a student who is dependent for income tax purposes. (Note: UMUC may require documentation of dependent status, such as copies of income tax forms.)
9. The disclosure is to comply with a judicial order or lawfully issued subpoena. Unless expressly prohibited by the subpoena, UMUC will make a reasonable effort to notify the student or parent of the order or subpoena in advance of compliance in order to give them time to seek protective action. unless
   i. The subpoena is issued by a federal grand jury and the court ordered that the existence or contents of the subpoena or the information furnished in response to the subpoena not be disclosed, or
   ii. The subpoena is issued for a law enforcement purpose and the court or other issuing agency has ordered that the existence or contents of the subpoena or the information furnished in response to the subpoena not be disclosed.
10. The disclosure is to comply with an ex parte order obtained by the U.S. attorney general (or designee not lower than an assistant attorney general) concerning investigations or prosecutions of an offense listed in 18 U.S.C. 2332b(g)(5)(B) or an act of domestic or international terrorism as defined in 18 U.S.C. 2331.
11. The disclosure is in connection with a health or safety emergency.
12. The disclosure is to an alleged victim of any crime of violence or nonforcible sex offense of the results of any disciplinary proceeding conducted by UMUC against the alleged perpetrator of that crime or offense with respect to that crime or offense.
13. The disclosure is to an alleged victim of any crime of violence of the results of any disciplinary proceeding conducted by UMUC against the alleged perpetrator of that crime with respect to that crime.
14. The disclosure concerns sex offenders and other individuals required to register under 42 U.S.C. 14071 and the information was provided to UMUC under that federal law or applicable federal regulations.

D. Record of Disclosures

1. UMUC maintains with the student's education records a record of each request and each disclosure, except for
   a. Disclosures to the student himself or herself.
   b. Disclosures made pursuant to the written consent of the student (the written consent itself suffices as a record).
   c. Disclosures to USM instructional or administrative officials.
   d. Disclosures of directory information. This record of disclosures may be inspected by the student, the official custodian of the records, and other officials of UMUC and governmental officials.
2. When information from an education record is disclosed pursuant to a health or safety emergency, UMUC will maintain a record with the following additional information:
   a. The articulable and significant threat to the health or safety of a student or other individuals that formed the basis for this disclosure, and
   b. The parties to whom UMUC disclosed the information.

VI. RIGHT TO FILE COMPLAINT

A student alleging that UMUC has not complied with the Family Educational Rights and Privacy Act (FERPA) may file a student grievance in accordance with UMUC's Student Grievance Procedures (Policy 130.70) or submit a written complaint to

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-4605

Appendix H

Policy on Shared Governance

I. INTRODUCTION

A. University of Maryland University College (UMUC) is one of 11 degree-granting institutions within the University of System Maryland (USM). Governance is vested in the Board of Regents and by the Board delegated to the chancellor of the USM and to the presidents of the constituent institutions of the USM.

B. The president of UMUC is the senior officer of the university and is responsible for the overall implementation and continued management of UMUC's mission and vision. The provost and chief academic officer (or "provost") is UMUC's senior academic officer, and the senior vice president for policy and administration (or "senior vice president") is UMUC's senior administrative officer. The Executive Committee and the Cabinet serve as the senior advisory councils to the president.

C. The provost heads the governance structure for all academic affairs at UMUC. Academic affairs include, but are not limited to, the following: academic policies and procedures, research and training, faculty and student services, and academic programs and courses. The major contributors to the academic governance system are the Academic Affairs Council, the Undergraduate Programs Advisory Council, the Graduate Council, responsible vice provosts, and the provost.

D. The senior vice president heads the governance structure for all administrative matters at UMUC. These matters include, but are not limited to, the following: legal counsel, human resources management, financial management, government and external outreach, institutional advancement, communications and marketing, planning and accountability, information technology, and facilities management. The major contributors to the administrative governance system are the Administrative Council, the responsible vice presidents, and the senior vice president.

E. To facilitate the decision-making process in UMUC, individual units are encouraged to have standing or ad hoc committees, task forces, or working groups to provide the unit leader the best possible information for sound decision making.

II. SHARED GOVERNANCE

In accordance with University System of Maryland Policy I - 6.00 Policy on Shared Governance in the University System of Maryland, approved on August 25, 2000, by the Board of Regents, UMUC has developed a shared governance structure that allows stakeholders to provide input to, and be informed about, significant institutional decisions. Each shared governance body within this structure acts in advisory capacity to the president and other university officers.

III. STAKEHOLDERS

UMUC's internal stakeholder groups are students, faculty, and staff.

A. Students: UMUC admits full-time and part-time students "on the ground" and online, through UMUC stateside, UMUC Europe, and UMUC Asia.

B. Faculty: UMUC has four types of faculty worldwide, as defined in UMUC Policy 181.00—Faculty Appointment, Rank, and Promotion.

C. Staff: UMUC employs full-time and part-time staff at its main locations in Maryland (Adelphi, Largo, Shady Grove, and Waldorf) as well as in UMUC Asia and UMUC Europe.

IV. SHARED GOVERNANCE STRUCTURE

Because of its unique structure and geographically dispersed stakeholder population, UMUC provides separate governance bodies for each stakeholder group as well as an institution-wide shared governance body. Each of the three stakeholder groups has an advisory council. The Advisory Councils consist of a minimum of 12 representatives, all duly elected by the stakeholders themselves. Each Advisory Council may also have one or more *ex officio* members selected from the university's senior leadership. The charter and constitution of each group outline the representation, mission, and purpose of the council. It is the responsibility of each council to comply with its charter and constitution. With the approval of the president, councils may modify their charters and constitutions as needed. Four representatives are chosen from each stakeholder advisory council to sit on the University Advisory Council, the institution-wide governance body.

The Advisory Councils are

A. Student Advisory Council: The Student Advisory Council serves as an information network for its constituents. The Student Advisory Council will meet periodically with the university's senior academic officers to address issues of concern to UMUC students.

B. Faculty Advisory Council: This council is structured to ensure representation of all faculty in a common, university-wide advisory body. The Faculty Advisory Council advises the provost, vice provosts, and any others designated by the provost on faculty issues and UMUC's research agenda.

C. Global Staff Advisory Council: The Global Staff Advisory Council serves as a worldwide communication link between the staff and the president on matters of concern to UMUC staff. The council will meet periodically with

the vice president for human resources to advise on issues of concern to UMUC employees.

D. University Advisory Council: The University Advisory Council consists of four representatives from each of the above stakeholder councils. They meet with the president, the provost, the senior vice president, and other senior administrators as the president shall designate on a regular basis to review the broad direction of the university in the following areas: mission/budget; curriculum/instruction; research; appointment, rank, and promotion of faculty; human resource policies; student issues; and other areas of interest or concern. In addition, the council shall upon request of the President, the provost, or senior vice president, provide appropriate representatives to serve on search committees for the selection of senior university officers and administrators.

V. PROCESSES

To ensure representation by all stakeholder sub-groups, each of the councils will use appropriate telecommunications technology to canvass for nominations to its offices, disseminate information to stakeholders, and conduct other business. The University Advisory Council will hold its meetings with the president, provost, and senior vice president at Adelphi or other location as the president shall designate. Funds will be provided for council members' travel where necessary.

VI. ACCOUNTABILITY

The president will submit an annual report to the chancellor describing the activities of the various advisory councils during the previous year.

Student Advisory Council

The Student Advisory Council consists of twelve (12) student representatives from UMUC locations worldwide and includes both undergraduate and graduate students. Student Advisory Council representatives serve on the overall University Advisory Council. Student Advisory Council members act in an advisory capacity to the university president, provost, deans, and other officials on behalf of all students. To learn more about the Student Advisory Council or contact a representative, students should visit the Web page at *www.umuc.edu/gov/stac* or send an e-mail to *stac@umuc.edu.*

Service and Classroom Locations

Major administrative centers are indicated by an asterisk. Stateside locations outside Maryland and the metropolitan Washington, D.C., area provide services only.

Stateside

CALIFORNIA

Coronado Naval Base
Point Loma Naval Base
San Diego Naval Base
Travis Air Force Base

DISTRICT OF COLUMBIA

Bolling/Anacostia
Walter Reed Army Medical Center

FLORIDA

Jacksonville Naval Air Station
Mayport Naval Station

GEORGIA

Fort Gordon
Fort Stewart
Kings Bay Naval Submarine Base

HAWAII

Camp Smith
Honolulu (Coast Guard Integrated Support Command)
Kaneohe Bay Marine Corps Base
Pearl Harbor Naval Station
Schofield Barracks
Tripler Army Medical Center

MARYLAND

Aberdeen Proving Ground
Adelphi (UMUC headquarters)*
Allegany College of Maryland
Andrews (Joint Base Andrews Naval Air Facility Washington)
Anne Arundel Community College
Arundel Mills (Anne Arundel Community College Center)
Baltimore City Community College
Bethesda National Naval Medical Center
Carroll Community College
Cecil College
Chesapeake College
College of Southern Maryland
(La Plata, Leonardtown, Prince Frederick)
Community College of Baltimore County
Curtis Bay Coast Guard Yard
Dorsey Station*
Eastern Shore Higher Education Center
Fort Detrick
Fort Meade
Frederick Community College
Garrett College
Hagerstown (University System of Maryland)
Hagerstown Community College
Harford Community College
Howard Community College
Largo (UMUC Academic Center)*
Laurel College Center
Montgomery College
NCI-Frederick at Fort Detrick
Patuxent River Naval Air Station
Prince George's Community College
Shady Grove*
Southern Maryland Higher Education Center
University of Maryland, College Park
Waldorf Center for Higher Education*
Wor-Wic Community College

SOUTH CAROLINA

Fort Jackson

TEXAS

Fort Hood
Fort Sam Houston
Lackland Air Force Base

VIRGINIA

Fort Belvoir
Fort Myer
Henderson Hall, Navy Annex
Langley Air Force Base
Little Creek Naval Air Base
Norfolk Naval Station
Oceana Naval Air Station
Portsmouth Naval Medical Center
Quantico (Marine Corps Base)

WASHINGTON

Bremerton Naval Station
Everett Naval Station
Fort Lewis
Kitsap at Bangor Naval Base
McChord Air Force Base
Whidbey Island Naval Air Station

* *Administrative center*

APPENDICES

Europe

AFGHANISTAN
Bagram
Fenty (Jalalabad)
Kabul
Kandahar
Salerno
Sharana

BAHRAIN
Manama

BELGIUM
Brussels
Kleine Brogel
SHAPE

DJIBOUTI
Camp Lemonnier

EGYPT
Sinai North Camp
Sinai South Camp

GERMANY
Ansbach
Bamberg
Baumholder
Büchel
Garmisch
Geilenkirchen
Grafenwöhr
Heidelberg*
Hohenfels
Illesheim
Kaiserslautern
Landstuhl
Mannheim
Miesau
Ramstein
Schweinfurt
Sembach
Spangdahlem
Stuttgart
Vilseck
Wiesbaden

GREECE
Souda Bay

IRAQ
Basrah
Camp Adder
Camp Taji
Camp Victory
Joint Base Balad

ITALY
Aviano
Gaeta
Ghedi
Livorno
Naples
Sigonella
Vicenza

KOSOVO
Camp Bondsteel

KUWAIT
Ali Al Salem Air Base
Camp Arifjan
Camp Buehring
LSA
Camp Virginia

NETHERLANDS
AFNORTH
Volkel

PORTUGAL
Lajes
Lisbon

QATAR
Al Udeid
Camp As Sayliyah

SPAIN
Rota

TURKEY
Adana (Incirlik)
Izmir

UNITED KINGDOM
Alconbury
Croughton
Lakenheath
Menwith Hill (Harrogate)
Mildenhall

Asia

AUSTRALIA
Alice Springs

BRITISH INDIAN OCEAN TERRITORY
Diego Garcia

CENTRAL JAPAN
Atsugi
Camp Fuji
Camp Zuma
Iwakuni
Misawa
Negishi (Yokohama)
Sasebo
Yokosuka
Yokota*

GUAM
Andersen*
Guam Army National Guard
Naval Base Guam

MARSHALL ISLANDS
Kwajalein

OKINAWA
Camp Courtney
Camp Foster
Camp Hansen
Camp Kinser
Camp Schwab
Camp Shields
Futenma
Kadena*
Torii Station

SINGAPORE
U.S. Navy Region Singapore (NRS)

SOUTH KOREA
Camp Carroll
Camp Casey
Camp Henry
Camp Hovey
Camp Humphreys
Camp Red Cloud
Camp Stanley
Chinhae
K-16
Kunsan
Osan
Suwon
Yongsan*

THAILAND
JUSMAG THAI/ U.S.Embassy

** Administrative center*

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NOTES

University of Maryland University College

STUDENT NAME_____ DATE_____

Degree Planning Worksheet 2010–2011

This worksheet is designed to help you plan and track your progress toward your degree. It lists all of the graduation requirements in the recommended sequence. For full course descriptions, please refer to the current undergraduate catalog. For major-specific worksheets, see www.umuc.edu/worksheets.

SEQUENCE *Courses are listed in the order in which students should take them.* *Changes in courses and order may affect other elements of the degree plan.*	**COURSE TAKEN OR TRANSFERRED**	**SESSION TAKEN**
Recommendations will differ for specific majors. Refer to catalog for alternatives to recommended general education requirements (GERs). Courses used for GERs may not be used in the major or minor.		
FIRST COURSES (10 credits) Take within first 18 credits. **Take placement exams before registering for writing and math courses**		
EDCP 100 (3) *Strongly recommended first course*		
LIBS 150 (1) *Required GER course*		
WRTG 101/101X (3) *Required GER course*		
MATH 106 or higher (3) *Required GER course (check requirements of individual major)*		
INTRODUCTORY COURSES (16 credits) Take within first 30 credits.		
GVPT 170 (3) *Or other first behavioral/social science GER course*		
BIOL 103 or BIOL 101–102 (4) *Or other biological/physical science GER course with related lab*		
WRTG 291 (3) *Or other writing GER course*		
IFSM 201 (3) *Required computing GER course*		
PHIL 140 *or foreign language course (3) Or other arts/humanities GER course*		
FOUNDATION COURSES (21 credits) Take within first 60 credits.		
STAT 200 *or other statistics course (3) If required for major*		
PSYC 100 or SOCY 100 (3) *Or other second behavioral/social science GER course (discipline must differ from first)*		
◆ First course for major (3) *Check requirements for major*		
NSCI 100 or ASTR 100 (3) *Or other 3-credit biological/physical science GER course*		
HIST 142 or HIST 157 (3) *Or other ARTH or HIST course for arts/humanities GER in historical perspective (discipline must differ from other arts/humanities GER course)*		
Other computing GER course (3) *Check requirements of individual major*		
SPCH 100, WRTG 288, or WRTG 390 (3) *Or other writing or speech GER course*		

◆ *Required courses for major*

STUDENT NAME_____ DATE_____

SEQUENCE *Note total credits for major. At least half must be upper level and at least half taken through UMUC.*	COURSE TAKEN OR TRANSFERRED	TERM TAKEN
ADDITIONAL REQUIRED COURSES FOR MAJOR AND DEGREE (30–38 credits) Take after introductory/foundation courses.		
WRTG 391/391X, WRTG 393/393X, or WRTG 394/394X (3) *Upper-level advanced writing GER course*		
◆ Major course requirement (3) *See requirements for specific major*		
◆ Major course requirement (3)		
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MINOR OR ELECTIVES (15 credits, at least 9 credits upper level for minor) Complete in last 60 credits along with major courses.		
See requirements of individual minor.		
ADDITIONAL ELECTIVES (20–28 credits)		
Choose any courses to meet 120 credits for degree. Note minimum requirements for upper-level coursework. Complete in last 60 credits along with major and minor courses.		
TOTAL: 120 CREDITS		

CHECKLIST FOR FULFILLMENT OF DEGREE REQUIREMENTS See catalog for overview of all requirements.

- ❑ 30 credits at UMUC, including at least half of the major and minor and 15 credits upper level.
- ❑ 45 credits upper level, including half the credit for the major and for the minor.
- ❑ All required courses and minimum number of credits for major and minor.
- ❑ Prerequisites for major and minor courses, if needed.
- ❑ All general education requirements.
- ❑ Grade of C or better in all courses for the major and minor.
- ❑ Overall GPA of at least 2.0.
- ❑ At least half the credit for the major earned through graded coursework.
- ❑ Total 120 credits.

◆ *Required courses for major*

Academic Calendar

Dates below are tentative. Specific dates, times, and locations, as well as dates of holidays and term breaks, are published in the undergraduate *Schedule of Classes* each term and may be accessed online at *www.umuc.edu/schedule*.

STATESIDE

FALL 2010

On-site

Standard	September 7–December 16
Session 1	September 7–October 25
Session 2	October 26–December 16

Online

Standard	August 23–December 18
Session 1	August 23–November 21
Session 2	September 7–December 6
Session 3	September 20–December 18
Session 4	October 10–December 18
Session 5	October 10–December 4

SPRING 2011

On-site

Pre-session	January 1–15
Standard	January 24–May 7
Session 1	January 24–March 13
Session 2	March 21–May 7

Online

Standard	January 18–May 12
Session 1	January 18–April 18
Session 2	January 31–May 1
Session 3	February 13–May 12
Session 4	March 3–May 12

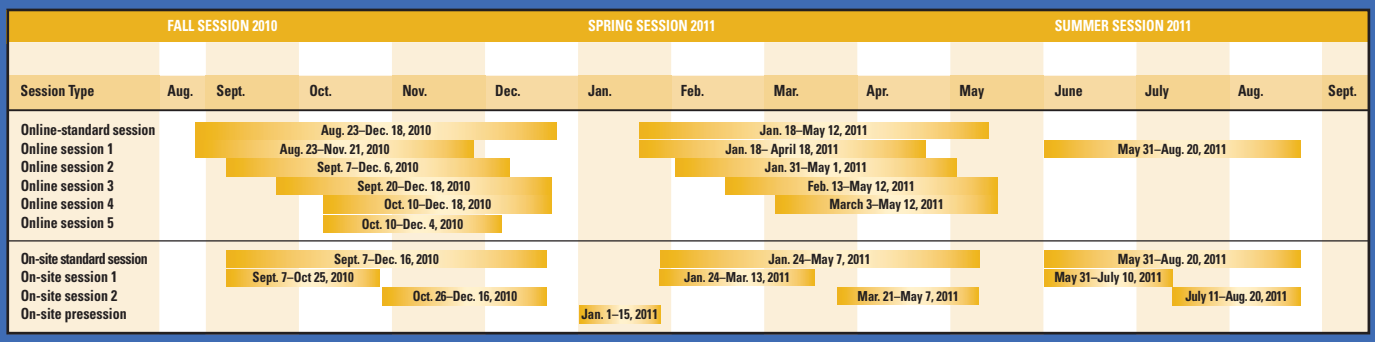
SUMMER 2011

On-site

Standard	May 31–August 20
Session 1	May 31–July 10
Session 2	July 11–August 20

Online

Session 1	May 31–August 20



OVERSEAS

Information on the academic calendar for UMUC Asia and UMUC Europe is available on the Web sites for the divisions: *www.asia.umuc.edu* and *www.ed.umuc.edu.*

ACCREDITATION University of Maryland University College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104 (267-284-5000), one of six regional accrediting agencies recognized by the U.S. Department of Education. UMUC is governed by the University System of Maryland Board of Regents and certified by the State Council of Higher Education for Virginia. UMUC is a constituent institution of the University System of Maryland.

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ABOUT UMUC

University of Maryland University College (UMUC) is the largest public university in the United States. As one of the 11 degree-granting institutions of the University System of Maryland, this global university specializes in high-quality academic programs tailored to working adults.

UMUC has earned a worldwide reputation for excellence as a comprehensive virtual university and, through a combination of classroom and distance-learning formats, provides educational opportunities to 90,000 students. The university is proud to offer highly acclaimed faculty and world-class student services to educate students online, throughout Maryland, across the United States, and in 27 countries around the world. UMUC serves its students through undergraduate and graduate degree and certificate programs, noncredit leadership development, and customized programs. For more information regarding UMUC and its programs, *visit www.umuc.edu.*

University of Maryland University College

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Adelphi, MD 20783-8080 USA

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SOLID WASTE: 144 LBS

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