UMUC
University of Maryland University College

2011–2012 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 50,000 active-duty military servicemembers, reservists, veterans and their families. With more than 150 worldwide locations in 27 countries and territories 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, 2011. (Details are listed on p. 7.) Students should keep their catalog available for easy reference throughout their degree program.

From the Dean

Welcome to UMUC's School of Undergraduate Studies. The School of Undergraduate Studies is committed to helping you learn and succeed in your academic journey and your professional career.

With this commitment in mind, we are introducing refreshed and invigorated academic programs and revised courses that align with program outcomes. Over the past two years, these program and course outcomes were developed by faculty members and professionals in the field to combine the latest academic theory with the most practical skills that employers need and demand. As a result, academic programs have been focused and strengthened, and all programs, courses, and assignments have been designed with your professional career in mind.

Use this catalog as your map to UMUC. Inside you will find degree requirements, recommended course sequences, academic and administrative policies and requirements, admission and enrollment information, and information on services and locations. All of this information—and more—may also be found at our Web site *(www.umuc.edu)* and in the university's information and service portal, MyUMUC *(https://my.umuc.edu)*.

I am pleased to be the first to welcome you to UMUC. You have my best wishes for your academic and professional success.

Sincerely,

Marie A. Cini

Marie A. Cini, PhD
Vice President 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.*

Table of Contents

WELCOME TO UMUC 4

4 A Unique Institution
4 Carrying Out the Mission
4 Facilities and Programs
4 For Assistance

SCHOOL OF UNDERGRADUATE STUDIES 5

5 Preparing Citizens for the 21st Century
5 Serving Adult Students
6 Educational Partnerships
6 For More Information

BACHELOR'S DEGREE REQUIREMENTS 7

7 Expectations
7 Requirements
10 Program Choices

BACHELOR'S DEGREE CURRICULA 12

12 Majors and Minors
13 Descriptions of Majors and Minors
13 Accounting
15 African American Studies
15 Art
15 Art History
16 Biology
16 Biotechnology
18 Business Administration
20 Business Law and Public Policy
20 Business Supply Chain Management
21 Communication Studies
22 Computer and Information Science
24 Computer Networking and Security
26 Computer Science
27 Computing
28 Criminal Justice
29 Customer Service Management
30 Cybersecurity
31 Digital Media and Web Technologies
33 East Asian Studies
34 Economics
35 Emergency Management
37 English
39 Environmental Management
41 Finance
42 Fire Service Administration
44 Forensics
45 General Studies
45 Gerontology
47 Global Business and Public Policy
49 Graphic Communication
50 History
52 Homeland Security
54 Humanities
56 Human Resource Management
58 Information Systems Management
60 International Business Management
60 Investigative Forensics
62 Journalism
62 Laboratory Management
64 Legal Studies
65 Management Studies
67 Marketing
68 Mathematical Sciences
69 Microbiology
69 Natural Science
69 Philosophy
70 Political Science
71 Psychology
73 Social Science
75 Sociology
75 Speech Communication
76 Strategic and Entrepreneurial Management
76 Women's Studies

Bachelor's Degree Curricula Continued . . .

MAJORS are indicated in bold.

ASSOCIATE OF ARTS DEGREE 77

77 Requirements
77 Curricula

CERTIFICATE PROGRAMS 87

87 Curricula
87 Requirements
88 Certificate Descriptions

INFORMATION ON COURSES 103

103 The Unit of Credit
103 Prerequisites
103 Key to Course Descriptions
104 Index to Course Descriptions
104 Undergraduate Courses

ACADEMIC AND ADMINISTRATIVE REQUIREMENTS 215

215 Scholastic and Administrative Standards
219 Rights and Responsibilities of the Student

ADMISSION AND ENROLLMENT 222

222 General Information and Orientation
222 Admission
225 Registration
225 Financial Information

WAYS OF EARNING CREDIT 227

227 Earning Credit at UMUC
229 Transferring Credit from Outside Sources

SERVICES AND RESOURCES 233

233 Availability of Services
234 General Information
234 Admission Assistance
234 Automated Services
234 Academic Advising
235 Disability Services
235 Financial Aid
237 Veterans Benefits
239 Graduation Services
239 Transcript Services
239 Student Advisory Council
239 Other Resources

ADMINISTRATION 242

242 University System of Maryland
242 UMUC

CONTACT INFORMATION 246

246 UMUC Stateside
246 UMUC Europe
247 UMUC Asia

APPENDICES 250

250 Statements on Policies and Procedures
262 UMUC Sites

INDEX 270

DEGREE PLANNING WORKSHEET 279

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 one of the largest selections 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 and community college students.

Excellence
A regionally 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 as well as advanced academic credentials 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 Professional and 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 administrative 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. The Academic Center at Largo houses both the School of Undergraduate Studies and the Graduate School of Management and Technology, as well as all related academic support units. 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 and integrated into 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 administration, cybersecurity, humanities, communication studies, biotechnology, social science, legal studies, environmental management, information systems management, and fire service administration. (A chart of available programs is on pp. 10–11.) Academic minors are available in 38 different areas. All the majors and minors were reviewed and revised in the past year in 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 30 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, gain knowledge to help them advance to a higher level or different specialty in the workplace, or earn a credential that may assist with career advancement while progressing toward the bachelor's degree. (Full descriptions of certificates begin on p. 87.) 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 2010, more than 70 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. 227–29) 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, includ-

ing military service credit and credit by examination (described on pp. 229–32).

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 more than 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. 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.

The School of Undergraduate Studies works in partnership with the Graduate School of Management and Technology to develop accelerated pathways for students who wish to earn their graduate degree at UMUC. Programs with articulated pathways include accounting, business administration, cybersecurity, computer science, English, history, social science, emergency management, and homeland security. More information may be obtained from an academic advisor or the graduate catalog.

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 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 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.

ALLIANCE PARTNERS

UMUC has established alliance agreements with more than 50 community colleges across the United States, including all 16 Maryland community colleges (listed below), all of which are visited regularly by UMUC representatives. More information and a list of out-of-state alliance partners may be found online at *www.umuc.edu/alliances.*

- Allegany College of Maryland
- Anne Arundel Community College
- Baltimore City Community College
- Carroll Community College
- Cecil 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

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.*

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 30 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. That experience is designed to help UMUC graduates develop 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, using the general education and other degree requirements to provide opportunities for students to acquire the knowledge and skills they need to demonstrate the hallmarks of the educated person:

- 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 has the ability to master 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, 2011.

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 (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 course in communication, writing, or speech (3 credits)
All 3-credit COMM, SPCH, and WRTG courses (except 486A and 486B); ENGL 102, 281, 294, 303, 384, and 485; and JOUR 201 apply.

An upper-level advanced writing course (3 credits)
WRTG 391, 393, and 394 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), GRCO, 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 may 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 and ACCT 326 apply. **Note:** Either IFSM 300 or ACCT 326 is required for majors in emergency management, fire service administration, 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. 231). 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 approved 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. 88 Advanced accounting, p. 88 Fraud investigation, p. 94
African American studies		p. 15	
Art		p. 15	Computer graphics and design, p. 90
Art history		p. 15	
Biology		p. 16	
Biotechnology	p. 16		
Business administration	p. 18	p. 19	Business project management, p. 89 Management foundations, p. 98
Business law and public policy		p. 20	
Business supply chain management		p. 20	
Communication studies	p. 21	p. 22	Workplace communications, p. 102
Computer and information science	p. 22		Database design and implementation, p. 92 Object-oriented design and programming, p. 99
Computer networking and security	p. 24		Computer networking, p. 91
Computer science	p. 26		Game development, p. 95
Computing		p. 27	
Criminal justice	p. 28	p. 29	Criminal justice intelligence, p. 91
Customer service management		p. 29	
Cybersecurity	p. 30		Information assurance, p. 97
Digital media and Web technologies	p. 31		Desktop publishing, p. 93 Internet technologies, p. 98 Visual Basic programming, p. 101
East Asian studies	p. 33	p. 34	
Economics		p. 34	
Emergency management	p. 35	p. 36	
English	p. 37	p. 38	
Environmental management	p. 38	p. 39	
Finance	p. 40	p. 41	Financial management, p. 94
Fire service administration	p. 42	p. 44	
Forensics		p. 44	
General studies	p. 45		

PROGRAM CHOICES (continued)

DISCIPLINE	MAJOR	MINOR	CERTIFICATE(S)
Gerontology	p. 45	p. 46	Health issues for the aging adult, p. 96
Global business and public policy	p. 47		
Graphic communication	p. 49		Web design, p. 101
History	p. 50	p. 52	
Homeland security	p. 52	p. 54	
Humanities	p. 54	p. 56	
Human resource management	p. 56	p. 58	Human resource management, p. 96
Information systems management	p. 58		Database management, p. 92 Information management, p. 97 Project management for IT professionals, p. 100 Visual Basic programming, p. 101
International business management		p. 60	
Investigative forensics	p. 60		
Journalism		p. 62	
Laboratory management	p. 62		
Legal studies	p. 64		Paralegal studies, p. 99
Management studies	p. 65		Management foundations, p. 98
Marketing	p. 67	p. 68	
Mathematical sciences		p. 68	
Microbiology		p. 69	
Natural science		p. 69	
Philosophy		p. 69	
Political science	p. 70	p. 71	Terrorism and institutions: Prevention and response, p. 100
Psychology	p. 71	p. 73	Clinical mental health care, p. 90 Human development, p. 96
Social science	p. 73		Applied behavioral and social sciences, p. 89 Diversity awareness, p. 93
Sociology		p. 75	
Spanish			Workplace Spanish, p. 102
Speech communication		p. 75	
Strategic and entrepreneurial management		p. 76	
Women's studies		p. 76	

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

Most majors are available only for the Bachelor of Arts (BA) or the Bachelor of Science (BS) degree. Only two majors are available for either the Bachelor of Technical and Professional Studies (BTPS) or the BS degree. All students with dual majors are awarded the BS degree, regardless of major.

Available for the BA

Communication studies
East Asian studies
English
Graphic communication
History
Humanities

Available for the BS

Accounting
Business administration
Computer and information science
Computer networking and security
Computer science
Criminal justice
Cybersecurity
Digital media and Web technologies
Emergency management
Environmental management
Finance
Fire service administration
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 or BS**

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
Biology
Business administration
Business law and public policy
Business supply chain management
Communication studies
Computing
Criminal justice
Customer service management
East Asian studies
Economics
Emergency management
English
Environmental management
Finance
Fire service administration
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 the required lower-level coursework for the major either within an Associate of Applied Science degree at a community college with which UMUC has an articulation agreement or within another appropriate transfer program. 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.

An articulation agreement between UMUC's School of Undergraduate Studies and Graduate School of Management and Technology allows eligible students who complete their undergraduate degree at UMUC with a major in accounting to reduce their total coursework for the graduate degree by 6 credits (two courses) and complete both degrees with a total of 150 credits of coursework. More information is available in the graduate catalog.

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); ACCT 411 (or BMGT 496); BMGT 364 and 380; 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	Introduction to Research	1
WRTG 101	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 biological and physical sciences lecture and laboratory course(s)*	1
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
Foundation Courses *(to be taken within the first 60 credits)*		
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course*	
◆ STAT 230	Introductory Business Statistics	3
or STAT 200	Introduction to Statistics	
ECON 203	Principles of Microeconomics *(related requirement for the major)*	3
GVPT 170	American Government *or other behavioral and social sciences course (discipline must differ from first)*	3
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
◆ ACCT 310	Intermediate Accounting I	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
◆ ACCT 321	Cost Accounting	3
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	
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
◆ ACCT 411	Ethics and Professionalism in Accounting	3
or BMGT 496	Business Ethics	
◆ ACCT 422	Auditing Theory and Practice	3
WRTG 394	Advanced Business Writing *or other communications/upper-level advanced writing course*	3
◆ ACCT 410	Accounting for Government and Not-for-Profit Organizations *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 433	Audit and Control of Information Technology *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 from the Colonial Era to 1900
ENGL 364	African American Authors from 1900 to the Present
HIST 255	African American History
HIST 460	African American History: 1500 to 1865
HIST 461	African American History: 1865 to the Present
MUSC 436	Jazz: Then and Now
SOCY 423	Minorities in the United States
SOCY 424	Race and Ethnic 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.

BACHELOR'S DEGREE CURRICULA

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 the required lower-level coursework for the biotechnology major—either within an Associate of Applied Science degree program at a community college with which UMUC has an articulation agreement or within another appropriate transfer program—may seek an academic major in biotechnology. Students should consult an advisor before electing this major.

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, 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 degree program at an approved community college or other institution:

- Foundation courses (15 credits): General microbiology (with laboratory), general genetics (with laboratory), biotechnology techniques (with laboratory), or laboratory techniques (with laboratory)
- 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 (15 credits): BIOL 325, 350 (or BIOL 356) and 400 and 6 credits in Co-op internship courses (numbered 486A or 486B) in any discipline related to biotechnology

- Supplemental major course in biological applications (3 credits): Chosen from BIOL 320, 334, and 357 and an additional Co-op internship
- Supplemental major course(s) in specialized topics (3 credits): Chosen from BIOL 328, 356, 360, 362, 398A, 398J, 398K, 398P, 422, 434, and 438 and NSCI 301 (No more than three 1-credit courses may be applied to major.)

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BTPS or BS in biotechnology (if the student selects appropriate courses as part of the transfer coursework). 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 Transfer Institution		
◆ Lower-level coursework in the following areas:		15
General microbiology with lab		
General genetics with lab		
Biotechnology techniques with lab		
Laboratory techniques with lab		
Additional coursework related to biotechnology		17
Selected from biotechnology, biochemistry, cell biology, chemistry, genetics, immunology, microbiology, molecular biology, physics, or virology (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	Introduction to Research	1
WRTG 101	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	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
WRTG 291	Research Writing *or other communications/writing course*	3
GVPT 170	American Government *or other behavioral and social sciences course*	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course*	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	
CMIS 111	Social Computing and Cybersecurity Best Practices *or other interdisciplinary issues/computing course*	3
Required Upper-Level Courses for Major *(to be taken after introductory and general education courses)*		
WRTG 393	Advanced Technical Writing *or other communications/upper-level advanced writing course*	3
◆ BIOL 325	Inquiries in Biological Science	3
◆ BIOL 350	Molecular and Cellular Biology	3
or BIOL 356	Molecular Biology Laboratory	
◆ BIOL 400	Life Science Seminar	3
◆ BIOL 320	Forensic Biology *or other supplemental major course in biological applications*	3
◆ BIOL 328	Bioethics *or other supplemental major course in specialized topics*	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)*		33
Recommended Electives		
ANTH 344	Culture and Language	
BMGT 317	Decision Making	
FINC 331	Finance for the Nonfinancial Manager	
SPCH 482	Intercultural Communication	
Total credits for BS or BTPS in biotechnology		**120**

BACHELOR'S DEGREE CURRICULA

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.

An articulation agreement between UMUC's School of Undergraduate Studies and Graduate School of Management and Technology allows eligible students who complete their undergraduate degree at UMUC with a major in business management to waive the prerequisite course for the graduate degree. More information is available in the graduate catalog.

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 course chosen from ACCT, BMGT, ENMT, FINC, HRMN, or MRKT courses), ACCT 220 and 221, and STAT 230 (or 200)
- Required core courses (21 credits): BMGT 364, 365, 380, and 496; FINC 330; HRMN 300; and MRKT 310
- 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	Introduction to Research	1
WRTG 101	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 an additional business 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 biological and physical sciences lecture and laboratory course(s)*	1
WRTG 291	Research Writing *or other communications/writing course*	3

IFSM 201	Concepts and Applications of Information Technology	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 arts and humanities course*	

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

◆ STAT 230	Introductory Business Statistics	3
or STAT 200	Introduction to Statistics	
GVPT 170	American Government *or other behavioral and social sciences course (discipline must differ from first)*	3
◆ ACCT 221	Principles of Accounting II	3
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
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 arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech 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)*	

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

◆ BMGT 364	Management and Organization Theory	3
WRTG 394	Advanced Business Writing *or other communications/upper-level advanced writing course*	3
◆ BMGT 365	Organizational Leadership	3
◆ MRKT 310	Marketing Principles	3
◆ BMGT 380	Business Law I	3
◆ HRMN 300	Human Resource Management	3
◆ FINC 330	Business Finance	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)*	
WRTG 490	Writing for Managers	

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, FINC, HRMN, 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 380	Business Law I
BMGT 381	Business Law II
BMGT 437	International Business Law
BMGT 482	Advanced Federal Contracting
BMGT 496	Business Ethics
HRMN 408	Employment Law for Business

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 305	Knowledge Management
BMGT 317	Decision Making
BMGT 372	Supply Chain Management
BMGT 375	Purchasing Management
BMGT 487	Project Management I
BMGT 488	Project Management II
MRKT 457	E-Marketing

Students are recommended to take BMGT 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 through 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 an understanding of both 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 33 credits for the major; 41 credits in general education requirements; and 46 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
- Speech communication course (3 credits): Any SPCH course
- Mass communication/media studies course (3 credits): Chosen from COMM 400, 410, and 493 and any JOUR courses
- Diversity communication courses (6 credits): Chosen from COMM 380 and SPCH 324, 472, and 482
- Specialization courses chosen from a single area (9 credits):
  - Professional writing: Chosen from WRTG 393, 394, 489, 490, 493, 494, and 496
  - Speech communication: Chosen from any upper-level SPCH courses
  - Media studies: Chosen from COMM 400 and 493 and any JOUR courses
- Required research methods course (3 credits): COMM 480
- Required capstone course (3 credits): COMM 495

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	Introduction to Research	1
WRTG 101	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)*		
◆ SPCH 100	Foundations of Oral Communication *or any speech course*	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	

WRTG 291	Research Writing *or other communications/writing course*	3
SOCY 100	Introduction to Sociology	
or GVPT 170	American Government *or other behavioral and social sciences course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
Foundation Courses *(to be taken within the first 60 credits)*		
◆ COMM 300	Communication Theory	3
◆ COMM 302	Mass Communication and Media Studies	3
PSYC 100	Introduction to Psychology	3
or BEHS 210	Introduction to Social Sciences *or other behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course (discipline must differ from other humanities course)*	
JOUR 201	Introduction to News Writing *or other communication, writing, or speech course*	3
CMST 310	Fundamentals of Electronic Publishing	3
or CMIS 111	Social Computing and Cybersecurity *or other interdisciplinary issues/computing course*	
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393	Advanced Technical Writing	3
or WRTG 394	Advanced Business Writing *or other communications/upper-level advanced writing course*	
◆ COMM 400	Mass Media Law *or other mass communication course for the major*	3
◆ COMM 380	Language in Social Contexts *or other diversity communication course for the major*	3
◆ SPCH 482	Intercultural Communication *or other diversity communication course for the major*	3
◆ SPCH 324	Communication and Gender *or other specialization course for the major*	3
◆ SPCH 426	Conflict Management *or other specialization course for the major*	3
◆ SPCH 470	Effective Listening *or other specialization course for the major*	3
◆ COMM 480	Research Methods in Communication Studies	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ COMM 495	Senior Seminar in Communication Studies	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 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:

- Introductory course (3 credits): CMIS 111 or CMIS 170
- Programming language sequence (6 credits): Chosen from
  - PC/Java: CMIS 141 and 242
  - Mac/Objective C: CMIS 115 and 215
  - PC/Microsoft: CMIS 125 and 225
- Core courses (6 credits): CMIS 320 and 330
- Supplemental major courses (6 credits): Chosen from CMIS 102 (for students with no prior programming experience), 255, 310, 315, and 325 (**Note:** Students should take CMIS 102 before core courses and may apply it toward the interdisciplinary issues/computing requirement rather than toward the major.)
- 400-level supplemental major courses (6 credits): Chosen from any 400-level CMIS courses (except CMIS 486A and 486B)
- Required capstone course (3 credits): CMSC 495

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	Introduction to Research	1
WRTG 101	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
CMIS 102	Introduction to Problem Solving and Algorithm Design *(fulfills the interdisciplinary issues/computing requirement and prerequisite for later courses)*	3
Introductory Courses *(to be taken within the first 30 credits)*		
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other arts and humanities course*	
◆ CMIS 170	Introduction to XML	3
or CMIS 111	Social Computing and Cybersecurity Best Practices	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
◆ CMIS 115	Programming in Objective-C for the Mac	3
or CMIS 125	Programming in C#	
or CMIS 141	Introductory Programming	
GVPT 170	American Government *or other behavioral and social sciences course*	3
Foundation Courses *(to be taken within the first 60 credits)*		
WRTG 291	Research Writing *or other communications/writing course*	3
◆ CMIS 215	Programming for the iPhone and iPad	3
or CMIS 225	Developing Windows Presentation Foundation Applications Using C#	
or CMIS 242	Intermediate Programming	

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	
◆ CMIS 320	Relational Database Concepts and Applications	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393	Advanced Technical Writing *or other communications/upper-level advanced writing course*	3
◆ CMIS 330	Software Engineering Principles and Techniques *or other supplemental major course*	3
◆ CMIS 310	Computer Systems and Architecture *or other supplemental major course*	3
◆ CMIS 325	UNIX with Shell Programming *or other supplemental major course*	3
◆ CMIS 420	Advanced Relational Database Concepts and Applications *or other 400-level supplemental major course*	3
◆ CMIS 485	Web Database Development *or other 400-level supplemental major course*	3
Capstone Course for Major *(to be taken in the last 15 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)*		46
Recommended Minor		
Computing		
Total credits for BS in computer and information science		**120**

Computer Networking and Security

Students may seek an academic major in computer networking and security.

Major in Computer Networking and Security

The computer networking and security major prepares students to enter or advance in computer networking fields where industry-standard certifications are commonly used to show skills or knowledge level and are considered essential in hiring and promotion decisions. The curriculum focuses on the techniques, policies, operational procedures, and technologies needed to design, implement, administer, secure, and troubleshoot enterprise-level networks. The major prepares students for careers as network managers, systems administrators, and network security analysts. 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. The computer networking and security curriculum integrates technical skill with communication skills, superior general education knowledge, and breadth of knowledge in the information technology field, particularly in networking and security.

Intended Program Outcomes

The student who graduates with a major in computer networking and security 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 networking and security 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 NETWORKING AND SECURITY MAJOR

Coursework for a major in computer networking and security includes the following:

- Required foundation courses (6 credits): CMIT 202 and 265
- Required core courses (9 credits): CMIT 320, 350, and 368
- Supplemental major courses (9 credits): Any upper-level CMIT courses (**Note:** Taking courses within a single topic area—Microsoft, Cisco, or security—is highly recommended.)
- Supplemental computing courses (6 credits): Any CMIS, CMIT, CMSC, CMST, CSIA, and IFSM courses
- Required capstone course (3 credits): CMIT 495

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in computer networking and 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.

Computer Networking and 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	Introduction to Research	1
WRTG 101	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	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other arts and humanities course*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
CMIS 111	Social Networking and Cybersecurity Best Practices *or other interdisciplinary issues/computing course*	3
WRTG 291	Research Writing *or other communications/writing course*	3
◆ CMIT 202	Fundamentals of Computer Troubleshooting	3
GVPT 170	American Government *or other behavioral and social sciences course*	3
Foundation Courses *(to be taken within the first 60 credits)*		
◆ CMIT 265	Fundamentals of Networking	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	
Additional Required Courses *(to be taken after introductory and foundation courses)*		
◆ CMIT 320	Network Security	3
◆ CMIT 350	Interconnecting Cisco Devices	3
◆ CMIT 368	Windows Server Administration	3
WRTG 393	Advanced Technical Writing *or other communications/ upper-level advanced writing course*	3
◆ CMIT 364	Windows Desktop Operating Systems *or other supplemental major course*	3
◆ CMIT 376	Windows Network Infrastructure *or other supplemental major course*	3
◆ CMIT 377	Windows Directory Services Infrastructure *or other supplemental major course*	3
◆ CMIT 378	Windows Server Applications Infrastructure *or other supplemental computing course for the major*	3
◆ CMIT 471	Windows Server Enterprise Administration *or other supplemental computing course for the major*	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ CMIT 495	Current Trends and Projects in Computer Networks and Security	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		43
Recommended Minors		
Computing or English		
Recommended Electives		
IFSM 304	Ethics in Information Technology	
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 networking and security		**120**

BACHELOR'S DEGREE CURRICULA

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.

An articulation agreement between UMUC's School of Undergraduate Studies and Graduate School of Management and Technology allows eligible students who complete their undergraduate degree at UMUC with a major in computer science to reduce their total coursework for the Master of Arts in Teaching by 12 credits (two courses) and complete both degrees with a total of 138 credits of coursework. More information is available in the graduate catalog.

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 19 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): CMIS 141 and 242 and CMSC 150
- Required core courses (9 credits): CMSC 330, 335, and 350
- Supplemental major course (3 credits): CMIS 310, CMIS 330, or CMSC 325
- 400-level supplemental major courses (6 credits): Chosen from any 400-level CMSC courses except CMSC 486A and 486B
- 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	Introduction to Research	1
WRTG 101	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	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	

CMIS 102	Introduction to Problem Solving and Algorithm Design *(fulfills the interdisciplinary issues/computing course and prerequisite for later courses)*	3
GVPT 170	American Government *or other behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other arts and humanities course*	

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

WRTG 291	Research Writing *or other communications/writing course*	3
◆ CMSC 150	Introduction to Discrete Structures	3
◆ CMIS 141	Introductory Programming	3
◆ MATH 141	Calculus II	4
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
◆ CMIS 242	Intermediate Programming	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	

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

WRTG 393	Advanced Technical Writing *or other communications/upper-level advanced writing course*	3
◆ CMSC 330	Advanced Programming Languages	3
◆ CMSC 335	Object-Oriented and Concurrent Programming	3
◆ CMSC 350	Data Structures and Analysis	3
◆ CMIS 310	Computer Systems and Architecture *or other supplemental major course*	3
◆ CMSC 451	Design and Analysis of Computer Algorithms *or other 400-level supplemental major course*	3
◆ CMSC 465	Image and Signal Processing *or other 400-level 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*) 38

Recommended Minors

Computing or mathematics

Recommended Electives

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)*	
EDTP 535	Adolescent Development and Learning Needs *(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**

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.

BACHELOR'S DEGREE CURRICULA

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:

- Introductory course (3 credits): CCJS 100 or CCJS 105
- Required statistics course (3 credits): STAT 200
- Core courses (12 credits): CCJS 340, 345, 380, and 497
- Supplemental major courses (9 credits): Any 3-credit CCJS courses (**Note:** Taking courses within a single topic area—law enforcement, law, corrections, security management, forensics, intelligence, or leadership—is highly recommended.)
- Required capstone course (3 credits): CCJS 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	Introduction to Research	1
WRTG 101	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 behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course*	
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 behavioral and social sciences course (discipline must differ from first)*	

NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or COMM 380	Language in Social Contexts *or other communication, writing, or speech course*	
CMIS 111	Social Computing and Cybersecurity Best Practices	3
or IFSM 304	Ethics in Information Technology *or other interdisciplinary issues/computing course*	
◆ CCJS 340	Law-Enforcement Administration	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 391	Advanced Research Writing *or other communications/upper-level advanced writing course*	3
◆ CCJS 345	Introduction to Security Management	3
◆ CCJS 380	Ethical Behavior in Criminal Justice	3
◆ CCJS 497	Correctional Administration	3
◆ CCJS 341	Criminal Investigation *or other supplemental major course*	3
◆ CCJS 342	Crime Scene Investigation *or other supplemental major course*	3
◆ CCJS 352	Drugs and Crime *or other supplemental major course*	3
Capstone Course for Major *(to be taken in the last 9 credits)*		
◆ CCJS 495	Issues in Criminal Justice	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		46
Recommended Electives		
ANTH 344	Culture and Language	
CCJS 230	Criminal Law in Action	
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 or CCJS 105 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	Decision Making
BMGT 364	Management and Organization Theory
BMGT 375	Purchasing Management
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.

BACHELOR'S DEGREE CURRICULA

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.

An articulation agreement between UMUC's School of Undergraduate Studies and Graduate School of Management and Technology allows eligible students who complete their undergraduate degree at UMUC with a major in cybersecurity to reduce their total coursework for the MS in cybersecurity or cybersecurity policy by 18 credits (three courses). More information is available in the graduate catalog.

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 countermeasures and conduct risk and vulnerability assessments of planned and installed information systems.
- Participate in forensic analysis of cyber incidents 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
- Supplemental major courses (9 credits): Chosen from CCJS 421; CMIT 321, 424, 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	Introduction to Research	1
WRTG 101	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	Concepts and Applications of Information Technology *(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 arts and humanities course*	
Both NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other biological and physical sciences lecture and laboratory course(s)*	1
WRTG 291	Research Writing *or other communications/writing course*	3
GVPT 170	American Government *or other behavioral and social sciences course*	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 behavioral and social sciences course (discipline must differ from first)*	
◆ CSIA 301	Introduction to Cybersecurity	3
◆ IFSM 304	Ethics in Information Technology	3
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
◆ CSIA 302	Telecommunications in Information Systems	3
or CMIT 265	Fundamentals of Networking	
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393	Advanced Technical Writing *or other communications/upper-level advanced writing course*	3
◆ CSIA 303	Foundations of Information System Security	3
◆ CSIA 412	Security Policy Analysis	3
◆ CSIA 413	Security Policy Implementation	3
◆ CMIT 320	Network Security	3
◆ CMIT 424	Advanced Digital Forensics *or other supplemental major course*	3
◆ CSIA 457	Cyberterrorism and Cyber Crime *or other supplemental major course*	3
◆ IFSM 433	Information Security Planning and Needs Assessment *or other supplemental major course*	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ CSIA 485	Practical Applications in Cybersecurity Management	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		43
Recommended Electives *(students should note prerequisites)*		
Courses related to security and cyber crime:		
BMGT 466	Global Business and the Public Sector	
CCJS 390	Cyber Crime and Security	
GVPT 409	Terrorism, Antiterrorism, and Homeland Security	
HMLS 408	Infrastructure in Homeland Security	
HMLS 414	Homeland Security and Intelligence	
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	
Courses for qualified students planning graduate study in cybersecurity or cybersecurity policy at UMUC:		
CSIA 520	Human Aspects in Cybersecurity: Ethics, Legal Issues, and Psychology	
CSIA 530	Prevention and Protection Strategies	
or CSIA 535	National Cybersecurity Policy and Law	
Total credits for BS in cybersecurity		**120**

Digital Media and Web Technologies

Students may seek an academic major in digital media and Web technologies.

Major in Digital Media and Web Technologies

The digital media and Web technologies 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 digital media and Web technologies will be able to

- Design, develop, and manage digital media using current and emerging technologies that adhere to industry standards.
- Analyze needs and effectively manage projects and resources, applying sound business principles and technology.
- 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 digital media and Web technologies 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 DIGITAL MEDIA AND WEB TECHNOLOGIES MAJOR

Coursework for a major in digital media and Web technologies includes the following:

- Foundation courses (6 credits): CMST 290 and 295
- Required core course sequence (6 credits): CMST 385–386 (Web technologies), CMST 341–342 (motion graphics), or CMST 310–311 (digital design)
- Supplemental major courses (15 credits): Chosen from any CMST, CMIS, CMIT, CMSC, CSIA, and IFSM courses (**Note:** Taking courses within a single topic area—Web technologies, motion graphics, or digital design—is highly recommended.)
- Required capstone course (3 credits): CMST 495

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in digital media and Web technologies. 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.

Digital Media and Web Technologies 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	Introduction to Research	1
WRTG 101	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 arts and humanities course*	
IFSM 201	Concepts and Applications of Information Technology	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 biological and physical sciences lecture and laboratory course(s)*	
CMIS 102	Introduction to Problem Solving and Algorithm Design *(fulfills the interdisciplinary issues/computing requirement and prerequisite for later courses)*	3
GVPT 170	American Government *or other behavioral and social sciences course*	3
WRTG 291	Research Writing *or other communications/writing course*	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 behavioral and social sciences course (discipline must differ from first)*	
◆ CMST 295	Fundamentals of Digital Media	3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
◆ CMST 290	Introduction to Interactive Design *or other foundation course for the major*	3
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communications/writing or speech course*	
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393	Advanced Technical Writing *or other communications/upper-level advanced writing course*	3
◆ CMST 385	Principles of Web Design and Technology I	3
or CMST 341	Principles of Multimedia I	
or CMST 310	Fundamentals of Electronic Publishing	
◆ CMST 386	Principles of Web Design and Technology II	3
or CMST 342	Principles of Multimedia II	
or CMST 311	Advanced Electronic Publishing	
◆ CMST 306	Introduction to Visual Basic .NET Programming *or other supplemental major course*	3
◆ CMST 388	Fundamentals of JavaScript *or other supplemental major course*	3
◆ CMST 460	Web Application Development Using ColdFusion *or other supplemental major course*	3
◆ CMST 463	Web Application Development Using PHP/MySQL *or other supplemental major course*	3
◆ CMST 450	Web Development Using XML *or other supplemental major course*	3
Capstone Course for Major *(to be taken in the last 9 credits)*		
◆ CMST 495	Current Trends and Projects in Digital Media and Web Technology	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		46
Recommended Minor		
Business administration		
Recommended Electives		
CMIS 111	Social Networking and Cybersecurity Best Practices	
IFSM 304	Ethics in Information Technology	
WRTG 490	Writing for Managers	
Total credits for BS in digital media and Web technologies		**120**

East Asian Studies

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

Major in East Asian Studies

The East Asian studies major provides an interdisciplinary overview of the history, economics, politics, culture, and languages of the East Asian region, including China, Korea, and Japan. It examines the region's rich past and continuing contributions to the global community. The curriculum emphasizes an understanding of East 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 East 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 East Asia.
- Use knowledge of East 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 East Asians and others.
- Apply knowledge of East 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 East Asian language, integrating interpersonal skills and cultural knowledge.

Degree Requirements

A degree with a major in East 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 EAST ASIAN STUDIES MAJOR

Coursework for a major in East Asian studies includes the following:

- Required foundation courses (6 credits): ASTD 284 and 285
- Required Asian language sequence (9 credits): Either JAPN 111, 112, and 114; KORN 111, 112, and 114; or CHIN 111, 112, and 114
- Required intercultural communication course (3 credits): SPCH 482
- Supplemental major courses (9 credits): Chosen from ANTH 417; PHIL 348; or any upper-level ASTD, JAPN, KORN, Asian HIST, or Asian GVPT courses
- Required capstone course (3 credits): ASTD 485

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BA in East 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.

East 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	Introduction to Research	1
WRTG 101	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 arts and humanities course*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3

◆ ASTD 284	Foundation of East Asian Civilization	3
GVPT 170	American Government *or other behavioral and social sciences course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
Foundation Courses *(to be taken within the first 60 credits)*		
◆ JAPN 111	Elementary Japanese I	3
or CHIN 111	Elementary Chinese I *or other first Asian language course for the major*	
ANTH 102	Introduction to Cultural Anthropology *or other behavioral and social sciences course (discipline must differ from first)*	3
◆ ASTD 285	Introduction to Modern East Asia	3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 141	Western Civilization I	3
or HIST 142	Western Civilization II *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
◆ JAPN 112	Elementary Japanese II	3
or CHIN 112	Elementary Chinese II *or other second Asian language course for the major*	
CMIS 111	Social Computing and Cybersecurity Best Practices *or other interdisciplinary issues/computing course*	3
SPCH 100	Foundations of Oral Communication	3
or COMM 380	Language in Social Contexts *or other communication, writing, or speech course*	
◆ JAPN 114	Elementary Japanese III	3
or CHIN 114	Elementary Chinese III *or other third Asian language course for the major*	
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 391	Advanced Research Writing *or other communications/upper-level advanced writing course*	3
◆ PHIL 348	Religions of the East *or other supplemental major course*	3
◆ HIST 481	History of China from the Opium War to Deng Xioping *or other supplemental major course*	3
◆ HIST 483	History of Japan Since the Late Edo Period *or other supplemental major course*	3
◆ SPCH 482	Intercultural Communication	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 East Asian studies		**120**

Minor in East Asian Studies

The East 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 East Asian studies requires the completion of 15 credits of coursework in East Asian studies, which must include ASTD 284 and 285. Courses allowable for the major in East 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.

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.

An articulation agreement between UMUC's School of Undergraduate Studies and Graduate School of Management and Technology allows eligible students who complete their undergraduate degree at UMUC with a major in emergency management to reduce their total coursework for the graduate degree by 12 credits and complete both degrees with a total of 144 credits of coursework. More information is available in the graduate catalog.

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 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 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): EMGT 308, CSIA 457, CSIA 459, IFSM 432, or IFSM 433
- Supplemental major course in operations management (3 credits): EMGT 310, BMGT 466, or ENMT 310
- Supplemental major course in planning and response (3 credits): EMGT 404 or HMLS 302
- Supplemental major course in terrorism (3 credits): EMGT 314, GVPT 406, or GVPT 407
- 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 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	Introduction to Research	1
WRTG 101	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 behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course *or other arts and humanities course*		

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

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
◆ EMGT 302	Concepts of Emergency Management	3
WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	3
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)*	
◆ EMGT 304	Emergency Response Preparedness and Planning	3

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

WRTG 394	Advanced Business Writing *or other communications/upper-level advanced writing course*	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
◆ EMGT 308	Exercise and Evaluation Programs *or other supplemental major course in needs and issues*	3
◆ EMGT 310	Continuity of Operations Planning and Implementation *or other supplemental major course in operations management*	3
◆ EMGT 404	Planning and Response for Catastrophic Disasters *or other supplemental major course in planning and response*	3
◆ EMGT 314	Terrorism Issues in Emergency Management *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)* 46

Recommended Electives

STAT 200	Introduction to Statistics *(students should note prerequisite)*	
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.

An articulation agreement between UMUC's School of Undergraduate Studies and Graduate School of Management and Technology allows eligible students who complete their undergraduate degree at UMUC with a major in English to reduce their total coursework for the Master of Arts in Teaching by 12 credits (two courses) and complete both degrees with a total of 138 credits of coursework. More information is available in the graduate catalog.

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 in order 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 courses (6 credits): ENGL 240 and 303
- Historical background courses (9 credits): Chosen from ENGL 309, 310, 311, 312, and 386
- Period course (3 credits): ENGL 345, 425, 430, 433, 441, 457, or 459
- Major authors courses (9 credits): Chosen from ENGL 363, 364, 406, 434, 439, and 454
- Supplemental major course (3 credits): Any ENGL course or WRTG 387
- Required capstone course (3 credits): ENGL 495

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	Introduction to Research	1
WRTG 101	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 arts and humanities course*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3
GVPT 170	American Government *or other behavioral and social sciences course*	3
IFSM 201	Concepts and Applications of Information Technology	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 behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
◆ ENGL 240	Introduction to Fiction, Poetry, and Drama	3
CMIS 111	Social Computing and Cybersecurity Best Practices *or other interdisciplinary issues/computing course*	3
SPCH 100	Foundations of Oral Communication	3
or COMM 380	Language in Social Contexts *or other communication, writing, or speech course*	
◆ ENGL 303	Critical Approaches to Literature	3

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

WRTG 391	Advanced Research Writing *or other communications/upper-level advanced writing course*	3
◆ ENGL 309	Medieval Literature *or other historical background course for the major*	3
◆ ENGL 310	Renaissance Literature *or other historical background course for the major*	3
◆ ENGL 311	17th- and 18th-Century British Literature *or other historical background course for the major*	3
◆ ENGL 425	20th-Century British Literature *or other period course for the major*	3
◆ ENGL 364	African American Authors from 1900 to the Present *or other major authors course for the major*	3
◆ ENGL 406	Seminar in Shakespeare Studies *or other major authors course for the major*	3
◆ ENGL 454	Modern World Drama *or other major authors course for the major*	3
◆ ENGL 481	Seminar in Creative Writing: Fiction and Creative Nonfiction *or other supplemental major course*	3

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

◆ ENGL 495	Advanced Seminar in English Language and Literature	3

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

Recommended Electives

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)*	
EDTP 535	Adolescent Development and Learning Needs *(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 (18 credits): ENMT 301, 303, 321, 322 (or 405), 340, and 390
- Required statistics course (3 credits): STAT 200 or 230
- Supplemental major courses (6 credits): Any ENMT courses
- Required capstone course (3 credits): ENMT 495
- Required related courses (9 credits), which may be applied anywhere in the degree: BIOL 301, CHEM 297, and MATH 115 (or MATH 107–108)

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	Introduction to Research	1
WRTG 101	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)*		
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	

IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
GVPT 170	American Government *or other behavioral and social sciences course*	3
CHEM 297	Environmental Chemistry *(related requirement for the major and prerequisite to major courses; fulfills the biological and physical sciences lecture requirement)*	3
WRTG 291	Research Writing *or other communications/writing course*	3
◆ STAT 230	Introductory Business Statistics	3
or STAT 200	Introduction to Statistics	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course*	

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

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	3
IFSM 300	Information Systems in Organizations *or other interdisciplinary issues/computing course*	3
BIOL 301	Human Health and Disease *(related requirement for the major and prerequisite to major courses)*	3
◆ ENMT 301	Environment and Ecosystems Management	3

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

WRTG 394	Advanced Business Writing *or other communications/upper-level advanced writing course*	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 390	Environmental Health Risk Assessment	3
◆ ENMT 315	Environmental Audits and Permits *or other supplemental major course*	3
◆ ENMT 380	Air Quality Management *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)* 43

Recommended Electives

ANTH 344	Culture and Language
CMIS 111	Social Computing and Cybersecurity Best Practices
WRTG 490	Writing for Managers

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 monetary systems' 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 (12 credits): ACCT 220 and 221, STAT 230 (or 200), and BMGT 364
- Required core courses (6 credits): FINC 330 and 340
- Supplemental major courses (15 credits): Chosen from any FINC courses (except FINC 321 and 322) and ECON 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	Introduction to Research	1
WRTG 101	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 biological and physical sciences lecture and laboratory course(s)*	1
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course*	

Foundation Courses *(to be taken within the first 60 credits)*		
◆ STAT 230	Introductory Business Statistics	3
or STAT 200	Introduction to Statistics	
GVPT 170	American Government *or other behavioral and social sciences course (discipline must differ from first)*	3
◆ ACCT 221	Principles of Accounting II	3
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
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 arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech 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)*	
◆ BMGT 364	Management and Organization Theory	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
◆ FINC 330	Business Finance	3
◆ FINC 340	Investments	3
WRTG 394	Advanced Business Writing *or other communications/upper-level advanced writing course*	3
◆ ECON 430	Money and Banking *or other supplemental major course*	3
◆ FINC 430	Financial Management *or other supplemental major course*	3
◆ FINC 440	Security Analysis and Valuation *or other supplemental major course*	3
◆ FINC 421	Financial Analysis *or other supplemental major course*	3
◆ FINC 460	International Finance *or other supplemental major course*	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)*		34
Recommended Minors		
Human resource management, marketing, or other business-related minor		
Recommended Electives		
BMGT 392	Global Business	
BMGT 496	Business Ethics	
WRTG 490	Writing for Managers	
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 Service Administration

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

Major in Fire Service Administration

The major in fire service administration 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 service administration 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 service administration 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 SERVICE ADMINISTRATION MAJOR

Coursework for a major in fire service administration includes the following:

- Required core courses (18 credits): FSCN 302, 304, 305, 412, 415, and 416
- Supplemental major courses (9 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 service 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.

Fire Service 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	Introduction to Research	1
WRTG 101	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 behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course*	
Foundation Courses *(to be taken within the first 60 credits)*		
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
◆ FSCN 302	Fire and Emergency Services Administration	3
WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	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
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 394	Advanced Business Writing *or other communications/upper-level advanced writing course*	3
◆ FSCN 305	Fire-Prevention Organization and Management	3

◆ FSCN 412	Political and Legal Foundations of Fire Protection	3
◆ FSCN 415	Application of Fire Research	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*	
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)*		46
Recommended Electives		
CMIS 111	Social Networking and Cybersecurity	
IFSM 304	Ethics in Information Technology	
STAT 200	Introduction to Statistics	
WRTG 490	Writing for Managers	
Total credits for BS in fire service administration		**120**

Minor in Fire Service Administration

The fire service administration 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 service administration requires the completion of 15 credits of coursework in fire service administration. All FSCN courses apply. It is recommended that students take FSCN 302 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. 60).

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 101 and 234 as the first courses 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

- Communicate effectively, both orally and in writing, with individuals and groups to convey ideas and knowledge and to establish professional competency.
- Develop the skills and competencies required for sustainable professional success.
- Use appropriate resources to research and critically analyze real-world situations.
- Cultivate an awareness of one's changing relationship to diverse social, historical, and cultural contexts.
- Understand and apply key concepts from chosen disciplines.

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, or 460 or BEHS 380
- Supplemental major courses (6 credits): Any GERO courses
- Required internship (3 credits): GERO 486A

BACHELOR'S DEGREE CURRICULA

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	Introduction to Research	1
WRTG 101	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
BEHS 210	Introduction to Social Sciences *or other behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course*	
Foundation Courses *(to be taken within the first 60 credits)*		
◆ GERO 220	Psychological Aspects of Aging	3
or PSYC 357	Adulthood and Aging	
◆ STAT 225	Introduction to Statistics for the Behavioral Sciences	3
or STAT 200	Introduction to Statistics	
or STAT 230	Introductory Business Statistics	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or COMM 380	Language in Social Contexts *or other communication, writing, or speech course*	
CMIS 111	Social Networking and Cybersecurity Best Practices *or other interdisciplinary issues/computing course*	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)*		
◆ GERO 301	Service/Program Management	3
or BMGT 361	Health Management	
◆ GERO 306	Programs, Services, and Policies	3
WRTG 391	Advanced Research Writing *or other communications/upper-level advanced writing course*	3
◆ GERO 338	Health Promotion in Older Adults *or other health-related course for the major*	3
◆ GERO 311	Gender 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
Practicum 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)*		46
Recommended Electives		
ANTH 344	Culture and Language	
SPCH 482	Intercultural Communication	
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.

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 (9 credits): BMGT 392, 456, and 482
- Supplemental major courses (12 credits): Chosen from ACCT 425; BMGT 307, 437, and 466; ECON 440; 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.

BACHELOR'S DEGREE CURRICULA

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	Introduction to Research	1
WRTG 101	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 biological and physical sciences lecture and laboratory course(s)*	1
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course*	
Foundation Courses *(to be taken within the first 60 credits)*		
STAT 230	Introductory 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 arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
◆ 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	Advanced Business Writing *or other communications/upper-level advanced writing course*	3
BMGT 380	Business Law I *(related requirement for the major)*	3
◆ FINC 330	Business Finance	3
◆ BMGT 392	Global Business	3
◆ MRKT 454	Global Marketing *or other supplemental major course*	3
◆ FINC 460	International Finance *or other supplemental major course*	3
◆ BMGT 466	Global Business and the Public Sector *or other supplemental major course*	3
◆ BMGT 456	Managing Across Cultures and Borders	3
◆ BMGT 482	Advanced Federal Contracting	3
◆ BMGT 307	Import and Export: Managing Global Trade *or other supplemental major course*	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		28
Recommended Electives		
BMGT 496	Business Ethics	
WRTG 490	Writing for Managers	
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 17 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 introductory courses (9 credits): ARTT 110 and 120 and GRCO 100
- Required foundation courses (6 credits): ARTT 210 and GRCO 230
- Required core courses (12 credits): ARTH 375, GRCO 350 and 354, and MRKT 310
- Supplemental major course (3 credits): Any ARTT or GRCO course
- Required capstone course (3 credits): GRCO 495

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	Introduction to Research	1
WRTG 101	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ GRCO 100	Introduction to Graphic Communication	3
Introductory Courses *(to be taken within the first 30 credits)*		
PHIL 140 *or* a foreign language course	Contemporary Moral Issues *or other arts and humanities course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
GVPT 170	American Government *or other behavioral and social sciences course*	3
◆ ARTT 110	Drawing and Design	3
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
Foundation Courses *(to be taken within the first 60 credits)*		
◆ ARTT 120	Two-Dimensional Design	3
PSYC 100	Introduction to Psychology	3
or BEHS 210	Introduction to Social Sciences *or other behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	

◆ ARTT 210	Drawing	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
CMST 385	Principles of Web Design and Technology I *(Fulfills the interdisciplinary issues/computing requirement; prerequisite for later courses)*	3
SPCH 100	Foundations of Oral Communication	3
or ENGL 281	Standard English Grammar, Usage, and Diction *or other communication, writing, or speech course*	
◆ GRCO 230	Typography	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
◆ ARTH 375	History of Graphic Art	3
WRTG 391	Advanced Research Writing *or other communications/upper-level advanced writing course*	3
◆ MRKT 310	Marketing Principles	3
◆ GRCO 350	Commercial Design	3
◆ GRCO 354	Digital Media	3
◆ GRCO 458	Illustration	3
or GRCO 479	Motion Graphics *or other supplemental course for the major*	
Capstone Course for Major *(to be taken after all other courses for the major)*		
◆ GRCO 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.

An articulation agreement between UMUC's School of Undergraduate Studies and Graduate School of Management and Technology allows eligible students who complete their undergraduate degree at UMUC with a major in history to reduce their total coursework for the Master of Arts in Teaching by 12 credits (two courses) and complete both degrees with a total of 138 credits of coursework. More information is available in the graduate catalog.

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 foundation course (3 credits): HIST 289
- 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 or HIST 141–142
- U.S. distribution course (3 credits): HIST 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 341, 342, 353, 354, 382, 383, 389, 392, 464, 465, 466, 480, 481, 482, 483, or 485
- Supplemental major course (3 credits): Any upper-level HIST course
- Required capstone course (3 credits): HIST 495

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	Introduction to Research	1
WRTG 101	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 arts and humanities course*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3
◆ HIST 115	World History I	3
or HIST 141	Western Civilization I *or other first course in required world history sequence for the major*	
GVPT 170	American Government *or other behavioral and social sciences course*	3
IFSM 201	Concepts and Applications of Information Technology	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)*		
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
◆ HIST 156	History of the United States to 1865	3
ARTH 372	History of Western Art I *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	3
SPCH 100	Foundations of Oral Communication	3
or COMM 380	Language in Social Contexts *or other communication, writing, or speech course*	
CMIS 111	Social Networking and Cybersecurity Best Practices *or other interdisciplinary issues/computing course*	3
◆ HIST 157	History of the United States Since 1865	3
◆ HIST 289	Historical Methods	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 391	Advanced Research Writing *or other communications/upper-level advanced writing course*	3
◆ HIST 309	Historical Writing	3
◆ HIST 364	Emergence of Modern America: 1900 to 1945 *or other U.S. distribution course for the major*	3
◆ HIST 337	Europe's Bloodiest Century *or other European distribution course for the major*	3
◆ HIST 481	History of China from the Opium War to Deng Xioping	3
or HIST 483	History of Japan Since the Late Edo Period *or other world regions distribution course for the major*	
◆ HIST 465	World War II *or other supplemental major course*	3
Capstone Course for Major *(to be taken after all other courses for the major)*		
◆ HIST 495	Senior Thesis in History	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		43
Recommended Electives		
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)*	
EDTP 535	Adolescent Development and Learning Needs *(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 289 as the first course in the minor and 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.

An articulation agreement between UMUC's School of Undergraduate Studies and Graduate School of Management and Technology allows eligible students who complete their under graduate degree at UMUC with a major in homeland security to reduce their total coursework for the graduate degree by 12 credits (four courses) and complete both degrees with a total of 144 credits of coursework. More information is available in the graduate catalog.

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 416
- Supplemental major course in technology (3 credits): Chosen from BIOL 422, CSIA 302 and 303, ENMT 321, FSCN 303, and HMLS 310
- Supplemental major course in operations (3 credits): Chosen from BMGT 466; EMGT 302, 308, 310, and 404; HMLS 312; and IFSM 432
- Supplemental major course in intelligence (3 credits): Chosen from CCJS 390, 412, and 413; CSIA 459; GVPT 408 and 409; and HMLS 414
- 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	Introduction to Research	1
WRTG 101	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 behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course *or other arts and humanities course*		
Foundation Courses *(to be taken within the first 60 credits)*		
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
◆ HMLS 302	Introduction to Homeland Security	3
WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	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
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 394	Advanced Business Writing *or other communications/upper-level advanced writing course*	3
◆ HMLS 406	Legal and Political Issues of Homeland Security	3
◆ HMLS 408	Infrastructure in Homeland Security	3
◆ HMLS 416	Homeland Security and International Relations	3
◆ HMLS 310	Homeland Security Response to Critical Incidents *or other supplemental major course in technology*	3
◆ HMLS 312	Technology in Homeland Security *or other supplemental major course in operations*	3
◆ HMLS 414	Homeland Security and Intelligence *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)*		46
Recommended Electives		
CMIS 111	Social Computing and Cybersecurity Best Practices	
EMGT 310	Continuity of Operations Planning and Implementation *(may meet requirements for certain graduate degree programs at UMUC)*	
STAT 200	Introduction to Statistics	
WRTG 490	Writing for Managers	
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 introductory course (3 credits): HUMN 100
- Required foundation courses (12 credits): ARTT 205, HIST 115–116 (or HIST 141–142), and PHIL 140
- Core courses (12 credits): ARTH 372 (or ARTH 373), an upper-level ENGL course, and two upper-level courses designated HUMN and/or PHIL
- Supplemental major course (3 credits): Any upper-level ARTT, ARTH, GRCO, HUMN, MUSC, PHIL, or THET 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	Introduction to Research	1
WRTG 101	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)*		
ENGL 240	Introduction to Fiction, Poetry, and Drama *or other arts and humanities course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
◆ HUMN 100	Introduction to the Humanities	3
GVPT 170	American Government *or other behavioral and social sciences course*	3
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
Foundation Courses *(to be taken within the first 60 credits)*		
◆ HIST 115	World History I	3
or HIST 141	Western Civilization I	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
◆ HIST 116	World History II	3
or HIST 142	Western Civilization II	
HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	3
CMIS 111	Social Networking and Cybersecurity Best Practices *or other interdisciplinary issues/computing course*	3
◆ PHIL 140	Contemporary Moral Issues	3
SPCH 100	Foundations of Oral Communication	3
or ENGL 281	Standard English Grammar, Usage, and Diction *or other communication, writing, or speech course*	
◆ ARTT 205	Art Appreciation	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 391	Advanced Research Writing *or other communications/upper-level advanced writing course*	3
◆ ARTH 372	History of Western Art I	3
or ARTH 373	History of Western Art II *(arts breadth course for the major)*	
◆ ENGL 433	Modern American Literature: 1914–1945 *or other upper-level ENGL core course for the major*	3
◆ HUMN 351	Myth in the World *or other PHIL or HUMN core course for the major*	3
◆ PHIL 336	Ideas Shaping the 21st Century *or other PHIL or HUMN core 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 and related disciplines. 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 humanities-related 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, nonprofit, 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, reflective practices, and ethical leadership skills that drive learning and self-improvement to develop strategic competencies and position the organization competitively.
- 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.
- Develop, implement, and assess training, development, and total rewards programs that foster employee and organizational learning and development.
- 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, and interpret data and effectively communicate information in a professional manner that educates and influences others.

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 (12 credits): BMGT 110 (or BMGT 364), ACCT 301 (or ACCT 221), FINC 331, and MKTG 310
- Required core courses (18 credits): HRMN 300, 362, 395, 400, 406, and 408
- Supplemental major courses (3 credits): Chosen from any HRMN courses or BMGT 365, 465, and 484
- Required capstone course (3 credits): HRMN 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 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	Introduction to Research	1
WRTG 101	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)*		
◆ BMGT 110	Introduction to Business and Management	3
or BMGT 364	Management and Organization Theory *(for students with business experience)*	
ECON 201	Principles of Macroeconomics	3
or ECON 203	Principles of Microeocnomics *or other behavioral and social sciences course*	
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other biological and physical sciences lecture and laboratory course(s)*	1
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course*	
Foundation Courses *(to be taken within the first 60 credits)*		
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (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 biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (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 Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	
◆ MRKT 310	Marketing Principles	3
◆ FINC 331	Finance for the Nonfinancial Manager	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 394	Advanced Business Writing *or other communications/upper-level advanced writing course*	3
◆ HRMN 300	Human Resource Management	3
◆ HRMN 362	Labor Relations	3
◆ HRMN 395	The Total Rewards Approach to Compensation Management	3
◆ HRMN 400	Human Resource Management: Issues and Problems	3
◆ HRMN 406	Employee Training and Development	3
◆ HRMN 408	Employment Law for Business	3
◆ HRMN 302	Organizational Communication	3
or HRMN 367	Organizational Culture *or other supplemental major course*	

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)*		40
Recommended Minors		
Business administration, finance, or other business-related minor		
Recommended Electives		
BMGT 365	Organizational Leadership	
BMGT 465	Organizational Development and Transformation	
BMGT 484	Managing Teams in Organizations	
HRMN 342	Organizational Communication	
HRMN 365	Conflict Management in Organizations	
HRMN 392	Stress Management in the Workplace	
STAT 200	Introduction to Statistics	
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 with 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 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 INFORMATION SYSTEMS MANAGEMENT MAJOR

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

- Required foundation courses (12 credits): IFSM 300, 301, 304, and 310
- Core courses (15 credits): CMIS 320; CSIA 302; and IFSM 311, 438, and 461
- Supplemental major courses (3 credits): Any upper-level CMIS, CMIT, CMSC, CMST, CSIA, or IFSM courses
- Required capstone course (3 credits): IFSM 495
- Required related courses (6 credits), which may be applied anywhere in the degree: CMIS 102 (or programming language course) and IFSM 201

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	Introduction to Research	1
WRTG 101	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 *or another programming language course (related requirement for the major)*	3
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other arts and humanities course*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
IFSM 201	Concepts and Applications of Information Technology *(related requirement for the major; also fulfills the interdisciplinary issues/computing requirement)*	3
WRTG 291	Research Writing *or other communications/writing course*	3
GVPT 170	American Government *or other behavioral and social sciences course*	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 behavioral and social sciences course (discipline must differ from first)*	
◆ IFSM 300	Information Systems in Organizations	3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
◆ IFSM 301	Foundations of Enterprise and Information Systems	3
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	
◆ IFSM 304	Ethics in Information Technology	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393	Advanced Technical Writing *or other communications/upper-level advanced writing course*	3
◆ IFSM 310	Software and Hardware Infrastructure Concepts	3
◆ CSIA 302	Telecommunication in Information Systems	3
◆ CMIS 320	Relational Database Concepts and Applications	3
◆ IFSM 311	Enterprise Architecture and Systems	3
◆ IFSM 438	Information Systems Project Management	3
◆ IFSM 461	Systems Analysis and Design	3
◆ IFSM 432	Business Continuity Planning *or other supplemental major course*	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ IFSM 495	Current Issues and Trends in Information Systems Management	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		43
Recommended Minors		
Computing, business administration, psychology, or marketing		
Recommended Electives		
ANTH 344	Culture and Language	
MATH 140	Calculus I *(for students who plan to go on to graduate school; students should note prerequisites)*	
WRTG 490	Writing for Managers	
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. Courses that meet core and supplemental course requirements in the global business and public policy 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 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. 44).

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 35 credits for the major; 41 credits in general education requirements; and 44 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 INVESTIGATIVE FORENSICS MAJOR

Coursework for a major in investigative forensics includes the following:

- Required foundation courses (20 credits): CCJS 101, 234, 301, 302, and 342 and STAT 200
- Specialization courses (15 credits) chosen from a single area:
  - Scientific specialization as follows:
    - Required core courses (6 credits): CCJS 420 and 461
    - Applied discipline courses (6 credits): Chosen from CCJS 486A, CCJS 486B, BIOL 331, BIOL 356, or any courses designated as forensic lab science
    - Supplemental major course (3 credits): ANTH 351, BIOL 160, BIOL 320, BIOL 350, BIOL 356, FSCN 414, or any chemistry, forensic science, or physics course
  - Digital specialization, as follows:
    - Required core courses (6 credits): CCJS 390 and 421
    - Applied discipline courses (6 credits): Chosen from CCJS 414, CMIT 424, CSIA 303, CSIA 413, or IFSM 300
    - Supplemental major course (3 credits): Chosen from any CSIA or IFSM courses
- Required related course (3 credits): 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	Introduction to Research	1
WRTG 101	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)*		
◆ CCJS 101	Introduction to Investigative Forensics	3
GVPT 170	American Government *or other behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
◆ CCJS 234	Criminal Procedure and Evidence	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course *or other arts and humanities course*		
Foundation Courses *(to be taken within the first 60 credits)*		
CMIS 111	Social Networking and Cybersecurity Best Practices *or other interdisciplinary issues/computing course*	3
◆ STAT 200	Introduction to Statistics	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science *or other biological and physical sciences lecture course*	3
◆ CCJS 301	Criminalistics I: The Comparative Disciplines	4
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication *or other communication, writing, or speech course*	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393	Advanced Technical Writing *(related requirement for the major; also fulfills the communications/upper-level advanced writing requirement)*	3
◆ CCJS 302	Criminalistics II: The Scientific Disciplines	4
◆ CCJS 342	Crime Scene Investigation	3
◆ CCJS 390	Cyber Crime and Security	3
or CCJS 420	Medical and Legal Investigations of Death	
◆ CCJS 421	Computer Forensics	3
or CCJS 461	Psychology of Criminal Behavior	
◆ CCJS 414	Intelligence Analysis	3
or CCJS 486A	Internship in Criminal Justice Through Co-op	
◆ IFSM 300	Information Systems in Organizations	3
or BIOL 331	Concepts in Microbiology	
◆ CSIA 303	Introduction to Cybersecurity	3
or ANTH 351	Anthropology in Forensic Investigations *or other specialization course for the major*	
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		41
Recommended Minors		
Biology (for scientific specialization)		
Computing (for digital specialization)		
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 the required lower-level coursework for the laboratory management major—either within an Associate of Applied Science degree program at a community college with which UMUC has an articulation agreement or within another appropriate transfer program—may seek an academic major in laboratory management. Students should consult an advisor before electing this major.

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, 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 degree program at an approved community college or other institution:

- 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 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 325, BMGT 364, FINC 331, and NSCI 301
- Supplemental major course (3 credits): Chosen from BMGT 317 and 487; BIOL 400; COMM 300; 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 or the BS in laboratory management (if the student selects appropriate courses as part of the transfer coursework). 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 Transfer Institution		
◆ Lower-level coursework in biology, biochemistry, biotechnology, chemistry, microbiology, and molecular biology		15
Additional required science coursework *(should also fulfill requirements in biological and physical sciences)*		14
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	Introduction to Research	1
WRTG 101	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	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
WRTG 291	Research Writing *or other communications/writing course*	3
GVPT 170	American Government *or other behavioral and social sciences course*	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course*	
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 behavioral and social sciences course (discipline must differ from first)*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	
CMIS 111	Social Networking and Cybersecurity Best Practices *or other interdisciplinary issues/computing course*	3
Required Upper-Level Courses for Major *(to be taken after introductory and foundation courses)*		
WRTG 393	Advanced Technical Writing *(related requirement for the major; also fulfills the communications/upper-level advanced writing requirement)*	3
◆ BIOL 325	Inquiries in Biological Science	3
◆ BMGT 364	Management and Organization Theory	3
◆ FINC 331	Finance for the Nonfinancial Manager	3
◆ NSCI 301	Laboratory Organization and Management	3

◆ BMGT 317	Decision Making *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)*		33
Total credits for BS or 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 be a cooperative and self-reliant 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.

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
- Required gateway skills course (3 credits): LGST 300 and 301
- Substantive and procedural foundation courses (9 credits): Chosen from LGST 312, 320, 322, 325, 330, and 340
- Substantive law course (3 credits): LGST 315, 316, 327, 335, 343, 350, 411, 415, 420, 442, or 450 or any three 1-credit LGST courses
- Senior experience course (3 credits): LGST 425, 460, 470, or 486A/B

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	Introduction to Research	1
WRTG 101	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 arts and humanities course*	
GVPT 170	American Government *or other behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3

IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
CCJS 100	Introduction to Criminal Justice	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (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 arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	
◆ LGST 101	Introduction to Law	3
◆ LGST 200	Techniques of Legal Research	3
◆ LGST 201	Legal Writing	3
◆ LGST 204	Legal Ethics	3
CMIS 111	Social Networking and Cybersecurity Best Practices *or other interdisciplinary issues/computing course*	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 394	Advanced Business Writing *or other communications/upper-level advanced writing course*	3
◆ LGST 300	Advanced Legal Research and Analysis	3
◆ LGST 301	Advanced Legal Writing	3
◆ LGST 312	Torts *or other substantive and procedural foundation course for the major*	3
◆ LGST 320	Criminal Law and Procedures *or other substantive and procedural foundation course for the major*	3
◆ LGST 325	Litigation *or other substantive and procedural foundation course for the major*	3
◆ LGST 450	Bankruptcy Law *or other substantive law course*	3
Senior Experience Course for the Major *(to be taken in the last 15 credits)*		
◆ LGST 425	Advanced Advocacy *or other senior experience course*	3
Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		43
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 (or ACCT 301), HRMN 302, and STAT 230
- Required core courses (9 credits): BMGT 364, 365, and 464 (or 465)
- Supplemental major courses (12 credits): Any ACCT, BMGT, ENMT, FINC, HRMN, and MRKT courses

BACHELOR'S DEGREE CURRICULA

- Required capstone course (3 credits) BMGT 485
- Required related courses (6 credits), which may be applied anywhere in the degree: IFSM 300 (or ACCT 326) and ECON 201 (or 203)

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	Introduction to Research	1
WRTG 101	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	3
or ECON 203	Principles of Microeconomics *(related requirement for the major; also fulfills the behavioral and social sciences requirement)*	
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other biological and physical sciences lecture and laboratory course(s)*	1
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course*	
Foundation Courses *(to be taken within the first 60 credits)*		
◆ STAT 230	Introductory Business Statistics	3
or STAT 200	Introduction to Statistics	
GVPT 170	American Government *or other behavioral and social sciences course (discipline must differ from first)*	3
◆ ACCT 220	Principles of Accounting I	3
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech 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 prerequisites)*	
◆ HRMN 302	Organizational Communication	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 394	Advanced Business Writing *or other communications/upper-level advanced writing course*	3
◆ BMGT 364	Management and Organization Theory	3
◆ BMGT 365	Organizational Leadership	3
◆ BMGT 464	Organizational Behavior	3
or BMGT 465	Organizational Development and Transformation	
◆ 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 317	Decision Making *or other supplemental major course*	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ BMGT 485	Leadership for the 21st Century	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 301 (or 221); BMGT 364, 380, and 496; and STAT 230
- Required marketing courses (12 credits): MRKT 310, 354, 410, and 412
- 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	Introduction to Research	1
WRTG 101	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 biological and physical sciences lecture and laboratory course(s)*	1
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
◆ STAT 230	Introductory Business Statistics	3

PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other arts and humanities course	
Foundation Courses *(to be taken within the first 60 credits)*		
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (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 Oral Communication	3
or WRTG 293	Introduction to Professional Writing *or other communication, writing, or speech course*	
◆ 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	Advanced Business Writing *or other communications/upper-level advanced writing course*	3
◆ BMGT 380	Business Law I	3
◆ MRKT 354	Integrated Marketing Communications	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 *or other supplemental major course*	3
◆ MRKT 412	Marketing Research	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ MRKT 495	Strategic Marketing Management	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 302	Bacteria, Viruses, and Health
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 and GVPT 101 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.

BACHELOR'S DEGREE CURRICULA

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 courses (6 credits): GVPT 100 and 101
- Required statistics course: (3 credits): STAT 200
- Core courses (9 credits): GVPT 170 (or 200), 280, and 444 (or 457)
- Supplemental major courses (9 credits): Any 400-level GVPT courses
- Required capstone course (3 credits): GVPT 495

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	Introduction to Research	1
WRTG 101	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 100	Introduction to Political Science	3
SOCY 100	Introduction to Sociology *or other behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course *or other arts and humanities course*		
◆ GVPT 101	Introduction to Political Theory	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 arts and humanities/historical perspective course (discipline must differ from other humanities course)*	

◆ GVPT 170	American Government	3
or GVPT 200	International Political Relations	
PSYC 100	Introduction to Psychology *or other behavioral and social sciences course (discipline must differ from first)*	3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
◆ GVPT 280	Comparative Politics and Government	3
SPCH 100	Foundations of Oral Communication	3
or COMM 380	Language in Social Contexts *or other communication, writing, or speech course*	
◆ STAT 200	Introduction to Statistics	3
CMIS 111	Social Networking and Cybersecurity Best Practices *or other interdisciplinary issues/computing course*	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 391	Advanced Research Writing *or other communications/upper-level advanced writing course*	3
◆ GVPT 444	American Political Theory	3
or GVPT 457	American Foreign Relations	
◆ GVPT 401	Understanding 21st-Century Global Challenges *or other supplemental major course*	3
◆ GVPT 403	Law, Morality, and War *or other supplemental major course*	3
◆ GVPT 406	Global Terrorism *or other supplemental major course*	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ GVPT 495	Advanced Seminar in Political Science	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 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements.

BACHELOR'S DEGREE CURRICULA

At least 18 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 300 and STAT 225
- Biological science psychology courses (6 credits): Chosen from BIOL 362 and PSYC 301, 310, and 341
- Professional psychology courses (6 credits): Chosen from PSYC 335, 353, 432, 436, and 437
- Social psychology courses (6 credits): Chosen from PSYC 321, 351, 354, and 361
- Supplemental major courses (6 credits): Any PSYC courses (but no more than three 1-credit courses)
- Required capstone course (3 credits): PSYC 495

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	Introduction to Research	1
WRTG 101	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 arts and humanities course*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3
◆ PSYC 100	Introduction to Psychology	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
SOCY 100	Introduction to Sociology *or other behavioral and social sciences course*	3
◆ STAT 225	Introduction to Statistics for the Behavioral Sciences	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 behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
CMIS 111	Social Networking and Cybersecurity Best Practices *or other interdisciplinary issues/computing course*	3
SPCH 100	Foundations of Oral Communication	3
or COMM 380	Language in Social Contexts *or other communication, writing, or speech course*	
◆ PSYC 300	Research Methods in Psychology	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 391	Advanced Research Writing *or other communications/upper-level advanced writing course*	3
◆ PSYC 321	Social Psychology *or other social psychology course for the major*	3
◆ PSYC 301	Biological Basis of Behavior *or other biological psychology course for the major*	3
◆ PSYC 353	Abnormal Psychology *or other professional psychology course for the major*	3
◆ PSYC 354	Cross-Cultural Psychology *or other social psychology course for the major*	3
◆ PSYC 310	Sensation and Perception *or other biological psychology course for the major*	3
◆ PSYC 436	Introduction to Clinical Psychology *or other professional psychology course for the major*	3
◆ PSYC 352	Child and Adolescent Psychology *or other supplemental major course*	3
◆ PSYC 334	Psychology of Interpersonal Relationships *or other supplemental major course*	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ PSYC 495	Senior Seminar in Psychology	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 and Systems *(for students who plan to go on to graduate school)*	
PSYC 451	Tests and Measurements	
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 300	Research Methods in Psychology
STAT 225	Introduction to Statistics for the Behavioral Sciences

They must also choose one biological psychology course, one social psychology course, and one professional 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.

An articulation agreement between UMUC's School of Undergraduate Studies and Graduate School of Management and Technology allows eligible students who complete their undergraduate degree at UMUC with a major in social science to reduce their total coursework for the Master of Arts in Teaching by 12 credits (two courses) and complete both degrees with a total of 138 credits of coursework. More information is available in the graduate catalog.

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 awareness, acceptance and appreciation of diversity, social factors, 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.

BACHELOR'S DEGREE CURRICULA

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 foundation courses (6 credits): BEHS 210 and 220
- Other foundation course (3 credits): SOCY 100, ANTH 102, PSYC 100, or GERO 100
- Required statistics course (3 credits): STAT 225 (or 200 or 230)
- Required research methods course (3 credits): BEHS 300
- Core courses (9 credits in a single focus area): Chosen from upper-level ANTH, SOCY, GERO, or PSYC courses
- Supplemental major course (3 credits): Chosen from any ANTH, BEHS, GERO, GEOG, PSYC, or SOCY courses or WMST 200
- Required capstone course (3 credits): BEHS 495

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	Introduction to Research	1
WRTG 101	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 behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course *or other arts and humanities course*		
PSYC 100	Introduction to Psychology *or other behavioral and social sciences course (discipline must differ from first)*	3
◆ BEHS 210	Introduction to Social Sciences	3
Foundation Courses *(to be taken within the first 60 credits)*		
CMIS 111	Social Networking and Cybersecurity Best Practices *or other interdisciplinary issues/computing course*	3
◆ STAT 225	Introduction to Statistics for the Behavioral Sciences	3
or STAT 200	Introduction to Statistics	
or STAT 230	Introductory Business Statistics	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
◆ SOCY 100	Introduction to Sociology *or other foundation course for the major*	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or COMM 380	Language in Social Contexts *or other communication, writing, or speech course*	
◆ BEHS 220	Diversity Awareness	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 391	Advanced Research Writing *or other communications/upper-level advanced writing course*	3
◆ BEHS 300	Research Methods in the Social Sciences	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
◆ ANTH 344	Culture and Language *or another supplemental major course*	3
Capstone Course for Major *(to be taken in the last 15 credits)*		
◆ BEHS 495	Advanced Seminar in Social Sciences	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*		46
Recommended Electives		
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)*	
EDTP 535	Adolescent Development and Learning Needs *(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	Introduction to Federal Contracting
BMGT 364	Management and Organization Theory
BMGT 365	Organizational Leadership
BMGT 392	Global Business
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	Gender Issues in Business
ENGL 354	American Women Writers Since 1900
ENGL 358	British Women Writers Since 1900
GERO 311	Gender and Aging
HIST 375	Modern European Women's History
HIST 376	Women and the Family in America to 1870
HIST 377	U.S. Women's History: 1870 to 2000
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 at right) 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.

Intended Program Outcomes

The student who graduates with an associate of arts degree will be able to

- Utilize academic skills to transition to further academic and professional studies (if he or she is transitioning to a bachelor's degree program).
- Employ academic skills and specialized knowledge to succeed and advance in chosen career and professional fields (if he or she is completing studies at this level).

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	Introduction to Research	1
WRTG 101	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 arts and humanities/historical perspective course*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
GVPT 170	American Government *or other behavioral and social sciences course*	3
Curriculum course	*(to be selected based on educational and career goals)*	3

ASSOCIATE OF ARTS DEGREE

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 behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or JOUR 201	Introduction to News Writing *or other communication, writing, or speech course*	
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. Specialized curricula are recommended but optional within the AA degree in general studies. Appropriate coursework for each of the specialized curricula 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

INTENDED PROGRAM OUTCOMES

Within the overall outcomes of the AA degree in general studies (listed on p. 77), the specialized curriculum in accounting will allow the student to demonstrate competencies in fundamental accounting practices to transition toward a bachelor's degree in accounting and related fields.

COURSEWORK 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 (except BMGT 140), or FINC courses
- Accounting-related courses (9 credits): Chosen from any ACCT and FINC courses; BMGT 110, 364, 380, 381, and 496; CMIS 102; 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 general studies while incorporating coursework 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	Introduction to Research	1
WRTG 101	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 behavioral and social sciences course*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	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 arts and humanities requirement*	

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
◆ 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 arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 490	Writing for Managers *or other communication, writing, or speech course*	
◆ BMGT 380	Business Law I	3
or STAT 230	Introductory 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 in general studies with accounting curriculum		**60**

Business and Management Curriculum

INTENDED PROGRAM OUTCOMES

Within the overall outcomes of the AA degree in general studies (listed on p. 77), the specialized curriculum in business and management will allow the student to utilize core business concepts and principles to pursue related professional goals.

COURSEWORK 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, 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 general studies while incorporating coursework 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	Introduction to Research	1
WRTG 101	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 behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	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 arts and humanities course*	
Additional Required Courses *(to be taken after first and introductory courses)*		
◆ STAT 230	Introductory Business Statistics *(core course for the curriculum)*	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (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 biological and physical sciences lecture course*	

ASSOCIATE OF ARTS DEGREE

◆ 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 arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 490	Writing for Managers *or other communication, writing, or speech course*	
◆ 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 in general studies with business and management curriculum		**60**

Computer Studies Curriculum

INTENDED PROGRAM OUTCOMES

Within the overall outcomes of the AA degree in general studies (listed on p. 77), the specialized curriculum in computer studies will allow the student to apply a selected range of fundamental computer-based skills to advance professional and career goals.

COURSEWORK FOR THE COMPUTER STUDIES CURRICULUM

Coursework for the computer studies curriculum includes the following:

- Required core course (3 credits): CMIS 102 or a programming language course
- Computer studies–related course (12 credits): Any CMIS, CMST, CMIT, CMSC, CSIA, or IFSM courses
- 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 general studies while incorporating coursework 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	Introduction to Research	1
WRTG 101	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
◆ Computer studies–related course for the curriculum		3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course*	
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
◆ Computer studies–related course for the curriculum		3
WRTG 291	Research Writing *or other communications/writing course*	3
GVPT 170	American Government *or other behavioral and social sciences course*	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 behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 490	Writing for Managers *or other communication, writing, or speech course*	
◆ Computer studies–related course for the curriculum		3
◆ Computer studies–related course for the curriculum		3
Elective Courses *(chosen from any courses to complete 60 credits for the degree—CMIS, CMST, CSIA, or IFSM courses that may be applied to the BS in a computing field are recommended)*		**10**
Total credits for AA in general studies with computer studies curriculum		**60**

Criminal Justice Curriculum

INTENDED PROGRAM OUTCOMES

Within the overall outcomes of the AA degree in general studies (listed on p. 77), the specialized curriculum in criminal justice will allow the student to apply knowledge of the criminal justice system to advance professional and educational goals.

COURSEWORK 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 general studies while incorporating coursework 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	Introduction to Research	1
WRTG 101	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 behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	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 arts and humanities course*	
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 behavioral and social sciences course (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or COMM 380	Language in Social Contexts *or other communication, writing, or speech course*	
◆ CCJS 340	Law Enforcement Administration *or other core course for the curriculum*	3
◆ CCJS 345	Introduction to Security Management *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 in general studies with criminal justice curriculum		**60**

Foreign Language Area Studies Curriculum

INTENDED PROGRAM OUTCOMES

Within the overall outcomes of the AA degree in general studies (listed on p. 77), the specialized curriculum in foreign language area studies will allow the student to utilize intermediate foreign language skills and related cultural knowledge in a variety of personal and professional settings.

COURSEWORK 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 general studies while incorporating coursework 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	Introduction to Research	1
WRTG 101	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 biological and physical sciences lecture and laboratory course*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	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 arts and humanities/historical perspective course*	
◆ 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 behavioral and social sciences course*	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 Cultural Anthropology *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 arts and humanities course (discipline must differ from other humanities course)*	3
SPCH 100	Foundations of Oral Communication *or other communication, writing, or speech course*	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 in general studies with foreign language area studies curriculum		**60**

Legal Studies Curriculum

INTENDED PROGRAM OUTCOMES

Within the overall outcomes of the AA degree in general studies (listed on p. 77), the specialized curriculum in legal studies will allow the student to apply knowledge of legal systems to advance professional and educational goals.

COURSEWORK 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 general studies while incorporating coursework 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	Introduction to Research	1
WRTG 101	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 arts and humanities course*	

GVPT 170	American Government *or other behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
CCJS 100	Introduction to Criminal Justice	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (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 arts and humanities/historical perspective course (discipline must differ from other humanities course)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other biological and physical sciences lecture course*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 490	Writing for Managers *or other communication, writing, or speech course*	
◆ 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 in general studies with legal studies curriculum **60**

Management Studies Curriculum

INTENDED PROGRAM OUTCOMES

Within the overall outcomes of the AA degree in general studies (listed on p. 77), the specialized curriculum in management studies will allow the student to apply knowledge from management-related disciplines to advance professional and educational goals.

COURSEWORK 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, and MRKT courses; GVPT 210; PSYC 321 and 361; STAT 230 (or 200); and WRTG 490
- 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 general studies while incorporating coursework 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	Introduction to Research	1
WRTG 101	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 behavioral and social sciences course*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other biological and physical sciences lecture and laboratory course(s)*	

ECON 201	Principles of Macroeconomics	3
or ECON 203	Principles of Microeconomics *(required for BS in management studies)* *or other behavioral and social sciences course* *(discipline must differ from first)*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course *or other arts and humanities course*		

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

◆ STAT 230	Introductory 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 biological and physical sciences lecture course*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other arts and humanities/historical perspective course* *(discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication	3
or WRTG 394	Advanced Business Writing *or other communication, writing, or speech course*	
◆ BMGT 364	Management and Organization Theory	3
or BMGT 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 in general studies with management studies curriculum **60**

Mathematics Curriculum

INTENDED PROGRAM OUTCOMES

Within the overall outcomes of the AA degree in general studies (listed on p. 77), the specialized curriculum in mathematics will allow the student to employ appropriate mathematical methods and technologies to accomplish quantitative tasks in professional and educational contexts.

COURSEWORK 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 general studies while incorporating coursework 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	Introduction to Research	1
WRTG 101	Introduction to Writing	3
MATH 107	College Algebra *(fulfills general education requirement in mathematics)* *or a higher-level math course*	3
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 arts and humanities/historical perspective course*	
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other biological and physical sciences lecture and laboratory course*	1
WRTG 291	Research Writing *or other communications/writing course*	3

IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	
ECON 201	Principles of Macroeconomics	3
or ECON 203	Principles of Microeconomics *or other behavioral and social sciences course*	
◆ 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 biological and physical sciences lecture course*	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other behavioral and social sciences course (discipline must differ from first)*	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other arts and humanities course (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Oral Communication *or other communication, writing, or speech course*	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	Introductory 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 in general studies with mathematics curriculum		**60**

Women's Studies Curriculum

INTENDED PROGRAM OUTCOMES

Within the overall outcomes of the AA degree in general studies (listed on p. 77), the specialized curriculum in women's studies will allow the student to apply knowledge of the history, status, and experience of women in professional, personal, and educational contexts.

COURSEWORK 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 general studies while incorporating coursework 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	Introduction to Research	1
WRTG 101	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 biological and physical sciences lecture and laboratory course*	
WRTG 291	Research Writing *or other communications/writing course*	3
IFSM 201	Concepts and Applications of Information Technology	3
or CMST 303	Advanced Application Software	

HIST 141	Western Civilization I	3
or HIST 142	Western Civilization II *or other arts and humanities/historical perspective course*	
◆ BEHS 220	Diversity Awareness *or other women's studies–related course for the curriculum*	3
GVPT 200	International Political Relations *or other behavioral and social sciences course*	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 Oral Communication *or other communication, writing, or speech course*	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 biological and physical sciences lecture course*	
ANTH 102	Introduction to Cultural Anthropology *or other behavioral and social sciences course (discipline must differ from first)*	3
PHIL 140	Contemporary Moral Issues *or other arts and humanities course (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 in general studies with women's studies curriculum		**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
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, 2011. However, should certificate requirements change, students must either complete these requirements within two years of the change or fulfill the new requirements.

FOR MORE INFORMATION

More details about certificate programs, including graduation rates, median debt of students who completed the program, and other information, is available online at *www.umuc.edu/undergrad/ugcertificates/index.cfm.*

CERTIFICATE PROGRAMS

CERTIFICATE DESCRIPTIONS

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. 87.

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. 87.

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**

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. 87.

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	3
A statistics course chosen from the following:			3
STAT	200	Introduction to Statistics	
STAT	225	Introduction to Statistics for the Behavioral Sciences	
STAT	230	Introductory Business Statistics	
A supporting elective chosen from the following:			3
ANTH	350	Health, Illness, and Healing	
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	300	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. 87.

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	487	Project Management I	3
BMGT	488	Project Management II	3
FINC	330	Business Finance	3
A supporting elective chosen from the following:			3
BMGT	317	Decision Making	
BMGT	339	Introduction to Federal Contracting	
BMGT	484	Managing Teams in Organizations	
FINC	351	Risk Management	
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**

CERTIFICATE PROGRAMS

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. 87.

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	300	Research Methods in Psychology	3
PSYC	353	Abnormal Psychology	3
PSYC	335	Theories of Personality	3
PSYC	436	Introduction to Clinical Psychology	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	451	Tests and Measurements

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. 87.

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:

GRCO	350	Commercial Design	3
GRCO	354	Digital Media	3
GRCO	479	Motion Graphics	3
CMST	386	Principles of Web Design and Technology II	3

A supporting elective chosen from the following: 3

CMST	310	Fundamentals of Electronic Publishing
CMST	311	Advanced Electronic Publishing
CMST	450	Web Development Using 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**

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 networking and security.

Overall certificate requirements are listed on p. 87.

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	Fundamentals of Networking	3
CMIT	368	Windows Server Administration	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	
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. 87.

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**

CERTIFICATE PROGRAMS

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. 87.

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 Database Concepts and Applications	3
CMIS	420	Advanced Relational Database Concepts and Applications	3
CMIS	485	Web Database Development	3

A supporting elective chosen from the following: 3

CMIS	430	Enterprise Database Administration Using Oracle
CMST	385	Principles of Web Design and Technology I
CMST	460	Web Application Development Using ColdFusion

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. 87.

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 .NET 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:

CMIS	320	Relational Database Concepts and Applications	3
CMIS	420	Advanced Relational Database Concepts and Applications	3
CMIS	430	Enterprise Database Administration Using Oracle	3

A supporting elective chosen from the following: 3

CMIS	485	Web Database Development
CMST	460	Web Application Development Using ColdFusion
IFSM	304	Ethics in Information Technology
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. 87.

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	Fundamentals of Electronic Publishing	3
CMST	311	Advanced Electronic Publishing	3
CMST	320	Illustration Graphics	3
CMST	325	Image Editing	3
A supporting elective chosen from the following:			3
COMM	493	Strategies for Visual Communication	
CMST	425	Advanced Image Editing	
GRCO	354	Digital Media	
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. 87.

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 Cultural Anthropology	
ANTH	344	Culture and Language	
A course in cultural/racial aspects of diversity chosen from the following:			3
PSYC	354	Cross-Cultural Psychology	
SOCY	423	Minorities in the United States	
SOCY	424	Race and Ethnic Relations	
SPCH	482	Intercultural Communication	
A course in gender- and age-related aspects of diversity chosen from the following:			3
BMGT	312	Gender Issues in Business	
GERO	311	Gender and Aging	
GERO	327	Ethnicity and Aging	
PSYC	338	Psychology of Gender	
PSYC	357	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 in the World	
PHIL	315	Ethical Issues in American Business	
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. 87.

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	Personal Financial Management	
FINC	352	Life and Health Insurance	
FINC	440	Security Analysis and Valuation	
FINC	441	Financial Derivatives and Portfolio Risk Management	
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. 87.

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 I	
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 Crime	
One of the following courses:			3
ACCT	433	Audit and Control of Information Technology	
CCJS	390	Cyber Crime and Security	
CCJS	421	Computer Forensics	
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. 87.

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	350	Data Structures and Analysis	3
CMSC	335	Object-Oriented and Concurrent Programming	3
CMSC	325	Game Design and Development	3
CMIS	255	Mobile Phone Application Development	3
A supporting elective chosen from the following courses:			3
CMIS	440	Advanced Programming in Java	
CMIS	445	Distributed Systems	
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. 87.

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	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	
BEHS	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. 87.

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	300	Research Methods in Psychology	3
PSYC	351	Lifespan Development	3
PSYC	352	Child and Adolescent Psychology	3
PSYC	357	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. 87.

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: Issues 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	Supervision	
BMGT	464	Organizational Behavior	
BMGT	465	Organization Development and Transformation	
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. 87.

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	Fundamentals of Networking
CMIT	320	Network Security
CSIA	454	Information System Security Mechanisms
CSIA	457	Cyberterrorism and Cyber Crime
CSIA	459	Evaluating Emerging Technologies
IFSM	432	Business Continuity Planning
IFSM	433	Information Security Planning and Needs Assessment

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**

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. 87.

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 .NET 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:

CMIS	320	Relational Database Concepts and Application	3
IFSM	300	Information Systems in Organizations	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 Information Technology

A 400-level supporting elective course chosen from the following: 3

CSIA	303	Foundations of Information System Security
IFSM	438	Information Systems Project Management

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

CERTIFICATE PROGRAMS

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. 87.

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	Principles of Web Design and Technology I	3
CMST	386	Principles of Web Design and Technology II	3
CMST	388	Fundamentals of JavaScript	3
CMST	450	Web Development Using XML	3

A supporting elective chosen from the following: 3

CMIS	242	Intermediate Programming
CMIS	440	Advanced Programming in Java
CMIS	485	Web Database Development
CMST	460	Web Application Development Using ColdFusion
CMST	461	Web Application Development Using PHP/MySQL

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. 87.

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. 87.

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.	
An introductory programming course chosen from the following:	3
CMIS 141 Introductory Programming	
CMIS 115 Programming in Objective-C for the Mac	
CMIS 125 Programming in C#	
An intermediate programming course chosen from the following:	3
CMIS 242 Intermediate Programming	
CMIS 215 Programming for the iPhone or iPad	
CMIS 225 Developing Windows Presentation Foundation Applications Using C#	
One required course:	
CMIS 330 Software Engineering Principles and Techniques	3
A supporting elective chosen from the following:	3
CMIS 440 Advanced Programming in Java	
CMIS 455 Requirements Development	
CMIS 460 Software Design and Development	
CMIS 465 Software Verification 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**

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. 87.

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 (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.	
Six 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
LGST 300 Advanced Legal Research and Analysis	3
LGST 301 Advanced Legal Writing	3
A substantive and procedural or substantive law elective chosen from the following:	3
LGST 312 Torts	
LGST 320 Criminal Law and Procedures	
LGST 327 Alternative Dispute Resolution	
LGST 340 Contract Law	
LGST 442 Business Organizations	
A second substantive and procedural or substantive law course chosen from the above list	3
Total credits for certificate in Paralegal Studies	**60**

CERTIFICATE PROGRAMS

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. 87.

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	Concepts and Applications of Information Technology	3
IFSM	300	Information Systems in Organizations	3
IFSM	438	Information Systems 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	Cyberterrorism and Cyber Crime
IFSM	302	Workplace Productivity
IFSM	303	Human Factors in Information Systems
IFSM	304	Ethics in Information Technology

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. 87.

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	390	Cyber Crime and Security
CMIS	335	Software Safety
ENMT	310	Emergency Planning and Operations Management
FSCN	306	Fire Investigation and Analysis
FSCN	401	Disaster Planning and Control
IFSM	432	Business Continuity Planning

A second specialized supporting elective chosen from the above list 3

Total credits for certificate in Terrorism and Institutions: Prevention and Response **18**

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. 87.

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 .NET Programming	3
CMST	416	Advanced Visual Basic .NET 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	320	Relational Database Concepts and Applications	
CMIS	420	Advanced Relational Database Concepts and Applications	
CMIS	440	Advanced Programming in Java	
CMST	385	Principles of Web Design and Technology I	
CMST	386	Principles of Web Design and Technology II	
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. 87.

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.			
Four required courses:			
CMST	325	Image Editing	3
CMST	385	Principles of Web Design and Technology I	3
CMST	386	Principles of Web Design and Technology II	3
CMST	390	Fundamentals of JavaScript	3
A supporting elective chosen from the following:			3
CMST	425	Advanced Image Editing	
CMST	450	Web Development Using XML	
CMST	455	Introduction to Digital Video Editing	
GRCO	350	Commercial Design	
A second supporting elective chosen from the above list			3
Total credits for certificate in Web Design			**18**

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. 87.

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	Introduction to Writing	3
IFSM	201	Concepts and Applications of Information Technology	3
CMST	310	Fundamentals of Electronic Publishing	3
WRTG	293	Introduction to Professional Writing	3
A writing course chosen from the following:			3
WRTG	393	Advanced Technical Writing	
WRTG	394	Advanced Business Writing	
An editing course chosen from the following:			3
WRTG	289	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. 87.

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 is expected to have before enrolling in a given course. Students may be barred from enrolling in or may be removed from courses for which they do not have the necessary prerequisites. Courses listed as "corequisite" are required but may be taken at the same time. Taking courses listed as "recommended" is advisable but not absolutely required.

It is each student's responsibility to check the prerequisites listed in the course description and make certain that he or she is academically prepared to take a course. If the prerequisite course was not taken recently, the student should consult advisors or the academic department about whether he or she is sufficiently prepared to perform well in a given course. Faculty members are not expected to repeat material listed as being prerequisite.

Prerequisites may also be fulfilled by Prior Learning credit for the appropriate course, earned through course-challenge examinations or Portfolio (described on p. 228). Advisors can explain the procedures for seeking this credit. Some courses are not eligible for challenge examination or Portfolio, and students may not take course-challenge examinations or seek Portfolio credit for lower-level courses that are prerequisite to courses for which they have already received credit.

WRTG 101 Introduction to Writing is prerequisite to any higher-level course in English, communication studies, and writing, as well as many other advanced courses. MATH 107 College Algebra is prerequisite to any higher-level course in mathematics, and MATH 107 or MATH 106 Finite Mathematics is prerequisite to any of the introductory statistics courses. Many other prerequisites for advanced courses may be found in the course descriptions.

Placement testing is required for enrollment in WRTG 101 and for MATH 012, 106, 107, 108, 115, 140, and 220, unless the student has taken the prerequisite course or its equivalent. More information on writing and mathematics placement tests may be obtained by calling 800-888-UMUC or visiting *www.umuc.edu/testing*. For introductory language courses, students with prior experience in the language should take a placement test to assess appropriate level. Information on language placement tests can be found by consulting the department or visiting *www.umuc.edu/languagetesting*.

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)

(With BMGT 393, designed to fulfill the requirements for the Maryland licensing examination to sell real estate.) Prerequisite: BMGT 393. A continuation of the study and functional analysis and application of the legal principles relevant to the conduct of real estate transactions. The goal is to prepare to take the Maryland licensing examination to sell real estate. Topics include home ownership, environmental issues, real estate appraisals and financing, agency and brokerage agreements, seller and buyer representation, fair housing and discrimination, and settlement procedures. Students may receive credit for only one of the following courses: BMGT 394 or BMGT 398H.

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.

INFORMATION ON COURSES

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) 105
African American Studies (AASP)* 109
Anthropology (ANTH)* 110
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)* 127
Chemistry (CHEM)* 127
Chinese (CHIN)* 127
Communication Studies (COMM) 128
Computer and Information Science (CMIS) 129
Computer Information Technology (CMIT) 133
Computer Science (CMSC) 135
Computer Studies (CMST) 137
Cooperative Education 140
Criminology/Criminal Justice (CCJS) 141
Cybersecurity (CSIA) 146
Economics (ECON) 148
Educational Principles (EDCP)* 149
Education: Teacher Preparation (EDTP)* 150
Emergency Management (EMGT) 150
English (ENGL) 152
Environmental Management (ENMT) 156
Experiential Learning (EXCL) 159
Finance (FINC) 160
Fire Science (FSCN) 162
Geography (GEOG)* 164
Geology (GEOL)* 164
German (GERM)* 165
Gerontology (GERO) 165
Government and Politics (GVPT) 169
Graphic Communication (GRCO) 172
History (HIST) 173
Homeland Security (HMLS) 179
Humanities (HUMN) 180
Human Resource Management (HRMN) 181
Information Systems Management (IFSM) 183
Japanese (JAPN)* 185
Journalism (JOUR)* 185
Legal Studies (LGST) 187
Library Skills and Information Literacy (LIBS)* 192
Marketing (MRKT) 192
Mathematics (MATH) 194
Music (MUSC)* 197
Natural Science (NSCI) 198
Philosophy (PHIL)* 199
Psychology (PSYC) 201
Sociology (SOCY) 206
Spanish (SPAN)* 208
Speech Communication (SPCH) 209
Statistics and Probability (STAT)* 210
Theatre (THET)* 212
Women's Studies (WMST)* 212
Writing (WRTG) 212

** Only a limited number of courses are available each session in this discipline.*

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.

ACCT 220 Principles of Accounting I (3)

An introduction to the basic theory and techniques of contemporary financial accounting. The objective is to identify the fundamental principles of accounting, identify and analyze business transactions, prepare financial statements, and communicate this information to users with different needs. Topics include the accounting cycle, transactions, 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. Further study of contemporary accounting practices, with an emphasis on financial and managerial accounting. The goal is to identify and analyze business transactions, define the characteristics of business entities, identify the interdependency of financial statements, employ managerial accounting techniques, and communicate this information to users with different needs. Financial accounting topics include liabilities, equities, investments, and business entities. Managerial accounting topics include job order and process costing, cost-volume-profit analysis, and budgets. 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 accounting principles relevant in making business decisions on the basis of financial information. The aim is to apply critical thinking skills and ethical principles to accounting issues. Topics include internal controls, financial reporting, analysis of financial statements, and elements of managerial 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.) Prerequisite: ACCT 221. A comprehensive analysis of financial accounting topics involved in preparing financial statements for external reporting. The objective is to identify and analyze complex business transactions and their impact on financial statements. 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. The aim is to identify and analyze complex business transactions and their impact on financial statements. 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 examining, identifying, detecting, and deterring fraud. The objective is to differentiate types of fraud, assess organizational characteristics conducive to fraud, and develop a plan to detect and deter fraud. Topics include the fraud triangle, cash larceny, check tampering, skimming, register disbursement schemes, cash receipts 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)

Prerequisite: ACCT 221. A study of basic cost accounting concepts. The goal is to apply basic cost accounting concepts, use technology to prepare financial deliverables, evaluate business and financial data, and communicate financial information. Topics include the evaluation of business and financial data to make profit-maximizing decisions and ethics and corporate social responsibility. Discussion also covers the role of accountants in decision making; cost behavior; cost planning and control; and costing methods, such as standard costing, budgeting, and inventory valuation. 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. Recommended: ACCT 310 and 311. A study of federal income tax for individuals and other entities. The objective is to identify the legislative process, conduct tax research, evaluate tax implications, and complete an individual tax return. Topics include the legislative process, tax policy, research, and the evaluation of transactions and decisions for planning and compliance. Emphasis is on ethics and professional responsibilities. 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. An introduction to accounting information systems (AIS) concepts. The aim is to evaluate how AIS tools are used to record, process, and analyze financial data; determine how best to integrate AIS tools and processes in a given organization; review and recommend controls to secure AIS applications and processes; and evaluate how technology can be used in AIS applications. Topics include transactional processing concepts and core AIS transactional cycles, basic control frameworks used to secure AIS applications and processes, strategies for implementing or upgrading AIS applications, information technology and accounting standards, and e-commerce and e-business. Students may receive credit for only one of the following courses: ACCT 326, BMGT 320, and 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 systems and management reporting. The goal is to research and evaluate culture, trends, and technologies that affect informational systems; use various tools and techniques to evaluate the effectiveness of informational systems; and apply project management techniques to resolve critical business issues. Practical experience in using computer-based tools (Excel, MS Project, etc.) to evaluate information systems is provided. Topics include the impact of information systems on business operations, the 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.

ACCT 328 Accounting Software (3)

Prerequisite: ACCT 326. An introduction to accounting software, focusing on evaluation of the benefits, costs, and risks of specific programs. The objective is to operate accounting software, enter data into a computerized accounting system, and evaluate accounting software. Specific PC-based software packages are used to record and analyze financial data, review the general ledger, and prepare financial statements. Accounting software is evaluated to determine its appropriateness to meet organizational needs, and executive summaries are produced to advise management of the costs and benefits of acquiring and implementing a new software package. Projects and assignments integrate the principles of accounting information systems with the evaluation of accounting software and the process of converting manual accounting data into a computerized accounting system. Students may receive credit for only one of the following courses: ACCT 328 or ACCT 398A.

ACCT 350 Federal Financial Management (3)

Prerequisite: ACCT 220 or ACCT 301. Analysis and discussion of issues relating to federal financial management. The goal is to apply knowledge of the federal process to accounting practice, administer federal grants and contracts, and research federal laws and regulations. Topics include the CFO Act, the federal budget, federal contracts and grants, and federal financial and information systems. Discussion also covers detection and deterrence of fraud, waste, and abuse.

ACCT 410 Accounting for Government and Not-for-Profit Organizations (3)

Prerequisite: ACCT 310. An introduction to the theory and practice of accounting as applied to governmental entities and not-for-profit organizations. The objective is to evaluate transactions, prepare and analyze financial statements, write financial briefings, and apply accounting rules and procedures. Topics include the evaluation and preparation of reports required for governmental and not-for-profit entities. 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. An examination of the importance of ethical behavior in organizations and for the accounting and auditing professions. The goal is to identify ethical dilemmas, research regulations, and apply problem-solving methodology to resolve unethical situations. Discussion covers the AICPA Code of Professional Conduct and the ethical codes and requirements of other standard-setting organizations. Corporate governance and legal and regulatory obligations are explored within an ethical framework. Issues related to accounting ethics and professionalism are examined and analyzed using philosophical models and ethical theories.

ACCT 417 Federal Income Tax II (3)

Prerequisites: ACCT 311 and 323. A continuing study of federal income taxation as applied to different business entities, including corporations, flow-through entities, estates, and trusts. The aim is to analyze tax planning and compliance issues, conduct tax research, analyze and define tax implications, and evaluate and communicate tax implications. Discussion covers tax research, planning, procedure, compliance, ethics, and professional responsibility. Topics also include the tax implications of financial and business decisions and transactions for various entities. 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 auditing profession, audit process, and other assurance and nonassurance services related to the CPA profession. The objective is to design an audit plan, apply audit procedures, evaluate audit findings, and assess the impact of standards and emerging issues. Topics include generally accepted auditing standards, tests of controls and substantive tests, statistical sampling, 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. The aim is to prepare, present, and explain financial statements in five sectors—consolidated, international, partnership, not-for-profit, and state and local governments—and analyze a firm's dissolution or reorganization. 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. Discussion covers the historical development and current status of international financial reporting standards. The goal is to recognize the influence of politics and culture on the development of accounting systems, prepare financial statements according to international financial reporting standards, and analyze the financial statements of a multinational enterprise. Strategies to manage and hedge against foreign currency exposure are developed. Topics include evolving international accounting and reporting standards, 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 and ACCT 498A.

ACCT 426 Advanced Cost Accounting (3)

Prerequisite: ACCT 321. An in-depth study of advanced costing concepts that emphasizes managerial planning and control, problem solving, performance measurement, and profit maximization. The aim is to evaluate financial and nonfinancial data, conduct high-level research on contemporary issues, apply best practices and tools, and prepare and present findings to management and clients. Research, technology, and global best practices are used in evaluating financial and nonfinancial data in decision making from both an entity and an industry perspective. Leadership skills are developed through collaborative assignments. 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 analysis of special auditing topics. The objective is to demonstrate familiarity with regulatory and auditing standards, analyze financial statements and the business environment, apply professional and ethical standards, identify and evaluate special topics in auditing, and identify and assess significant audit risk. Topics include statistical sampling, information systems auditing, attestation standards, assurance services, and SEC compliance requirements. 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 Information Systems (3)

Prerequisite: ACCT 326. A comprehensive review of advanced accounting information system (AIS) topics. The objective is to operate accounting software; research and evaluate organizational trends and technologies; determine what strengths and weaknesses exist in its accounting information system; and review accounting, auditing, and information technology standards. Topics include transactional processing concepts and core AIS transactional cycles, the impact of fraud and other threats to AIS applications and processes, advanced control frameworks used to secure AIS applications and processes, emerging technologies (such as REA modeling and XBRL) that can be used to enhance AIS applications, and strategies for implementing or upgrading AIS applications.

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 accounting information systems. The goal is to analyze accounting information systems; research and evaluate various auditing procedures and techniques; develop an audit plan; and identify, extract, and analyze data, using appropriate computer-based tools. Topics include information technology audit guidelines and frameworks; technology-based and process-based risks and controls; automated and nonautomated audit tools; and emerging trends, such as forensic accounting.

ACCT 436 Internal Auditing (3)

(Designed to align with the Institute of Internal Auditors and the Certified Internal Auditor examination.) Prerequisite: ACCT 311. An exploration of the role of internal auditing and its consultative role in the management of risk. The aim is to identify the professional and ethical standards that apply to internal auditors; design, plan, and apply audit procedures; assess the impact of emerging issues and trends; and identify internal control deficiencies. Topics include internal auditing standards, scope, responsibilities, ethics, controls, techniques, and reporting practices. Practice in PC-based software such as ACL and IDEA is provided. 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. An analysis and discussion of issues relating to fraud and forensic accounting. The objective is to identify the resources for detecting fraud, evaluate the conditions that encourage fraud, and design effective fraud detection and prevention plans. 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. An analysis and discussion of issues relating to forensic and investigative accounting. The goal is to research and describe the use of forensic accounting evidence, identify the role of the forensic accountant, apply investigative and forensic accounting practices, and present forensic accounting evidence as an expert witness. Forensic and investigative methods, including use of auditing and technology, are demonstrated. Topics include criminal and civil litigation support, rules of evidence, and accreditation of expert witnesses.

ACCT 451 Federal Accounting Management (3)

Prerequisite: ACCT 221. Recommended: ACCT 311. An overview of federal budgeting and accounting processes. The aim is to learn to formulate, propose, manage, and execute a federal budget; execute federal grants and contracts; analyze and manage federal programs; comply with federal oversight and reporting guidance; and detect and deter fraud, waste, and abuse. Topics include the budget life cycle, formulation, execution, and program evaluation. Emphasis is on budget presentation. Discussion also covers contracts, grants, fraud, waste, and abuse. Federal Acquisition Regulations (FAR) and related rules on compliance with federal oversight are examined, especially as they relate to detection and deterrence of fraud, waste, and abuse.

ACCT 452 Federal Auditing (3)

Prerequisite: ACCT 221. Recommended: ACCT 422 or ACCT 436. An overview of the federal auditing life cycle. The objective is to plan, manage, and execute a federal audit; identify and evaluate program and financial risks; and identify and recommend enhancements to operations and technology. Topics include planning and executing a federal audit, communicating audit findings to stakeholders, providing advisory support, evaluating program and financial risks, identifying enhancements to technology, maximizing economy and efficiency through the audit process, and minimizing fraud waste and abuse. Discussion also covers the auditing of grants and contracts.

ACCT 486A Internship in Accounting Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

ACCT 486B Internship in Accounting Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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. An intensive 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. The aim is to use current technology, research, and analytical tools proficiently to perform accounting and business functions, work collaboratively, facilitate decision making, and communicate to financial and nonfinancial audiences. Focus is on researching and analyzing emerging issues in accounting, business transactions, and financing. 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.

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. The objective is to conduct research, apply critical thinking skills, and articulate diverse historical perspectives in the context of African American history and culture. Topics include definitions of African American identity, influences, and achievements within American culture, as well as 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 East Asian studies;
- a certificate in Diversity Awareness; and
- electives.

ANTH 101 Introduction to Biological 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. The aim is to apply anthropological knowledge to understanding human origins and how human populations adapt to the environment. Discussion examines human evolution and adaptation, including biocultural patterns in humans and other primates. Students who complete both ANTH 101 and 102 may not receive credit for ANTH 340, BEHS 340, or BEHS 341.

ANTH 102 Introduction to Cultural Anthropology (3)

A survey of social and cultural principles inherent in ethnographic descriptions. The objective is to apply anthropological knowledge of human behavior to everyday situations and problems. 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 Becoming Human (3)

An interdisciplinary intermediate-level exploration of contemporary and applied issues in biological anthropology and archaeology. The goal is to apply relevant anthropological theories to concerns in our global society. Discussion covers human evolution, human biological variation, primate studies, and archaeological frameworks. Students may receive credit for only one of the following courses: ANTH 340, ANTH 343, or BEHS 340.

ANTH 344 Culture and Language (3)

An intermediate-level exploration of contemporary issues in cultural anthropology and the anthropology of language. The aim is to apply relevant anthropological theories to concerns in our global society. Topics include ethnographic methods, variation in human social organization and worldviews, and the cultural dimensions of language. Students may receive credit for only one of the following courses: ANTH 340, ANTH 344, or BEHS 340.

ANTH 350 Health, Illness, and Healing (3)

Recommended: ANTH 102 or ANTH 344. An overview of health, illness, and healing from a cross-cultural perspective. The objective is to apply the perspectives of medical anthropology to promote individual and public health in local, national, and global contexts. Topics include cultural and social influences on health and healing, the experience and meaning of illness, and current issues in public and global health.

ANTH 351 Anthropology in Forensic Investigations (3)

Recommended: BIOL 160 or BIOL 201. An introduction to the application 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 forensic team. The aim is to understand how anthropologists apply scientific principles and processes to the collection and analysis of evidence and how they communicate their conclusions. Topics include the scope of anthropology within the context of forensic investigations, human skeletal biology, research methods, scientific reporting, crime scene protocols, and the application of professional standards and ethics. 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 parenting behavior in monkeys, from evolutionary and socioecological perspectives. Topics include maternal, paternal, and sibling care; the costs and benefits of parental care; parental investment; allomothering (i.e., nonmaternal infant care); and parent/offspring conflict.

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. The objective is to apply a biological anthropological perspective to distinguish great apes from other primates and to recognize the importance of great ape conservation for global biodiversity. Topics include the cognitive and behavioral adaptations of great apes, great ape rights, and the impact of human activities on wild ape populations.

ANTH 398L Anthropology in Death Investigations (1)

A study of how anthropological skills are used in investigations into cause of death. The objective is to apply anthropological perspectives—archaeological, biological, cultural, and linguistic—to inquiry about cause of death and to other aspects of personal and professional life. Discussion covers the application of anthropology to crime scene investigations, mass disasters, and other scenarios.

ANTH 398S Peoples and Cultures: South Asia (1)

Recommended: ANTH 102 or ANTH 344. An anthropological overview of the peoples and cultures of South Asia, comprising the modern nations of India, Pakistan, Bangladesh, Nepal, Sri Lanka, the Maldives, and Bhutan. Two modern social institutions of South Asia—family structure and religion—are examined from an anthropological point of view. The goal is to interpret the significance and roles of family through the cultural lens of food production and consumption. Topics include the major religions of South Asia (Hinduism, Buddhism, Islam, Jainism, and Sikhism) and their expression in the daily activities and contemporary culture of the people of South Asia.

ANTH 486A Internship in Anthropology Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

ANTH 486B Internship in Anthropology Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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; and
- electives.

UMUC offers a limited number of foreign language courses each session.

ARAB 111 Elementary Arabic I (3)

(Not open to native speakers of Arabic; assumes no prior knowledge of Arabic. Students with prior experience with the Arabic language should take a placement test to assess appropriate level.) An introduction to spoken and written modern standard Arabic. The objective is to communicate in Arabic in some concrete, real-life situations using culturally appropriate language and etiquette. Practice in Arabic pronunciation and the structures needed for everyday communication is provided.

ARAB 112 Elementary Arabic II (3)

(Not open to native speakers of Arabic.) Prerequisite: ARAB 111 or appropriate score on a placement test. A continued introduction to spoken and written modern standard Arabic. The goal is to communicate in Arabic in concrete, real-life situations using culturally appropriate language and etiquette. Practice is provided in improving pronunciation and developing the oral and written skills used in everyday communication.

ARAB 114 Elementary Arabic III (3)

(Not open to native speakers of Arabic.) Prerequisite: ARAB 112 or appropriate score on a placement test. Further development of skills in elementary spoken and written modern standard Arabic. The aim is to communicate in Arabic in a variety of real-life situations, using culturally appropriate language. Practice is provided in improving pronunciation and developing the oral and written skills used in everyday communication.

ARAB 115 Elementary Arabic IV (3)

(Not open to native speakers of Arabic.) Prerequisite: ARAB 114 or appropriate score on a placement test. Further development of skills in elementary spoken and written modern standard Arabic. The objective is to interact effectively with native Arabic speakers in a variety of real-life situations, using culturally appropriate language. Practice in fine-tuning pronunciation and applying language skills to a range of contexts is provided.

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; and
- electives.

ARTT 110 Drawing and Design (3)

A hands-on introduction to various drawing media and related techniques. The objective is to translate the three-dimensional world into two dimensions, communicate through a visual medium, and critique visual works of art. Projects are based on nature and still life.

ARTT 120 Two-Dimensional Design (3)

A project-driven study of the theoretical design elements of a composition as they relate to its overall expression. The aim is to apply elements and principles of design to create a variety of compositions that effectively communicate ideas and emotions.

ARTT 205 Art Appreciation (3)

An introduction to a variety of two- and three-dimensional art forms, with particular emphasis on two-dimensional arts. The goal is to examine the elements and principles of design, materials, and techniques used in personal and professional settings. Examples from different media—including illustration; painting with oils, acrylics, and watercolors; and sculpture—are used to consider form, light, color, perspective, and other elements of art.

ARTT 210 Drawing (3)

Prerequisite: ARTT 110. A continuing examination of materials and techniques of drawing. The objective is to apply drawing techniques and visual principles to various subjects, communicate through drawing, and critique works of art. More advanced media, compositions, techniques, and subjects are explored. Students may receive credit for only one of the following courses: ARTS 210 or ARTT 210.

ARTT 220 Color Theory (3)

Prerequisite: ARTT 120. A hands-on, project-based study of color theory. The goal is to analyze and apply the vocabulary and characteristics of color. Topics include the properties, aesthetics, relationships, and applications of color. Appropriate methods and technologies are explored.

ARTT 320 Painting (3)

Prerequisite: ARTT 110. Practice in the basic tools and vocabulary of painting. The goal is to apply an understanding of compositional strategies, visual principles, and basic materials and techniques to produce paintings using oil/watercolor/acrylic paints.

ARTT 428 Advanced 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 486A Internship in Art Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

ARTT 486B Internship in Art Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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 major in graphic communication or humanities;
- a minor in art history or 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.

ARTH 204 Film and American Culture Studies (3)

An introductory study of the relationship between film and American culture. The objective is to improve one's ability to understand a film's message and to expand one's cultural awareness. Discussion covers the way one of our most popular media portrays American culture and influences our interpretation of cultural issues. Various films, filmmaking issues, and representative filmmakers' work are examined. Students may receive credit for only one of the following courses: ARTH 204, AMST 204, or HUMN 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 372 History of Western Art I (3)

(Formerly ARTH 370.) A survey of the development of the Western tradition of visual art in its various forms that examines and compares the expression of cultural and aesthetic values in different parts of the Western world from prehistory through the Middle Ages. The objective is to apply principles of visual literacy; describe, analyze, and contextualize content and elements of art; and differentiate historic periods and styles of art. Students may receive credit for only one of the following courses: ARTH 370 or ARTH 372.

ARTH 373 History of Western Art II (3)

(Formerly ARTH 371.) A survey of the development of visual art of the Western world in its various forms that examines and compares the expression of cultural and aesthetic values in Europe and the United States from 1300 to the present day. The aim is to apply principles of visual literacy; describe, analyze, and contextualize content and elements of art; and differentiate historic periods and styles of art. Students may receive credit for only one of the following courses: ARTH 371 or ARTH 373.

ARTH 375 History of Graphic Art (3)

Prerequisite: ARTT 205. ARTT 100 recommended. A survey of the development of graphic design with an emphasis on the historical, technological, and sociological influences on the production of typography and the aesthetics of visual media. The aim is to recognize the philosophy of graphic arts, identify various movements within the field, and analyze the impact of graphic arts upon society. Topics include major works and artists and cultural, social, and religious movements and their impact on graphic arts.

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 388 Contemporary Art (3)

Prerequisite: ARTH 373. A thematic survey of contemporary art from 1970 to the present. The goal is to actively engage and find meaning with diverse artistic expressions, including art that ranges from the sublime to the outrageous. Discussion covers contemporary art, the people who create it, and the institutions that support it.

ARTH 478 History of Women in the Visual Arts (3)

A survey of the work, roles, and representations of women in the visual arts, from the 16th century to the present. The aim is to evaluate the role of women artists and assess the impact of gender on visual arts as a way to understand the complexity and diversity of human experience and culture. Emphasis is on women working in the tradition of Western art in painting, sculpture, the decorative arts, performance art, photography, and other media. Discussion also evaluates how gender affected the art and careers of women artists.

ARTH 486A Internship in Art History Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

ARTH 486B Internship in Art History Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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 East Asian studies; and
- electives.

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 284 Foundations of East Asian Civilization (3)

(Formerly HIST 284.) An interdisciplinary survey of the foundations of East Asian civilization from its beginnings to the 17th century. The goal is to analyze philosophical, religious, artistic, economic, and political aspects of the region's historical experience. Focus is on China, Korea, and Japan. Topics include East Asian belief systems (including Confucianism and Buddhism), the dynastic cycle, relations between steppe and agrarian societies, warrior and scholar-gentry cultures, technological change and economic development, and the role of class and gender in early East Asian society. Students may receive credit for only one of the following courses: ASTD 150, ASTD 284, or HIST 284.

ASTD 285 Introduction to Modern East Asia (3)

(Formerly HIST 285.) An interdisciplinary survey of East Asia from the late 17th century—beginning with Ming-Qing China, Tokugawa Japan, and Choson Korea—to the present. The objective is to trace how transformations on global, regional, and local levels led to the development of the modern nation-states of East Asia and to examine how those developments affected the culture of the areas. Topics include the rise of imperialism and colonialism; cross-cultural interactions; and issues of gender, class, and ethnicity in East Asian culture. Students may receive credit for only one of the following courses: ASTD 160, ASTD 285, or HIST 285.

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 485 Great Issues in Asian Studies (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: ASTD 284 (or ASTD 150) and 285 (or ASTD 160). A project-based, interdisciplinary study of East Asia. The aim is to integrate knowledge gained through previous coursework and experience and build on that conceptual foundation through integrative analysis, practical application, and critical thinking. Discussion covers emerging issues and current scholarship in East Asian studies.

ASTD 486A Internship in Asian Studies Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

ASTD 486B Internship in Asian Studies Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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.

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. An examination of the major areas of astronomy. The objective is to use scientific and quantitative reasoning to make informed decisions about topics related to space science. 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;
- a minor in women's studies;
- a certificate in Applied Behavioral and Social Sciences or Diversity Awareness; and
- electives.

BEHS 210 Introduction to Social Sciences (3)

Recommended: WRTG 101. An interdisciplinary introduction to the study of society that addresses the issue of what it is to be a social scientist from a variety of social science perspectives. The objective is to use the empirical and theoretical contributions of the different social science disciplines to better understand the nature of society. Topics include research methods in the social science disciplines and the relationships among the different social science disciplines. Discussion surveys the various social sciences, including psychology, sociology, anthropology, and gerontology. 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 examination of the many dimensions of diversity within the framework of modern culture and principles of social justice. The aim is to interact and communicate effectively and appropriately within a diverse society. Emphasis is on raising consciousness of diversity and using critical thinking with respect to stereotypes, prejudice, and discrimination. Discussion covers issues related to age, disability, race, religion, gender, sexual orientation, national origin, and socioeconomic status, as well as current issues in diversity studies.

BEHS 300 Research Methods in the Social Sciences (3)

Prerequisite: BEHS 210. Recommended: STAT 225. An introduction to the core concepts, research methods, and skills that apply to work in the social sciences. The goal is to begin the process of conducting social science research. Discussion covers the scientific method, as well as quantitative and qualitative research methods specific to the social science disciplines of psychology, sociology, anthropology, and gerontology. Topics also include reliability and validity of data, correlation versus causality, research ethics, institutional review boards, proposal writing, and the unique contribution of "interdisciplinarity" in social science research.

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. The goal is to interact and communicate effectively and appropriately in situations relevant to issues of disability. Topics include the construction of images of people with disabilities, attitudes and actions toward those with disabilities, approaches taken by major social institutions (e.g., law, education, religion, the arts) toward disability, distinctions between different models of disability, and current issues in disability studies.

BEHS 343 Parenting Today (3)

An overview of critical issues of parenthood in the United States today using an interdisciplinary perspective. The objective is to apply research and theory in family development to practical decision making. Topics include characteristics of effective parenting styles, disciplinary strategies, the role of diverse family structures, and the social forces that cause changes in parent/child relationships.

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 380 End of Life: Issues and Perspectives (3)

(Formerly GERO 380.) An exploration of death, dying, and bereavement from social, cultural, psychological, biomedical, economic, and historical perspectives. The objective is to clarify one's personal perspective on death and dying, based on a better understanding of end-of-life planning issues, stages of death, and models of care for the dying. Topics include definitions of death, needs of the dying and their support systems, pain management, palliative and hospice care, end-of-life decision making, cultural meanings and rituals, suicide, euthanasia, homicide, natural disaster, the economics of death and life-sustaining care, family conflict and coping, bereavement, and grieving. Students may earn credit for only one of the following courses: BEHS 380 or GERO 380.

BEHS 453 Domestic Violence (3)

An examination of the complex phenomenon of domestic violence from a multidisciplinary perspective that integrates individual, social, political, cultural/ethnic, economic, legal, and medical viewpoints. The aim is to evaluate research and theoretical models of domestic violence; assess institutional, community, and individual responses to domestic violence; and locate effective resources. Topics include neglect and 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: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

BEHS 486B Internship in Behavioral Science Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

BEHS 495 Advanced Seminar in Social Sciences (3)

Prerequisite: BEHS 300. A study of the social sciences that integrates perspectives from various disciplines in the field. The aim is to apply theoretical perspectives and empirical evidence to address complex contemporary social problems and become better consumers and purveyors of knowledge and research. Topics include ethical and professional issues inherent in working in the social sciences and the role of advocacy in promoting social change.

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, laboratory management, or psychology;
- a minor in biology, forensics, microbiology, natural science, or psychology; and
- electives (including related requirements for the environmental management major).

BIOL 101 Concepts of Biology (3)

(For students not majoring in a science.) An introduction to the structure and function of living organisms. The objective is to use knowledge about biological principles and scientific reasoning to make informed decisions about the natural world. Topics include the chemical foundations of life, cell biology, genetics, evolution, ecosystems, and interdependence of living organisms. Discussion also covers the importance of the scientific method to biological inquiry and the impact of biological knowledge on human societies. 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 hands-on study of the concepts underlying the structure and function of living organisms. The goal is to apply the scientific method and to use scientific and quantitative reasoning to make informed decisions about experimental results in the biological sciences. Laboratory exercises emphasize the scientific method and explore topics such as the chemical foundations of living organisms, cell structure and function, and the classification of organisms. 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 aim is to apply the scientific method and use scientific and quantitative reasoning to make informed decisions about experimental results in the biological sciences. Topics include the chemical foundations of life, cell biology, genetics, evolution, ecosystems, and interdependence of living organisms. Discussion also covers the importance of the scientific method to biological inquiry and the impact of biological knowledge on human societies. Laboratory activities emphasize the scientific method. 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 aim is to use scientific reasoning to make informed decisions about topics related to human biology. The human organism is examined from the basic cellular level and genetics, through organ systems, to interaction with the outside world. Discussion also covers pertinent health topics. Students may receive credit for only one of the following courses: BIOL 160 or GNSC 160.

BIOL 181 Life in the Oceans (3)

An introductory 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 objective is to use scientific reasoning to make informed decisions about topics related to marine biology. Discussion covers the impact of human activity on life in the ocean and the potential uses and misuses of the ocean. 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. The goal is to use scientific reasoning to make informed decisions about matters related to human biology and health. 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 analysis of factors that cause disruption of healthy body functions leading to disease and 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 and how they relate to health, infectious disease, and illness. The objective is to apply knowledge of cellular and molecular processes and communicate synthesized knowledge of microbial pathogenesis and disease prevention methods. 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 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 (such as Alzheimer'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)

(For students majoring in both science and nonscience disciplines.) Recommended: BIOL 101, BIOL 103, BIOL 105, or BSCI 105. An introduction to the basic principles of biology as applied to the field of forensic science. The aim is to use scientific reasoning to draw conclusions and make decisions about forensic techniques, analyses, and results. Topics include the biological features and characteristics of evidentiary materials, as well as the basic principles of chemistry, cell biology, microbiology, and genetics that underlie forensic analyses.

BIOL 325 Inquiries in Biological Science (3)

Prerequisite: BIOL 101 or equivalent. An overview of biological science. The goal is to critically analyze current research and to use knowledge of core biological principles to make ethical and informed decisions related to applications in the biological sciences. Topics include the scientific process, core biological concepts, careers in biology-related fields, and safety and health policies relevant to biological research.

BIOL 328 Bioethics (3)

Recommended: WRTG 101 and BIOL 101. An introduction to ethical decision making related to human life and health. The aim is to form defensible positions and carefully crafted arguments based on well-supported evidence. Discussion covers reproductive issues, biological research, and health care. Emphasis is on scientific and philosophical thinking.

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. Student may receive credit for only one of the following: 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 325 or another upper-level BIOL course. A thorough examination of the basic structure and function of cells, with an emphasis on eukaryotic cell biology. The objective is to use knowledge of molecular biology to interpret results and draw conclusions about research findings and technological applications. Topics include cell-cycle growth and death; protein structure; DNA replication, repair, and recombination; gene expression; RNA processing; and molecular transport, traffic, and signaling. Discussion also covers the application of recombinant DNA, genetic engineering, and other current molecular biology technologies. 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.) Recommended: BIOL 325. A laboratory study of current molecular biology and genetic engineering procedures, including 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: MATH 106 (or higher) and IFSM 201. 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: 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: 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. The goal is to apply knowledge of neurobiological principles to advanced studies or careers and be more informed health care consumers. Topics include neuronal structure and function; communication at the synapse; membrane receptors and intra- and intercellular signaling systems; gross organization of the brain and spinal cord; the processing of sensory information; the programming of motor responses; research techniques; ethics; brain development; plasticity; and higher functions such as learning, memory, cognition, and speech.

BIOL 398A Human Evolution and Ecology (1)

(For students majoring or minoring in a science.) An examination of paleontological and biological evidence supporting human evolution, human migration, and human impact on ecosystems. The aim is to apply the scientific method to data analysis and critically evaluate findings from paleontological, linguistic, and genetic studies. Support for the theory of evolution is provided through examination of fossil records, DNA analysis, geology, and biogeographical changes. Emphasis is on basic tenets of evolution and natural selection as they relate to human impact on biodiversity within ecosystems. Topics include biotechnological approaches for exploring genetic drift and the expression of genetic traits in various human populations.

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 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 325. An examination of current topics in the life sciences through seminars and discussions based on representative publications in the recent and primary literature. The aim is to use scientific reasoning, quantitative reasoning, and knowledge of biological principles to interpret results, make inferences, and draw conclusions about research findings.

BIOL 422 Epidemiology of Emerging Infections (3)

Prerequisite: BIOL 230, BIOL 302, or BIOL 398G. Recommended: WRTG 393. An investigation of factors contributing to the emergence of new infectious diseases and the resurgence of diseases once thought to have been controlled. The goal is to synthesize and apply knowledge of research methods, integrate epidemiological information, and communicate knowledge to scientific and nonscientific communities. Topics include socioeconomic and environmental factors that contribute to the inability to prevent or control malaria, tuberculosis, and AIDS. Disease symptoms, patterns of spread, and possible control measures are examined for new infectious diseases (such as Lyme disease and those caused by E. coli O157, the Ebola virus, hantaviruses, and cryptosporidia). Discussion also covers resurgent diseases such as anthrax, bubonic plague, dengue, influenza, and cholera. 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: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

BIOL 486B Internship in Life Science Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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, international business management, or strategic and entrepreneurial management;
- a certificate in various business-related areas; and
- electives.

BMGT 110 Introduction to Business and Management (3)

(For students with little or no business background. Recommended preparation for many other BMGT courses.) An introduction to the fundamental concepts of business management and leadership. The objective is to understand the interrelated dynamics of business, society, and the economy. Discussion covers business principles and practices in the context of everyday business events and human affairs and from a historical perspective.

BMGT 160 Principles of Supervision (3)

(Formerly MGST 160.) An introductory study of the skills required to effectively supervise and manage employees in organizations, such as knowing how to plan, organize, and control the workload and understanding worker behavior. Topics include the role and function of supervisors, recruitment and evaluation of workers, management by objectives, task delegation, motivation strategies, training and professional development, communication and conflict management, and time management. Students may receive credit for only one of the following courses: BMGT 160 or MGST 160.

BMGT 305 Knowledge Management (3)

A practical approach to knowledge management. The aim is to understand the value of knowledge management and the roles of knowledge workers and knowledge managers. Discussion covers how organizations capture, acquire, and share knowledge to maintain corporate memory and to develop collaborative energy. Topics include both formal and informal approaches to knowledge sharing and ways in which organizations use knowledge management techniques for competitive advantage. Students may receive credit for only one of the following courses: BMGT 305 or BMGT 388C.

BMGT 307 Import and Export: Managing Global Trade (3)

(Formerly BMGT 407.) Prerequisite: BMGT 392. An exploration and analysis of managing global trade within today's fast-paced, highly interconnected global economy. The aim is to research business opportunities and make informed decisions, use public and private resources in the development of an import and export program, evaluate contractual arrangements, and assess regulations and rules to assure procedural compliance. 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 307, BMGT 407, or BMGT 498S.

BMGT 312 Gender Issues in Business (3)

Prerequisite: BMGT 110 or at least two years of business and management experience. An examination of gender roles in the business environment. The objective is to identify the implications of gender differences for organizational effectiveness and understand how to transform the challenges into opportunities. Topics include changing workplace dynamics and differences in leadership and communication styles. Students may receive credit for only one of the following courses: BMGT 312, BMGT 398I, or MGMT 398I.

BMGT 317 Decision Making (3)

A practical examination of decision making. The goal is to use a proven problem-solving framework to generate potential solutions for effective decision making. Discussion covers the cultural impacts of decision making, including stakeholders' expectations. Topics also include root cause analysis, risks and uncertainty, critical success factors, key performance indicators, psychological traps, and the steps to assure effectiveness before and after decision implementation. Students may receive credit for only one of the following courses: BMGT 317 or TMGT 310.

BMGT 324 Starting a Small Business (1)

An introduction to entrepreneurship and small business start-up. The aim is to identify the fundamental skills necessary for managing a small business, the critical elements of a business plan, and associated risks and challenges. Topics include business structures, competitor analysis, capital acquisition, and marketing. 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)

Recommended: BMGT 324. An introduction to the preparation of a business plan for starting a small business. The goal is to be able to draft a small-business plan using research to identify prospects and resources. Topics include prior performance, business expenses, customer service, competitive analysis, and financial management. 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 Introduction to Federal Contracting (3)

An overview of the federal contracting process, including the requirements and techniques of federal contracting. The objective is to be able to document needs in writing, develop evaluation criteria, and review and assess contractor performance. Activities include planning, evaluating award criteria, and assessing performance. Discussion also covers critical contract issues. 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. Focus is on 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. An examination of the four functions of management—planning, organizing, leading, and controlling—with emphasis on the application of management concepts and theories to achieve organizational goals. The aim is to develop strategies, goals, and objectives to enhance performance and sustainability. Topics include ethics, social responsibility, globalization, and change and innovation. 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 110 or BMGT 364. An exploration of leadership as a critical skill for the 21st century, when change occurs rapidly and consistently. The objective is to be able to use leadership theory and assessment tools to evaluate one's own leadership skills. Focus is on the leadership skills needed to develop committed and productive individuals and high-performing organizations. Topics include vision, values, culture, ethics, and the interaction between the organization and the external environment. Students may receive credit for only one of the following courses: BMGT 365, MGMT 300, MGST 310, or TEMN 310.

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 an organization. The goal is to explain the implications of supply chains for customer expectations and the competitive advantage of the organization. Discussion covers effective practices and tradeoffs among separate supply chain functions and the use of performance measures to monitor outcomes. Topics also include logistics, forecasting, negotiating, trust and collaboration, and supply chain status reporting.

BMGT 375 Purchasing Management (3)

Prerequisite: BMGT 364. A study of purchasing management and the roles of purchasing specialists in medium to large organizations under the guidance of the chief purchasing officer. The aim is to understand how organizations use purchasing for competitive advantage; how suppliers are evaluated, selected, and managed; how metrics and models are used to make purchasing more effective; how cross-functional collaboration is vital to achieving economic efficiencies; and how important ethics and integrity in purchasing is to good business practices. Topics include the duties of a buyer, the ways information technology supports purchasing, materials management, controlling costs, best practices, outsourcing and insourcing, and measuring purchasing effectiveness. Students may receive credit for only one of the following courses: BMGT 375, MGMT 375, or TEMN 360.

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 and concepts relevant to the conduct and understanding of commercial business transactions in the domestic and global environments. The aim is to evaluate sources of law, legal process, procedures, and remedies and to analyze tort, criminal, and contractual rights, obligations, liabilities, and remedies in the business environment. Topics include the legal, ethical, and social environment of business, civil and criminal law, agency, types 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. The aim is to evaluate sources of law, legal process, procedures, and remedies and to analyze tort, criminal, and contractual rights, obligations, liabilities, and remedies in the business environment. Topics include personal and real property, leases, antitrust, business insurance, accountants' liability, negotiable instruments, secured transactions, government regulation affecting consumer protection, environmental protection, debtor/creditor relationships, and bankruptcy and reorganization.

BMGT 388G Effective Business Presentations (1)

An introduction to best practices and methodologies for creating and delivering effective business presentations. The aim is to be able to prepare a presentation plan and use the plan to prepare and deliver a PowerPoint presentation. Topics include presentation objectives, audience analysis, storyboarding, presentation delivery techniques, best practices of developing PowerPoint slides, and selection of presentation resource materials.

BMGT 391 Supervision (3)

Prerequisite: BMGT 364. A survey of traditional and contemporary supervisory practices. The objective is to apply interpersonal communication, decision making, performance management, and other supervisory skills to the practice of management. Discussion covers the five managerial functions of a supervisor: planning, organizing, staffing, leading, and controlling. Students may receive credit for only one of the following courses: BMGT 391, BMGT 398S, or HRMN 394.

BMGT 392 Global Business (3)

Prerequisite: BMGT 110 or at least two years of business and management experience. An overview of key concepts and issues relevant to conducting business in the global environment. Emphasis is on applying fundamental knowledge of global business and analyzing and evaluating global business variables for informed decision making. The objective is to analyze property rights, obligations, liabilities, and remedies; evaluate regulations in the business environment; and assess implications of transactions and negotiable instruments in the business environment. Topics include the nature and scope of global business; cultural, political, legal, and economic environments; marketing; trade; and foreign investments. 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)

(With BMGT 394, designed to fulfill the requirements for the Maryland licensing examination to sell real estate.) Recommended: ECON 203. A conceptual and functional analysis and application of legal principles and related concepts relevant to the conduct of real estate transactions concerning types of home ownership. The aim is to prepare to take the Maryland licensing examination to sell real estate. Topics include definition and scope of real estate, contracts, brokerage services, licensing and practice of salespeople, property descriptions, encumbrances, and methods and concepts of financing such as mortgages.

BMGT 394 Real Estate Principles II (3)

(With BMGT 393, designed to fulfill the requirements for the Maryland licensing examination to sell real estate.) Prerequisite: BMGT 393. A continuation of the study and functional analysis and application of the legal principles relevant to the conduct of real estate transactions. The goal is to prepare to take the Maryland licensing examination to sell real estate. Topics include home ownership, environmental issues, real estate appraisals and financing, agency and brokerage agreements, seller and buyer representation, fair housing and discrimination, and settlement procedures. 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 398F Conflict Management in Organizations (1)

(Formerly MGST 398F.) A study of the proper management of conflict as a natural and healthy element of effective organizational functioning. Focus is on understanding why inappropriate conflict management leads to dysfunctional employee behavior, while appropriate conflict management leads to motivated and supportive behavior. A model of basic conflict management strategies is presented, and the circumstances under which each strategy is (or is not) appropriate are discussed. Students may receive credit for only one of the following courses: BMGT 398F or MGST 398F.

BMGT 398I Communication Skills for Supervisors (1)

(Designed to help supervisors improve their communication skills.) An introduction to the basic aspects of communication. Focus is on practical applications. Elementary skills are practiced and the dynamics of interpersonal communication are analyzed to provide experience, confidence, and insight into one-to-one communication situations.

BMGT 398J Motivation and Performance in Organizations (1)

(Formerly MGST 398J.) An exploration of various theoretical perspectives on motivation-related performance problems. The implications for policy formulation, managerial strategy, and problem resolution are assessed. Focus is on the definition of motivation and performance within organizational settings, the analysis of performance problems, and the implications of motivation theory and research for managers and supervisors. Assignments include advanced reading and research. Students may receive credit for only one of the following courses: BMGT 398J, MGST 198J, or MGST 398J.

BMGT 411 Process Improvement and Performance Measurements (3)

A hands-on, project-based introduction to process improvement and performance management. The objective is to assess the root cause of a problem, apply a variety of proven tools to improve processes, and select and apply performance measures to evaluate the results of process improvements. Emphasis is on process improvements that are cost-effective and add value to organizational missions. Topics include meeting customer expectations, waging the war on waste, flowcharting, and selecting approaches to change management. Students may receive credit for only one of the following courses: BMGT 411 or TMGT 411.

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. The goal is to analyze business transactions, structure international business transactions, and recommend means of protecting against risk of loss. 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 456 Managing Across Cultures and Borders (3)

(Formerly BMGT 498R.) Prerequisite: BMGT 392. An examination and analysis of multinational management across cultures and borders. The aim is to apply critical thinking and analytical skills in global management settings. Focus is on the role of business managers in today's complex global environment. Topics include cross-cultural strategic planning, multinational organizational structures, global leadership, cross-cultural communication, environmental factors, decision making, and negotiations. 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), 364, and 365. An examination of research and theory on the forces underlying the way members of an organization behave and their effect on employee and organizational productivity and effectiveness. The aim is to participate, lead, and manage teams and maximize individual contributions to an organization. Topics include the impact that individual characteristics, group dynamics, and organizational structure, polices, and culture have on employee behaviors and organizational outcomes (i.e., productivity, absenteeism, turnover, deviant workplace behavior, satisfaction, and citizenship).

BMGT 465 Organizational Development and Transformation (3)

Prerequisites: BMGT 364 and 365. An introduction to organizational development—a systematic process of data collection, diagnosis, action planning, intervention, and evaluation aimed at increasing the effectiveness of the organization and developing the potential of all individuals. The goal is to identify and diagnose organizational problems and opportunities and apply management principles to support organizational change. Students may receive credit for only one of the following courses: BMGT 465, MGMT 398K, MGMT 465, or TMGT 350.

BMGT 466 Global Business and the Public Sector (3)

(Formerly BMGT 366.) Prerequisite: BMGT 392. Recommended: BMGT 364 or BMGT 365. A conceptual and functional analysis and application of management principles and strategies encompassing state and nonstate 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, and marketing; public finance; and governance. Students may receive credit for only one of the following courses: BMGT 366, BMGT 466, or TMGT 305.

BMGT 482 Advanced Federal Contracting (3)

Prerequisites: BMGT 110 (or at least two years of business and management experience) and 339. An in-depth examination of the procurement life cycle. The objective is to assess the intricate relationships between the contracting activity and contractors involved in ongoing contract performance and see how these relationships can become mutually beneficial instead of adversarial. Topics include ethics, socioeconomics, key decision points, terminations, modifications, and related performance issues. 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. A theoretical and practical investigation into the factors involved in building and managing effective work groups or teams in organizations. The aim is to lead and manage teams—establishing goals, roles, and processes; managing resources and relationships; and using effective interpersonal communication and team-building practices to enhance team members' individual and collective motivation, productivity, and performance. Topics include the conscious and unconscious dynamics of team development, conflict and decision making, commitment and trust, assessment and rewards, and other factors that foster team cohesion and performance. Students may receive credit for only one of the following courses: BMGT 484, BMGT 498H, or MGMT 498H.

BMGT 485 Leadership for the 21st Century (3)

(Intended as the final capstone course for management studies majors, to be taken in the last 15 credits, but appropriate for anyone who aspires to a leadership position.) Prerequisites: BMGT 364, 365, and 464 (or BMGT 465). An examination of leadership in organizations, with a focus on issues pertinent to the 21st century. Discussion covers the leadership qualities and behaviors that help organizations thrive: valuing employees, having a clear vision, acting ethically, relying on core values, and building positive relationships. The goal is to develop the skills necessary to achieve individual and organizational excellence.

BMGT 486A Internship in Business and Management Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

BMGT 486B Internship in Business and Management Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

BMGT 487 Project Management I (3)

(The first course in the two-course series BMGT 487–488.) Prerequisites: BMGT 364 and FINC 330. An introduction to project management principles, concepts, and software applications. The goal is to manage a project simulation through all phases of the project life cycle. 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 examination of project management processes and applications beyond introductory principles and concepts. The goal is to manage a project simulation through all phases of the project life cycle. Emphasis is on the practical applications of project management principles and processes in real-world situations. Projects depict real-world situations, such as information systems implementations; service business/e-commerce projects; and consulting projects that occur in research, information systems, manufacturing, and engineering firms. Students may receive credit for only one of the following courses: BMGT 488 or TMGT 430.

BMGT 495 Strategic Management (3)

(Access to spreadsheet, word processing, and presentation software is required. Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: BMGT 364 and 365, FINC 330 (or BMGT 340), and MRKT 310. A study of strategic management that focuses on integrating management, marketing, finance/accounting, production/operations, services, research and development, and information systems functions to achieve organizational success. The aim is to apply integrative analysis, practical application, and critical thinking to the conceptual foundation gained through previous study and personal experience. Emphasis is on developing an organizational vision and mission, developing and implementing strategic plans, and evaluating outcomes. 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. The aim is to explore ethical and moral considerations of corporate conduct, social responsibilities, policies, and strategies. Emphasis is on the definition, scope, application, and analysis of ethical values as they relate to issues of public and organizational consequence and business decision making in the domestic and global business environments.

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. Focus is on examining, evaluating, and assessing individual skill sets; networking; and researching career and economic markets. The objective is to formulate a career path and develop the resources needed to enter that path. Topics include résumé and cover letter development, interviewing techniques, negotiation strategies, and tools for ongoing career planning.

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 (including related requirements for the environmental management major).

CHEM 121 Chemistry in the Modern World (3)

For students not majoring or minoring in science.) An exploration of chemistry as it relates to human life and the environment. The goal is to use a working knowledge of chemical principles, scientific reasoning, and quantitative reasoning to make informed decisions about health and safety matters. Discussion examines natural processes and human factors in the modern world using the principles of chemistry and the scientific method. Students may receive credit for only one of the following courses: CHEM 102, CHEM 103, CHEM 104, CHEM 107, CHEM 121, or GNSC 140.

CHEM 297 Environmental Chemistry (3)

Prerequisite: MATH 115 (or MATH 107–108). An examination of chemistry in the context of environmental systems and an exploration of interactions among ecosystems, living resources, waste, and pollutants. The aim is to identify and evaluate fundamental principles of chemistry in relation to environmental systems and ecosystem health. Discussion covers sources, effects, prevention, and management of pollution and environmental degradation. Students may receive credit for only one of the following courses: CHEM 102, CHEM 103, CHEM 105, 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 East Asian studies; and
- electives.

UMUC offers a limited number of foreign language courses each session.

CHIN 111 Elementary Chinese I (3)

(Not open to native speakers of Chinese; assumes no prior knowledge of Chinese. Students with prior experience with the Chinese language should take a placement test to assess appropriate level.) An introduction to spoken and written Mandarin Chinese. The objective is to communicate in Chinese in some concrete real-life situations using culturally appropriate language and etiquette, to read and write pinyin, and to begin to recognize and type Chinese characters. Practice is provided in using the correct pronunciation, vocal tone, and structures needed for everyday communication.

CHIN 112 Elementary Chinese II (3)

(Not open to native speakers of Chinese.) Prerequisite: CHIN 111 or appropriate score on a placement test. A continued introduction to spoken and written Mandarin Chinese. The goal is to communicate in Chinese in concrete real-life situations using culturally appropriate language and etiquette and to recognize and type some high frequency Chinese characters. Practice is provided in improving pronunciation and developing oral and written skills used in everyday communication.

CHIN 114 Elementary Chinese III (3)

(Not open to native speakers of Chinese.) Prerequisite: CHIN 112 or appropriate score on a placement test. Further development of skills in elementary spoken and written Mandarin Chinese. The aim is to communicate in Chinese in a variety of real-life situations using culturally appropriate language, recognize and distinguish more commonly used Chinese characters, and read in context. Practice is provided in improving pronunciation and developing the oral and written skills used in everyday communication.

CHIN 115 Elementary Chinese IV (3)

(Not open to native speakers of Chinese.) Prerequisite: CHIN 114 or appropriate score on a placement test. Further development of skills in elementary spoken and written Mandarin Chinese. The aim is to interact effectively with native speakers of Chinese in a variety of real-life situations using culturally appropriate language and to recognize and distinguish more commonly used Chinese characters in context. Practice in fine-tuning pronunciation and applying language skills to a range of contexts is provided.

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 laboratory management;
- a minor in communication studies, journalism, or speech communication;
- a certificate in Desktop Publishing; and
- electives.

COMM 200 Military Communication and Writing (3)

(Fulfills the general education requirement in communication.) A study of managing 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 presentation; 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 or ENGL 101. An introduction to communication theory. The objective is to apply communication theory and evaluate communication situations. 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. Topics include intra- and interpersonal communication, public communication, mass media, and contemporary issues associated with mediated communication.

COMM 302 Mass Communication and Media Studies (3)

(Formerly COMM 379A. Fulfills the general education requirement in communications but is not a writing course.) Prerequisite: WRTG 101 or ENGL 101. A survey of mass communication designed to enhance media literacy. The goal is to interpret, evaluate, and produce media messages. 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 or ENGL 101. An examination of the components of languages, with special emphasis on the English language, its origins, continued development, and use in speaking and writing. The aim is to examine categories of speech and methods of written communication from the perspective of regional and social variation. Discussion covers cultural, gender, and racial variations, as well as underlying perspectives and assumptions.

COMM 400 Mass Media Law (3)

(No previous study of law required. Fulfills the general education requirement in communications but is not a writing course.) Recommended: WRTG 391, WRTG 393, or WRTG 394. An examination of important legal issues that affect mass media and communications professionals. The objective is to analyze mass media law, its evolution, and its relationship with society, culture, and politics. Topics include copyright, intellectual property, fair use, defamation, privacy, freedom of information, freedom of speech, and freedom of the press, as well as issues raised by the growth of the Internet. Discussion also covers ethics in mass media, 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 410 History of Mass Media

(Formerly JOUR 410). Prerequisite: WRTG 101 or ENGL 101. 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. Students may receive credit for only one of the following courses: COMM 410 or JOUR 410.

COMM 486A Internship in Communication Studies Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

COMM 486B Internship in Communication Studies Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

COMM 493 Strategies for Visual Communication (3)

(Access to a desktop publishing program, preferably InDesign or QuarkXPress, is required; instruction on software is not provided. Fulfills the general education requirement in communications but is not a writing course.) Recommended: CMST 310. An introduction to visual communication that explores the integration of text and graphics in formal and practical design. The goal is to develop strategic solutions to enhance communication and apply critical and creative processes to produce and evaluate design. Topics include design principles (such as color theory, typography, and content organization) and meaning and rhetoric.

COMM 495 Senior Seminar in Communication Studies (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: COMM 300 and WRTG 391, WRTG 393, or WRTG 394. A project-based examination of communication. The aim is to integrate knowledge, practices, and principles gained from previous study and build on that conceptual foundation through integrative analysis, practical application, and critical thinking. Tasks include assembling and analyzing a portfolio and completing a final project (such as a research-based report and presentation, feasibility study, feature article, or career strategic plan) that requires conducting research and exploring ethical issues.

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 networking and security, computer science, digital media and Web technology, or information systems management;
- a minor in computing;
- a certificate in various computer- and information science–related areas; 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.

INFORMATION ON COURSES

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. The objective is to design programs using pseudocode and participate in hands-on debugging, testing, and documenting activities. Topics include principles of programming, the logic of constructing a computer program, and the practical aspects of integrating program modules into a cohesive application. Algorithms are used to demonstrate programming as an approach to problem solving. Students may receive credit for only one of the following courses: CMIS 102, CMIS 102A, or CMSC 101.

CMIS 111 Social Networking and Cybersecurity Best Practices (3)

A hands-on study of current social networking applications and approaches to protect against cyber attacks and enhance personal cybersecurity. The goal is to collaborate and interact through personal and professional social networking while developing and using computer security best practices. Discussion covers issues associated with the impact of social computing on individuals and society.

CMIS 115 Programming in Objective-C for the Mac (3)

(Access to a Mac computer running Leopard or higher is required.) Prerequisite: CMIS 102 or prior programming experience. A hands-on introduction to object-oriented programming using Objective-C. The aim is to design, implement, test, debug, and document programs using the Xcode integrated development platform and other appropriate tools.

CMIS 125 Programming in C# (3)

Prerequisite: CMIS 102 or prior programming experience. A hands-on introduction to object-oriented programming using C#. The aim is to design, implement, test, debug, and document programs, using the Microsoft Visual Studio integrated development environment. Topics include data types, iterative and decision statements, exception handling, input/output, and classes and objects.

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. The goal is to design, implement, test, debug, and document Java programs, using appropriate development tools. Projects require use of algorithms, simple data structures, and object-oriented concepts. 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 or CMIS 141. An introduction to the principles of Extensible Markup Language (XML) and its use in business data exchange. The goal is to design and create well-formed, validated XML documents. Discussion covers the structure, transformation, presentation, and implementation of XML technologies, including document type definitions (DTDs) and schemas. Hands-on projects and exercises are provided.

CMIS 215 Programming for the iPhone and iPad (3)

(Access to a Mac computer running Leopard or higher required.) Prerequisite: CMIS 115. A hands-on introduction to programming mobile devices. The aim is to design, implement, test, debug, document, and deploy business and graphical mobile applications.

CMIS 225 Developing Windows Presentation Foundation (WPF) Applications Using C# (3)

Prerequisite: CMIS 125. A hands-on introduction to applications development using C#. The aim is to analyze, design, develop, test, and deploy rich client applications using Windows Presentation Foundation (WPF), C#, and common .Net class libraries. The XAML markup language and the event-programming model of WPF are introduced. Topics also include LINQ, data binding, and data access.

CMIS 242 Intermediate Programming (3)

Prerequisite: CMIS 141. Further study of the Java programming language. The objective is to design, implement, test, debug, and document Java programs, using appropriate development tools. Topics include object-oriented design, event-driven programming, exceptions, recursion, arrays, and data structures.

CMIS 255 Mobile Phone Application Development (3)

Prerequisite: CMIS 225. A hands-on, project-based introduction to the development of applications for Windows mobile phones. The goal is to design, implement, test, debug, and document programs. Integrated development environments and tools from Microsoft are used to design, develop, and test Windows phone solutions for business, service-oriented, multimedia, and data-driven applications.

CMIS 310 Computer Systems and Architecture (3)

(Not open to students who have completed CMSC 311.) Prerequisite: CMIS 115, CMIS 125, or CMIS 141. A study of the fundamental concepts of computer architecture and factors that influence the performance of a system. The aim is to apply practical skills to computer systems architecture. Topics include data representation, assembly language, central processing unit architecture, memory architecture, and input/output (I/O) architecture. Students may receive credit for only one of the following courses: CMIS 270, CMIS 310, CMSC 311, or IFSM 310.

CMIS 315 Programming in C++ (3)

Prerequisite: CMIS 141, CMIS 115, or CMIS 125. A hands-on, comprehensive study of the C++ programming language, including basic C++ syntax, arrays and strings, pointers and references, operator overloading, object-oriented concepts, inheritance and polymorphism, and templates. The aim is to design, implement, test, debug, and document C++ programs using basic computation, simple input/output (I/O), standard conditional and iterative structures, and functions. Students may receive credit for only one of the following courses: CMIS 240 or IFSM 315.

CMIS 320 Relational Database Concepts and Applications (3)

Prerequisite: CMIS 102 or CMIS 141. A study of the functions, underlying concepts, and applications of enterprise relational database management systems (RDBMS) in a business environment. The aim of the course is to appropriately use databases to meet business requirements. Discussion covers entity/relationship diagrams, relational theory, normalization, integrity constraints, the Structured Query Language (SQL), and physical and logical design. Business case studies and projects include hands-on work using an industry-standard RDBMS. 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 141, CMIS 115, or CMIS 125. A hands-on, project-based introduction to the UNIX operating system. The aim is to use basic UNIX commands to design, create, and execute shell programs. Topics include file structures, editors, pattern-matching facilities, shell commands, and shell scripts.

CMIS 330 Software Engineering Principles and Techniques (3)

Prerequisite: CMIS 115, CMIS 125, or CMIS 141. A study of software engineering from initial concept through design, development, testing, and maintenance of the product. Discussion covers software development life-cycle models. The goal is to analyze, customize, and document multiple processes to solve information technology problems. Topics include configuration management, quality, validation and verification, security, human factors, and organizational structures. Students may receive credit for only one of the following courses: CMIS 330 or CMIS 388A.

CMIS 420 Advanced Relational Database Concepts and Applications (3)

Prerequisite: CMIS 320, IFSM 410, or IFSM 411. A comprehensive study of the features and techniques of relational database management appropriate to the advanced end user, database designer, or database administrator. The goal is to complete hands-on work using an industry-standard enterprise relational database management system. Topics include basic database administration functions, advanced SQL and complex data types, stored procedures, user-defined functions, triggers, and data warehousing. Students may receive credit for only one of the following courses: CMIS 420, IFSM 420, or IFSM 498I.

CMIS 430 Enterprise Database Administration Using Oracle (3)

Prerequisite: CMIS 420 or CMIT 261. A hands-on study of database administration. The aim is to create and manage a secure enterprise database in an effective and efficient manner. Discussion covers evaluation and implementation of security solutions, backup and recovery, use of graphic user interface (GUI) tools and scripts to monitor and maintain an enterprise database, and Oracle database architecture. Students may receive credit for only one of the following courses: CMIS 430, CMIT 381, or CMIT 381O.

CMIS 435 Computer Networking (3)

Prerequisite: CMIS 310. An investigation of the effects of computer networking on information systems. The aim is to apply skills to the optimization of network design. Topics include the seven-layer Open Systems Interconnection (OSI) reference model, physical aspects of computer networking, ethernet and TCP/IP protocols, quality of service (QoS) issues, and security implications. A project involves the design of a computer network. Students may receive credit for only one of the following courses: CMIS 435 or CMSC 440.

CMIS 440 Advanced Programming in Java (3)

Prerequisites: CMIS 242 and CMIS 320. An exploration of advanced Java programming, using the Java Enterprise edition. The objective is to analyze, design, develop, test, deploy, and document small- to medium-scale Web applications. Hands-on projects in Java server pages, servlets, and Java database connectivity are included. Students may receive credit for only one of the following courses: CMIS 440 or CMIS 498A.

CMIS 445 Distributed Systems (3)

Prerequisite: CMIS 435. Recommended: CMIS 325. An examination of the concepts and design principles of distributed computer systems. The objective is to apply skills to the design of distributed systems. Topics include client/server architecture, distributed systems, middleware, processes, marshalling, interprocess communications, distributed objects, Web services, distributed file systems, name services, time services, distributed multimedia systems, network quality of service, security, and replication. Discussion also covers standards for distributed object-oriented programming. A distributed programming project 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 used in developing a statement of required functionality and behavior of a system. The aim is to develop a complete and accurate software specification. Discussion covers the fundamentals of elicitation, analysis, verification, validation, and documentation of software requirements. Projects using these techniques are included.

CMIS 460 Software Design and Development (3)

Prerequisite: CMIS 330. An in-depth study of the concepts and techniques for designing and developing software for large projects. Focus is on Unified Modeling Language (UML) and its application to the system architectural design using established patterns. Discussion covers design strategies, principles, methodologies, and paradigms, as well as evaluation and representation. Topics also include architectural models, development tools and environments, implementation guidelines, and documentation. Students may receive credit for only one of the following courses: CMIS 460 or CMSC 415.

CMIS 465 Software Verification and Validation (3)

Prerequisite: CMIS 330. A study of tools, methods, and current practices for assessing the quality and correctness of software. The goal is to establish and use a development and test environment. Topics include the roles of testing and formal verification, fundamentals and formal models of program verification and validation, planning and documentation for quality assurance, methods of performing technical reviews, strategies of system testing and integration planning, and principles and practices used in conducting tests.

CMIS 485 Web Database Development (3)

Prerequisites: CMIS 141 and 320. An exploration of the current Web technologies and programming language options used to interface a relational database to Web servers. The aim is to build relational databases and Web-based applications. Hands-on projects using Web technologies such as Perl, PHP, ASP.NET, and Java are constructed and evaluated within a three-tiered architecture. Students may receive credit for only one of the following courses: CMIS 485, CMIS 398B, or CMIS 498B.

CMIS 486A Internship in Computer Information Science Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

CMIS 486B Internship in Computer Information Science Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

CMIS 498 Special Topics in Computer and Information Science (3)

Prerequisites: Vary according to topic. An examination of 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 networking and security, cybersecurity, digital media and Web technology, or information systems management;
- a minor in computing;
- a certificate in various computer-related areas; and
- electives.

CMIT 202 Fundamentals of Computer Troubleshooting (3)

(Designed to help prepare for the CompTIA A+ exams.) Prerequisite: IFSM 201. A thorough review of computer hardware and software with emphasis on the application of current and appropriate computing safety and environmental practices. The goal is to evaluate, install, configure, maintain, and troubleshoot computer hardware components and operating systems.

CMIT 265 Fundamentals of Networking (3)

(Designed to help prepare for the CompTIA Network+ certification exam.) Prerequisite: CMIT 202. An introduction to networking technologies for local area networks, wide area networks, and wireless networks. The aim is to recognize the type of network design appropriate for a given scenario. Topics include the OSI (open system connectivity) model, security, and networking protocols. Students may receive credit for only one of the following courses: CMIT 265 or CMIT 265M.

CMIT 320 Network Security (3)

(Designed to help prepare for the CompTIA Security+ exam.) Prerequisite: CMIT 265, CSIA 302, or CompTIA Network+ certification. A study of the fundamental concepts of computer security and its implementation. The aim is to assess and mitigate risk, evaluate and select appropriate technologies, and apply proper security safeguards.

CMIT 321 Ethical Hacking (3)

(Formerly CMIT 398E. Designed to help prepare for EC-Council Certified Ethical Hacker certifications.) Prerequisite: CMIT 265 or CSIA 302. Development of the knowledge and skills required to discover vulnerabilities and recommend solutions for tightening network security and protecting data from potential attackers. The goal is to use penetration-testing tools and techniques that security testers and ethical hackers use to protect computer networks. Students may receive credit for only one of the following courses: CMIT 398E or CMIT 321.

CMIT 331 Wireless Network Administration (3)

(Designed to help prepare for the Certified Wireless Network Administrator certification exam. Access to a dd-wrt/tomato-compatible wireless access point/router with administration privileges is required; use of a secondary or separate router for coursework is recommended to preserve Internet connectivity.) Prerequisite: CMIT 265. A comprehensive review of the fundamentals of wireless network technologies. The objective is to design, implement, and manage secure and scalable wireless networks based on organizational requirements. 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 prepare for the Cisco Certified Network Associate Examination 640-802.) Prerequisite: CMIT 265. Presentation of and practice in the concepts and commands required to configure Cisco switches and routers in multiprotocol Internetworks. Focus is on developing the skills necessary to install, configure, and operate Cisco routers and switches within local area network and wide area network environments, including VoIP (voice over Internet protocol) and wireless networks. Discussion covers routing and switching concepts (Layer 2 and Layer 3 technologies) using Cisco switches and routers. 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 364 Windows Desktop Operating Systems (3)

(Designed to help prepare for the Windows Client Configuration exam, part of MCITP Enterprise Administrator Certification.) Prerequisite: CMIT 265. An overview of the configuration and management of Windows desktop operating systems. The aim is to install, configure, manage, and troubleshoot Windows desktop operating systems. Students may receive credit for only one of the following courses: CMIT 364 or CMIT 499X.

CMIT 368 Windows Server Administration (3)

(Designed to help prepare for the Windows Server Administrator exam, part of MCITP Server Administrator Certification.) Prerequisite: CMIT 265. An overview of the configuration and management of Windows Server operating systems. The goal is to install, configure, manage, and troubleshoot Windows Server operating systems.

CMIT 376 Windows Network Infrastructure (3)

(Formerly CMIT 376M. Designed to help prepare for the Windows Server Network Infrastructure exam, part of MCITP Server Administrator and MCITP Enterprise Administrator Certifications.) Prerequisite: CMIT 368. Development of the knowledge and skills necessary to install, configure, manage, and support the Windows Server network infrastructure. The objective is to configure network addressing, name resolution, network access, and file and print services, as well as to proactively monitor and manage the Windows Server network infrastructure. Students may receive credit for only one of the following courses: CMIT 376 or CMIT 376M.

CMIT 377 Windows Directory Services Infrastructure (3)

(Designed to help prepare for the Windows Server Active Directory exam, part of MCITP Server Administrator and MCITP Enterprise Administrator Certifications.) Prerequisite: CMIT 368. Development of the knowledge and skills necessary to install, configure, manage, and support the Windows Directory Services infrastructure. The goal is to configure, deploy, and maintain Windows Directory Services infrastructure and Domain Name System (DNS). Students may receive credit for only one of the following courses: CMIT 377 or CMIT 377M.

CMIT 378 Windows Server Applications Infrastructure (3)

(Designed to help prepare for the Microsoft Windows Applications Infrastructure exam, part of MCITP Enterprise Administrator Certification.) Prerequisite: CMIT 376. A study of the various Windows Server application services as they relate to supporting business needs. The aim is to deploy, configure, and secure Windows Server application services, including Web, terminal, and file services.

CMIT 391 Linux System Administration (3)

(Designed to help prepare for the Linux Profession Institute Certification 1 [LPIC-1] exams.) Prerequisite: CMIT 265. A study of the Linux operating system. The goal is to configure and manage processes, user interfaces, device files, print facilities, file systems, task automation, the boot-up/shutdown sequence, disk storage, network connectivity, system security, users, and groups. Students may receive credit for only one of the following courses: CMIS 390, CMIT 391, or CMIS 398U.

CMIT 424 Advanced Digital Forensics (3)

(Designed to help prepare for the Certified Computer Examiner [CCE] certification exam.) Prerequisite: CMIT 320 or CompTIA Security+ Certification. Recommended: CCJS 421 Digital Forensics. A project-driven study of the digital forensic evaluation process. The objective is to build forensic workstations, collect evidence, extract artifacts, identify unknown files, and reassemble evidence from network packet captures.

CMIT 425 Advanced Information System Security (3)

(Formerly CMIT 499S. Designed to help prepare for the $[ISC]^2$ Certified Information System Security Professional [CISSP] certification exam.) Prerequisites: CompTIA Network+ certification (or CMIT 265 or equivalent knowledge) and CompTIA Security+ certification (or CMIT 320 or equivalent knowledge). Recommended: BMGT 110, IFSM 300, or two years of business and management experience. A comprehensive study of information systems security to enhance organizational security. The goal is to manage risks by identifying and mitigating them. 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 prepare for the Cisco Certified Design Associate Examination 640-863.) Prerequisite: CMIT 350. Development of the knowledge and skills necessary for network design using Cisco Systems technologies. Focus is on developing the skills to identify Cisco products, local and wide area network (LAN and WAN) technologies, routing and bridging protocols, wireless and VoIP (voice over Internet protocol), and Cisco IOS software features that meet customer requirements for performance, capacity, and scalability in small- to medium-sized networks. Fundamentals of small- and medium-sized network design are introduced. Projects include designing 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 471 Windows Server Enterprise Administration (3)

(Designed to help prepare for the Microsoft Windows Server Enterprise Administrator exam, part of MCITP Enterprise Administrator Certification.) Prerequisites: CMIT 377 and 378. A comprehensive study of the planning, design, and management of a Windows server infrastructure in an enterprise environment. The aim is to plan and design directory services, Domain Name Systems (DNS), remote access, security policies, and virtualization infrastructure to support business goals.

CMIT 486A Internship in Computer Information Technology Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

CMIT 486B Internship in Computer Information Technology Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

CMIT 495 Current Trends and Projects in Computer Networks and Security (3)

(Intended as a final capstone course to be taken in a student's last 9 credits.) Prerequisites: CMIT 320, 350, and 368 and an additional 15 credits in CMIT coursework. A comprehensive project-driven study of network design and security, with an emphasis on the integration of knowledge, practical applications, and critical thinking. The objective is to implement a secure and scalable network to meet organizational needs. Topics include advanced concepts in network and security design.

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 Implementing Cisco IP Routing (3)

(Designed to help students prepare for the Cisco 642-902 ROUTE [Implementing Cisco IP Routing] Exams.) Prerequisite: CMIT 350. Development of the knowledge and skills necessary to use advanced IP address management and routing protocols in implementing scalable and secure Cisco integrated services routers (ISRs) connected to local and wide area networks. The goal is to configure and troubleshoot various routed environments (access, distributed, and core). Discussion covers configuration of secure routing solutions to support branch offices and mobile workers. Topics also include managing access and controlling overhead traffic in growing, routed networks after establishing basic connectivity.

CMIT 499F Implementing Cisco IP Switched Networks (3)

(Designed to help students prepare for the Cisco 642-813 SWITCH [Implementing Cisco IP Switched Networks] Exams.) Prerequisite: CMIT 350. Development of the knowledge and skills necessary to plan, configure, and verify the implementation of complex enterprise switching solutions using Cisco's Campus Enterprise Architecture. Topics include secure integration of VLANs (virtual local area networks), WLANs (wireless local area networks), and voice and video into campus networks.

CMIT 499G Troubleshooting and Maintaining Cisco IP Networks (3)

(Designed to help students prepare for the Cisco 642-832 TSHOOT [Troubleshooting and Maintaining Cisco IP Switched Networks] Exams.) Prerequisites: CMIT 499E and 499F. Development of the knowledge and skills to plan and perform regular maintenance on complex enterprise routed and switched networks. Discussion covers technology-based practices and a systematic ITIL (information technology infrastructure library)–compliant approach to perform network troubleshooting.

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 and information science, computer networking and security, digital media and Web technologies, or information systems management;
- a minor in computing;
- a certificate in Game Development; and
- electives.

CMSC 150 Introduction to Discrete Structures (3)

Prerequisite or corequisite: MATH 140. A survey of fundamental mathematical concepts relevant to computer science. The objective is to address problems in computer science. Proof techniques presented are those used for modeling and solving problems in computer science. Discussion covers functions, relations, infinite sets, and propositional logic. Topics also include graphs and trees, as well as selected applications. Students may receive credit for only one of the following courses: CMSC 150 or CMSC 250.

CMSC 325 Game Design and Development (3)

Prerequisite: CMSC 230 or CMSC 350. A project-driven study of the theory and practice of game design and development. The aim is to build realistic graphical 3-D worlds, animate characters, and add special effects to games. Discussion covers critical mathematical concepts and real-time game physics. Projects include collaborative development of interactive games.

CMSC 330 Advanced Programming Languages (3)

Prerequisite: CMSC 230 or CMSC 350. A comparative study of programming languages. The aim is to write safe and secure computer programs. Topics 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 350. A study of object-oriented and concurrent programming using features of Java. The goal is to design, implement, test, debug, and document complex robust programs in an object-oriented language. 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, threads, and event-driven graphic user interface programs). Programming projects are implemented in Java. Students may receive credit for only one of the following courses: CMSC 300 or CMSC 335.

CMSC 350 Data Structures and Analysis (3)

Prerequisites: CMSC 150 and CMIS 242. A study of user-defined data structures and object-oriented design in computer science. The aim is to develop secure Java programs. Topics include linked lists, stacks, queues, arrays, maps, vectors, and trees. Algorithms that perform sorting, searching, and recursion are discussed and analyzed.

CMSC 412 Operating Systems (3)

Prerequisite: CMIS 310 or CMSC 311. A study of the fundamental principles underlying modern operating systems. The objective is to design and implement a small-scale operating system and design a virtual memory management system. Discussion covers the essential components of a typical operating system and the interactions among them. Topics also include methods of managing processes and resources in computer systems. A programming project that implements part of an operating system is required.

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. The goal is to write programs that are constructed using program generators. Topics 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 350 (or 230). A presentation of fundamental techniques for designing and analyzing computer algorithms. The aim is to apply Big-O estimates of algorithms and proof-of-correctness techniques and to design algorithms. Basic methods include divide-and-conquer techniques, search and traversal techniques, dynamic programming, greedy methods, and induction. Programming projects are included.

CMSC 465 Image and Signal Processing (3)

Prerequisites: MATH 141 and CMSC 350. A project-driven study of image and signal processing. The goal is to apply spectral analysis techniques to analyze time series data for the purpose of recognizing and classifying signals and to apply image segmentation, representation, and description techniques to recognize and classify objects. Topics include discrete Fourier transforms, fast Fourier transforms, sampling and filtering, and image transformations and enhancements.

CMSC 486A Internship in Computer Science Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

CMSC 486B Internship in Computer Science Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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: Either CMSC 330 and 335 or CMIS 320 and 330. An overview of computer technologies with an 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, social networking, gaming, modeling simulations, or other current issues. Assignments include working in teams throughout the analysis, design, development, implementation, testing, and documentation phases of the projects, including periodic peer reviews.

CMSC 498 Special Topics in Computer Science (1–3)

Prerequisites: Vary according to topic. An examination of 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 networking and security, digital media and Web technology, or information systems management;
- a minor in computing;
- a certificate in various computer-related areas; and
- electives.

CMST 290 Introduction to Interactive Design (3)

An introduction to the principles, practices, techniques, and theories that govern the use of programming languages in the design and development of digital media. The objective is to effectively use proven programming theory to support digital media design for print, Web, and mobile devices. Topics include the logic of constructing a computer program, the practical aspects of integrating program modules as a unified whole, the use of algorithms as an approach to problem solving, and the basic features of object-oriented languages. Projects involve creation of pseudo code and actual code.

CMST 295 Fundamentals of Digital Media (3)

An overview of the principles, practices, techniques, and theories that govern the design and development of digital media in Web technology, digital design, and motion graphics. The goal is to effectively follow proven design theory in creating digital media for print, Web, and mobile devices. Topics include usability, accessibility, ethics, and emerging technologies. Career paths in the digital media industry are analyzed.

CMST 303 Advanced Application Software (3)

Prerequisite: Extensive experience with office application software, including word processing, spreadsheet, presentation, and database programs. A hands-on, project-based survey of advanced features of office application software. The aim is to use advanced application features to produce documents for professional and personal communication. Topics include information systems, application integration, computer hardware and software, storage, and networking. Students may receive credit for only one of the following courses: CAPP 303 or CMST 303.

CMST 306 Introduction to Visual Basic .NET Programming (3)

Prerequisite: CMST 290 or CMIS 102. A hands-on, project-based introduction to developing object-oriented, event-driven Web and desktop applications using the Visual Basic programming language in the .NET environment. The objective is to successfully write, test, debug, and execute Visual Basic .NET programming code to create visually oriented, event-driven desktop and Web applications. Topics include objects, events, variables, looping, data input/output, form design, sequencing of operation, interface design, and debugging. Discussion also covers specifications and requirements, documentation, and determination of performance relative to specification.

CMST 310 Fundamentals of Electronic Publishing (3)

Prerequisite: IFSM 201 or CMST 103. Recommended: CMST 290 and 295. A hands-on, project-based introduction to the tools, concepts, processes, and methods of electronic (desktop) publishing. The aim is to use Adobe InDesign (or another professional electronic publishing software program) to create electronic publications for various media formats following fundamental design principles. Topics include the history and evolution of publishing, working with color, incorporating graphics, principles and elements of design, publication workflow, emerging technologies, careers in the field, ethical and legal considerations, and collaborative design. 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 hands-on, project-based study of the advanced concepts, tools, processes, and methods of electronic (desktop) publishing. The goal is to use Adobe InDesign to create engaging electronic publications following fundamental design principles for print, online, and mobile devices. Topics include motion and interactivity, PDF (portable document format) publishing, emerging technologies, design issues related to mobile devices, ethical and legal considerations, collaborative work, and print and Web-ready Adobe Flash files. Students may receive credit for only one of the following courses: CAPP 311 or CMST 311.

CMST 320 Illustration Graphics (3)

A hands-on, project-based introduction to illustration graphics using Adobe Illustrator. The goal is to apply fundamental concepts of vector image composition to create professional digital media for delivery across multiple platforms, including print, Web, and video following ethical principles and legal guidelines. Topics include terminology, tools, theory, and processes from concept to completion. Discussion covers Bezier curves, shading, depth, paths, drawing tools, vector vs. raster images, and color theory.

CMST 325 Image Editing (3)

An introduction to digital image editing using Adobe Photoshop. The aim is to identify established digital image editing tools, techniques, and best practices; create new images; and edit existing images. Topics include terminology, tools, theory, and processes from concept to completion. Discussion covers fundamental concepts and practical techniques, as well as ethical and legal issues. Emphasis is on applying these concepts and techniques to produce high-quality digital works for multiple platforms, including print, Web, and other electronic media.

CMST 341 Principles of Multimedia I (3)

Recommended: CMST 290 and 295. A hands-on, project-based introduction to multimedia development. The aim is to create interactive products that integrate images, sound, video, and animation following sound media design principles for optimal display in multiple media formats using Adobe Flash. Topics include storyboarding, Web design, animation, motion-tweening, project management, and ethical design.

CMST 342 Principles of Multimedia II (3)

Prerequisite: CMST 341. Further hands-on project-based study of multimedia development. The objective is to use scripting with Adobe ActionScript to develop products that integrate sound, video, animation, and images for display in multiple media formats using Adobe Flash. Topics include storyboarding, Web design, animation, project management, and ethical design.

CMST 351 Motion Graphics I (3)

Prerequisites: CMST 320 and 325. A hands-on introduction to the basic concepts, techniques, and principles of digital video and motion graphics effects using Adobe After Effects. The objective is to describe digital video compositing techniques; create digital composites that combine video, text, digital images, and audio; and apply visual special effects to create professional results for use on multiple platforms, such as film, video, multimedia, and the Web. Topics include techniques such as basic storyboarding, key framing, transformations, and rendering, as well as effects (including levels, curves, color correction, blur, glow, fractal noise, keying, masking, and cartoon effects).

CMST 385 Principles of Web Design and Technology I (3)

Prerequisite: CMST 290, CMIS 102, IFSM 201, or CMST 103. Recommended: CMST 295. A study of Web design, tools, and technology principles. The goal is to plan and produce a professional Web site. Topics include Internet protocols; usability; accessibility; and social, ethical, and legal issues related to Web site production. Focus is on Extensible HyperText Markup Language (XHTML) and cascading style sheets (CSS). Students may receive credit for only one of the following courses: CAPP 385 or CMST 385.

CMST 386 Principles of Web Design and Technology II (3)

Prerequisite: CMST 385. Continuation of the study of Web design, tools, and technology principles. The objective is to create a Web site promotion strategy, with search engine optimization, and produce a professional Web site that incorporates multimedia and scripting. Topics include Web site marketing, Web analytics, performance, privacy, and security issues related to Web site production. Focus is on Extensible HyperText Markup Language (XHTML), cascading style sheets (CSS), and JavaScript. Students may receive credit for only one of the following courses: CAPP 386 or CMST 386.

CMST 388 Fundamentals of JavaScript (3)

Prerequisite: CMST 386. A hands-on, project-based study of JavaScript using a structured programming approach to build dynamic, interactive Web pages. The goal is to use client-side JavaScript to create interactive, cross-browser-compatible Web pages that minimize security and privacy vulnerabilities. Topics include form validation, Web development tools, documentation, dynamic HTML, event handling, cross-browser compatibility, cookies, and security issues. Programming projects are included. Students may receive credit for only one of the following courses: CMST 398J or CMST 390.

CMST 416 Advanced Visual Basic .NET Programming (3)

Prerequisite: CMST 306. A hands-on, project-based, structured programming approach for building dynamic, interactive Web applications using the Visual Basic .NET application development environment. The aim is to use sophisticated event-driven programming techniques to develop and deploy Web-based programming applications that interface with current database technologies. Emphasis is on programming concepts, tools, methods, and application design and development. Practical opportunities to design and develop complete applications integrating multiple features of the Visual Basic .NET programming language are provided.

CMST 425 Advanced Image Editing (3)

Prerequisite: CMST 325. Continued hands-on, project-based study of digital image editing using Adobe Photoshop. The objective is to identify and apply advanced design concepts, adjustments, and batch processing techniques toward creating new images and editing existing ones. Topics include more advanced terminology, tools, considerations, and processes from concept to completion. Emphasis is on advanced concepts and practical techniques to create professional images for print, Web, and other electronic media. Discussion also covers ethical and legal issues.

CMST 429 3D Modeling (3)

Prerequisites: CMST 320 and 325. A hands-on, project-based introduction to 3D modeling. The aim is to use professional-level software to create and manipulate models in three-dimensional space to render high-definition, photo-realistic 3D scenes and images using standard modeling methods. Topics include extrusion, lathing, sweeping, lofting, lighting, texture, and NURBS (non-uniform rational b-splines).

CMST 449 3D Animation (3)

Prerequisite: CMST 429. A hands-on, project-based introduction to 3D animation and continued study of 3D modeling concepts. The goal is to use professional-level software to create and manipulate models in three-dimensional space along a timeline to render high-definition 3D animations suitable for use in interactive applications, the Web, gaming, and other production environments. Emphasis is on applying movement to 3D creations. Discussion covers the fundamental principles of animation. Topics also include key framing, rigging, cycles, and deformers.

CMST 450 Web Development Using XML (3)

Prerequisite: CMST 386. A study of the concepts and techniques essential to Web development. The aim is to create, validate, and transform data into multiple formats to create digital and Web-based media. Topics include document creation, validation, transformation, and security principles. Focus is on Extensible Markup Language (XML). Students may receive credit for only one of the following courses: CAPP 498D or CMST 450.

CMST 451 Motion Graphics II (3)

Prerequisite: CMST 351. Advanced hands-on study of the concepts, techniques, and principles of digital video and motion graphics effects using Adobe After Effects. The aim is to identify requirements for advanced video effects, conceptualize the end result, plan and storyboard the digital video effect, and execute it using advanced tools and techniques following the postproduction process. Discussion covers advanced concepts, tools, and techniques used to create professional two- and three-dimensional motion graphics and digital visual effects for film, video, multimedia, and the Web. Topics include storyboarding, importing, previewing, layering, adjustments, and rendering. Advanced effects such as key framing, transformations, 3D techniques, particle effects, expressions, and motion tracking are also covered.

CMST 455 Introduction to Digital Video Editing (3)

A hands-on, project-based introduction to nonlinear digital video editing. The aim is to use video editing software to create nonlinear digital video products using sound principles, techniques, and tools, for delivery across multiple platforms. Topics include planning, storyboarding, adding special effects, incorporating sound, and publishing.

CMST 458 Multimedia Programming and Design (3)

Prerequisite: CMST 342. A hands-on, project-based study of multimedia programming and design using Adobe ActionScript and Adobe Flash. The objective is to create interactive media, user interfaces, and games through Adobe ActionScript using object-oriented programming that meets requirements and minimizes security risks. Topics include animation, 3D modeling, interface design, data source integration, security, and privacy vulnerabilities. Programming projects are included.

CMST 460 Web Application Development Using ColdFusion (3)

(Formerly CMST 498F.) Prerequisite: CMST 388. A structured approach to building and maintaining dynamic and interactive Web applications. The objective is to plan, design, develop, document, and test professional, dynamic Web applications. Emphasis is on structured, modular application design and development. Topics include data-driven interactivity, mitigation of security risks, privacy issues, and code frameworks. Students may receive credit for only one of the following courses: CMST 460 or CMST 498F.

CMST 463 Web Application Development Using PHP/MySQL (3)

Prerequisite: CMST 388. A hands-on, project-based study of Web application development using the PHP scripting language and MySQL databases. The goal is to create Web applications that adhere to industry standards and minimize security risks. Topics include PHP scripting, data-driven interactivity, writing secure PHP programs, privacy issues, and code frameworks. Programming projects are included.

CMST 486A Internship in Computer Studies Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

CMST 486B Internship in Computer Studies Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

CMST 488 Web Application Development Using AJAX (3)

Prerequisite: CMST 388. A hands-on, project-based study of Web application development using AJAX (Asynchronous JavaScript and XML) techniques. The aim is to create cross-browser compatible Web applications that adhere to industry standards and minimize security risks. Topics include AJAX libraries, user interfaces, accessibility, usability, and security. Programming projects are included.

CMST 495 Current Trends and Projects in Digital Media and Web Technology (3)

(Intended as a final, capstone course to be taken at the end of the student's program.) Prerequisites: CMST 290 and 295 and 15 credits in the major. An overview of current trends, technologies, theories, and practices in the digital media and Web technology fields. The aim is to integrate concepts, practical application, and critical thinking acquired through previous study and apply them to professional and postgraduate objectives. Analysis covers innovative and emerging issues in digital media, Web technology, motion graphics, or general computing. Projects use techniques and approaches previously studied; they may focus on digital media design and production for print or online access, Web technologies, or motion graphics.

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 pp. 228–29. 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, or investigative forensics;
- a minor in African American studies, criminal justice, or forensics;
- a certificate in Criminal Justice Intelligence, Fraud Investigation, or Terrorism and Institutions: Prevention and Response; 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.

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. The objective is to conduct research, analyze criminological theory to inform the development of criminal justice policies, and make appropriate criminal justice decisions. 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 101 Introduction to Investigative Forensics (3)

A survey of the practical applications of forensic science. The aim is to learn to apply the scientific method to forensic evidence and distinguish between reality and popular misperceptions of the roles and importance of forensic science and its practitioners. Discussion covers the "CSI effect," the scientific method as it applies to forensic evidence, ethical practices, and legal aspects of the field. Topics include the definition of forensic science and how it has evolved, disciplines within the field, ethical codes, and case law.

CCJS 105 Introduction to Criminology (3)

(Fulfills the general education requirement in behavioral and social sciences.) An overview of the major elements of the criminological enterprise. The objective is to classify and analyze different crime trends and patterns, analyze criminological theories, and conduct research. Topics include the nature of criminology, criminological methods, crime causation, and characteristics of types of crimes and offenders. The police, courts, and corrections and the effects of the criminal justice system in society are also examined.

CCJS 201 Introduction to Corrections (3)

Prerequisite: CCJS 100 or CCJS 105. An introduction to corrections in the United States, emphasizing the history and theories of confinement and its alternatives. The aim is to analyze contemporary issues relevant to corrections, such as political relations, training and certification of personnel, Constitutional rights, and the handling of special populations. Discussion also examines organizational culture and structure and the management of operations and personnel within corrections environments.

CCJS 230 Criminal Law in Action (3)

Recommended: CCJS 100 or CCJS 105. A study of the history, nature, sources, and types of criminal law. The objective is to identify the elements of crime, recognize parties to crime, and explain the historical development of criminal law and punishment in the United States. Topics include behavioral and legal aspects of criminal acts and the classification and analysis of select 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 and evidence. The goal is to interpret statutes and case law, identify relevant issues, and evaluate the integrity and admissibility of evidence. Topics include due process, arrest, search and seizure, and the evaluation of evidence and proof. Recent developments in the field are discussed.

CCJS 301 Criminalistics I: The Comparative Disciplines (4)

Prerequisite: CCJS 101, CCJS 100, or CCJS 105. Recommended: CCJS 234. An intensive study of the analysis of physical evidence in the crime laboratory, with practical laboratory exercises. The objective is to apply the skills expected of an entry-level professional in the investigative forensics field that are necessary for the practical analysis of evidence in a criminal investigation. Topics include the comparative disciplines, including impression evidence analysis, trace evidence analysis, and firearms analysis.

CCJS 302 Criminalistics II: The Scientific Disciplines (4)

Prerequisite: CCJS 301. Further intensive study of the analysis of physical evidence in the crime laboratory, with practical laboratory exercises. The goal is to apply skills expected of an entry-level professional in the investigative forensics field that are necessary for the practical analysis of evidence in a criminal investigation. Topics include the applications of the scientific disciplines, including bloodstain pattern analysis, questioned document analysis, controlled dangerous substances analysis, and DNA analysis.

CCJS 340 Law-Enforcement Administration (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. An introduction to organization and management in law enforcement. The objective is to communicate effectively and apply research skills and management and administrative principles to a law enforcement agency. Topics include 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)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. An introduction to the concepts and methodologies used by criminal investigators to prevent and suppress crime and aid in the apprehension of criminal suspects. The aim is to communicate effectively, demonstrate principles of effective investigative management, and apply scientific techniques and technology to criminal investigations. 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 342 Crime Scene Investigation (3)

Prerequisite: CCJS 101, CCJS 100, or CCJS 105. Recommended: CCJS 234. An examination of the investigation of crime scenes. The objective is to apply skills expected of an entry-level professional in the investigative forensics field. Topics include the crime scene, crime scene documentation, evidence, and post–crime scene activities.

CCJS 345 Introduction to Security Management (3)

(Formerly CCJS 445.) Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. A study of the history, concepts, principles, and methods of organizing and administering security management and loss prevention activities in industry, business, and government. The objective is to manage security duties, evaluate and apply risk management principles, and evaluate administrative and operational issues. Discussion covers both private and governmental risk assessment and management and the 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. Recommended: CCJS 230. An examination of juvenile delinquency in relation to the general problem of crime. The aim is to apply theories and identify statutory parameters related to juvenile delinquency, analyze prevention measures, and assess the effectiveness of treatment measures. 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 352 Drugs and Crime (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. An analysis of the role of criminal justice in controlling the use and abuse of drugs. The objective is to apply effective enforcement strategies, demonstrate case management skills, and analyze the effect of drug policy. Students may receive credit for only one of the following courses: CCJS 352 or CJUS 352.

CCJS 360 Victimology (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. 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 aim is to identify and apply appropriate preventative measures and responses to victimization. Discussion covers the interaction between victims of crime and the system of criminal justice 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. Recommended: CCJS 230. A historical and theoretical study of the role and treatment of racial/ethnic minorities in the criminal justice system. The objective is to identify and apply appropriate preventative measures and master the aspects of the field of victimology.

CCJS 380 Ethical Behavior in Criminal Justice (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. A survey of basic principles relating to the standards for ethical behavior that guide criminal justice professionals in different roles and responsibilities. The aim is to make ethical decisions based on informed personal and accepted professional standards. Rules, laws, and codes of conduct are explored as a foundation for discussing individual ethical responsibilities.

CCJS 385 Health and Mental Health in Corrections (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. An examination of the current challenges associated with providing adequate physical and mental health care to criminal offenders within various correctional environments. The objective is to be able to assess and evaluate the medical and mental health needs of inmates, evaluate and allocate medical and mental health resources, and create operational and reentry plans. Topics include the deinstitutionalization of mental health hospitals, the growing number of aging inmates, legal precedents that determine standards of care, mental health treatment and pharmacological approaches, and the importance of reentry coordination.

CCJS 390 Cyber Crime and Security (3)

(Formerly CCJS 496.) Prerequisite: CCJS 100 or CCJS 105. 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 390, CCJS 496, or CCJS 498C.

CCJS 398D The Death Penalty (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. 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. Recommended: CCJS 230. An examination of contemporary criminal courts in the United States at all levels. The objective is to apply knowledge of the criminal court system, its culture, and appropriate technologies. Topics include the roles of judges, prosecutors, defenders, clerks, courthouse administrators, and people employed in related courthouse fields; problems of administration; and modernization of the traditional court setting. 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)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. A study of the role that intelligence gathering has played throughout history. The aim is to interpret historical lessons and communicate effectively in the intelligence environment. Focus is on 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)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. An examination and analysis of intelligence processes and cycles in contemporary U.S. intelligence arenas (national/homeland security, the military, law enforcement, and the private sector) that effectively ensure the safety and security of the country. The objective is to work as an effective part of an intelligence team and evaluate the needs of intelligence customers. Discussion covers how the intelligence process assists in the detection, deterrence, prevention, response to, and mitigation of criminal and terrorist activities in the United States while simultaneously protecting individual privacy and civil rights.

CCJS 413 Legal and Ethical Issues in Intelligence (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. An examination of the legal and ethical issues related to intelligence activities in the United States. The aim is to be able to make informed ethical decisions that are consistent with traditional democratic values protecting individual civil liberties and privacy. Discussion covers legal mandates governing information collection, analysis, and information sharing for federal, state, local, and tribal criminal justice intelligence activities.

CCJS 414 Intelligence Analysis (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. A case study–based introduction to intelligence analysis using software-based analytical systems. The objective is to deconstruct intelligence problems; apply specific analytical techniques to solve strategic, operational, and tactical intelligence problems; apply the principles of collaboration; and identify the factors that can adversely affect analysis.

CCJS 415 Advanced Intelligence Analysis (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. 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. The goal is use of critical thinking techniques, including target-centric modeling, decomposition of complex problems, hypothesis testing, and structuring an analysis. 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 101, CCJS 100, or CCJS 105. Recommended: CCJS 234. 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)

(Computer access that includes administrator privileges to install software required.) Prerequisite: CCJS 101, CCJS 100, or CCJS 105. Recommended: CCJS 390. A study of the technical and legal issues facing computer crime investigators and digital forensic examiners. The aim is to identify and collect digital evidence at a crime scene, analyze that evidence using forensically sound methods, and report forensic findings both verbally and in writing.

CCJS 430 Legal and Ethical Issues in Security Management (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. An examination of current legal and ethical issues facing security professionals. The objective is to apply ethical principles, case law, and legal precedents to security situations. Topics include leadership and management of 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 432 Law of Corrections (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. A review of the law of corrections, from the pretrial or sentenced commitment of a prisoner to his or her release from the sentence. Topics include the law of corrections and the prisoners' rights in various areas, including protections afforded by the First Amendment, access to the courts, disciplinary proceedings, privacy, search and seizure, classification, programming, transfers, and due process as it pertains to property and personal injury. Discussion also covers cruel and unusual punishment, the death penalty, collateral sanctions and consequences, community-based sanctions, and litigating prisoners' rights. Students may receive credit for only one of the following courses: CCJS 432 or CRIM 432.

CCJS 434 Correctional Reentry and Transition (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. An examination of the historical, political, and public policies associated with the transition of prisoners from incarceration to release into the community. The objective is to identify and evaluate prisoner reentry initiatives that pose the best scenarios for preventing recidivism. Discussion covers the organizational, budgetary, and philosophical challenges associated with successful reentry planning. Topics also include offender assessment and classification, evidence-based treatment approaches, community supervision models, best practices, and community partnerships.

CCJS 440 Fingerprint Analysis (3)

Prerequisite: CCJS 301. A comprehensive study of friction ridge analysis in fingerprints. Emphasis is on the practical analysis of evidence in a criminal investigation. The objective is to apply skills expected of an entry-level professional in the fingerprint field, including assessing surfaces for viability of latent fingerprints; evaluating how to process and collect latent fingerprints; analyzing, comparing, evaluating, and verifying fingerprint evidence; and conveying findings. Topics include processing and comparison methodologies, historical and biological foundations of impressions, and legal aspects.

CCJS 454 Contemporary Criminological Theory (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. A comprehensive study of criminological theory. The goal is to apply criminological theories to specific criminal typologies and to the development of a crime control and reduction plan. Topics include the criminological theories, characteristics of the major theories devised to explain criminality and causes of crime, and use of theory in efforts to address crime and justice-related problems. Students may receive credit for only one of the following courses: CCJS 454 or CRIM 454.

CCJS 461 Psychology of Criminal Behavior (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. An overview of the biological, environmental, and psychological factors that underlie criminal behavior. Discussion covers the characteristics of criminal behavior and the influence of biophysiology and stress on the commission of various crimes. 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 470 Leadership and Time Management (4)

(Designed to enhance the skills of mid- to senior-level criminal justice practitioners.) Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. 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)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. 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)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. 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)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. 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)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

CCJS 486B Internship in Criminal Justice Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

CCJS 491 Institutional Security (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. A review of historical and current security management concepts, issues, and practices in organizations. The integration of security concerns with other aspects of organizational management is examined. The aim is to evaluate and employ security management strategies and techniques to best protect organizational assets. Students may receive credit for only one of the following courses: CCJS 491 or CCJS 498E.

CCJS 492 Criminal Justice Research (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. A review of research methods and skills focused on the criminal justice system. The objective is to justify the need for research in criminal justice through presentations that look at data, identify problems, and develop plans for resolving or mitigating the problems; select the proper research method to address an identified problem; and conduct research to advance the mission of criminal justice.

CCJS 495 Issues in Criminal Justice (3)

(Intended as a capstone course to be taken in a student's last 15 credits.) At least 15 upper-level credits in criminal justice. An integrative study of the various components of the criminal justice system through practical applications. The goal is to apply principles of interagency cooperation, critical thinking, and systems approaches to solve practical problems in a criminal justice environment. Case studies and exercises are used to integrate previous study in criminal justice.

CCJS 497 Correctional Administration (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. An examination of prison administration, including theories of management and institutional structure and purpose. Discussion covers organization and management in the field of corrections. Emphasis is on organizational structure, communication, self-assessment, strategic planning, decision making, and human resources. Students may receive credit for only one of the following courses: CCJS 497 or CCJS 498D.

Cybersecurity

Courses in cybersecurity (designated CSIA) may be applied as appropriate (according to individual program requirements) toward

- a major in computer networking and security, cybersecurity, digital media and Web technology, emergency management, homeland security, information systems management, or investigative forensics;
- 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.

CSIA 301 Introduction to Cybersecurity (3)

Prerequisite: CMIS 102. A comprehensive introduction to the protection of business information and the systems that support business processes. The objective is to identify common threats and attacks employed against Web-accessible applications, analyze the role of security models and architectures, explain the role of cryptography, and analyze issues related to security management and network security.

CSIA 302 Telecommunications in Information Systems (3)

(Formerly IFSM 450.) Prerequisite: CSIA 301 or IFSM 300. An introduction to telecommunication infrastructure. The goal is to plan, analyze, and design a secure telecommunication infrastructure that meets business needs and protects information assets. Topics include cybersecurity, data communication protocols and standards, networks, and trends in telecommunications. 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 means of establishing and maintaining a practical cyber and information security program to protect key organizational assets. The aim is to develop an information security program that is aligned with organizational strategy and to evaluate and recommend information and security technologies to support the information security program. Discussion covers the integration of confidentiality, integrity, and availability into an organization's security program through the use of physical and logical security controls. Topics include data protection, telecommunications systems, applications, and emerging technologies. Threats and vulnerabilities are assessed to determine the level of risk. Students may receive credit for only one of the following courses: CSIA 303, IFSM 430, IFSM 433, or IFSM 498N.

CSIA 412 Security Policy Analysis (3)

Prerequisite: CSIA 303. A study of various aspects of information assurance and cybersecurity policy planning in an organizational context. The aim is to examine key analysis procedures, such as security requirements analysis and risk assessments, to determine their roles in policy formation. Topics include the impact of current legislation, judicial decisions, and government regulations directing the focus of policy formulation. Projects include generating an information security profile for an organization.

CSIA 413 Security Policy Implementation (3)

Prerequisite: CSIA 412. A study of information security (IS) performance standards and policy implementation for IS system administrators. The goal is to analyze the application of security policy and security assessment findings to security procedures and processes. 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)

Prerequisite: CSIA 302 or CMIT 265. Recommended: CSIA 303. A hands-on technical examination of cybersecurity mechanisms used to provide cost-effective solutions to mitigate threats and vulnerabilities and reduce organizational risk. The objective is to identify and analyze security threats and vulnerabilities, identify appropriate security mechanisms for mitigation of threats, and perform a cost/benefit analysis to identify appropriate mitigation tactics. Topics include various types of hardware, software, Web- and network-based attacks and vulnerabilities and mechanisms for hardening systems, network defenses and design, wireless security, cryptography, physical and logical security, authentication, access control, auditing, monitoring, risk management, and vulnerability assessments. Students may receive credit for only one of the following courses: CSIA 454 or IFSM 454.

CSIA 457 Cyberterrorism and Cyber Crime (3)

(Formerly IFSM 457.) Prerequisites: CSIA 302 (or CMIT 265) and CSIA 303. In-depth analysis of differences between cyberterrorism and cyber crime and the motivations that drive cyber adversaries. The goal is to assess cyberterrorism and cyber crime–related vulnerabilities, understand the use of network analysis tools, and identify the differences between computer network defense and offense and the difficulties associated with a global threat space. Students may receive credit for only one of the following courses: CSIA 457, IFSM 457, or IFSM 497C.

CSIA 459 Evaluating Emerging Technologies (3)

(Formerly IFSM 459). Prerequisite: CSIA 302 or CMIT 265. Recommended CSIA 303. A survey of emerging and leading technologies in the cybersecurity field. The aim is to research, evaluate, and recommend emerging technologies and determine secure implementation strategies for best-fit business solutions. Topics include evolutionary technology development and adoption in organizations. Students may receive credit for only one of the following courses: CSIA 459 or IFSM 459.

CSIA 485 Practical Applications in Cybersecurity Management (3)

(Formerly IFSM 485. Intended as a final capstone course to be taken in a student's last 6 credits.) Prerequisites: CMIT 320 and 413. A study of cybersecurity that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. The goal is to protect an organization's critical information and assets by ethically integrating cybersecurity best practices and risk management throughout an enterprise. Emerging issues in cybersecurity are considered.

CSIA 486A Internship in Cybersecurity Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

CSIA 486B Internship in Cybersecurity Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

CSIA 520 Human Aspects in Cybersecurity: Ethics, Legal Issues, and Psychology (6)

(For cybersecurity majors only. May also be applied to the Master of Science in cybersecurity or cybersecurity policy at UMUC as equivalent to CSEC 620, if completed with a grade of B or better.) Prerequisites: 24 credits of coursework in the major, including CSIA 413 and 484 and a minimum GPA of 3.0 in the major. An examination of the human aspects in cybersecurity. Topics include ethics, relevant laws, regulations, policies, standards, psychology, and hacker culture. Emphasis is on the human element and the motivations for cyber crimes. Analysis covers techniques to prevent intrusions and attacks that threaten organizational data.

CSIA 530 Prevention and Protection Strategies in Cybersecurity (6)

(For cybersecurity majors only. May also be applied to the Master of Science in cybersecurity at UMUC as equivalent to CSEC 630, if completed with a grade of B or better.) Prerequisites: 24 credits of coursework in the major, including CSIA 520 and a minimum GPA of 3.0 in the major at UMUC. An in-depth study of the theories and practices for prevention of cyber attacks. Countermeasures discussed include training, encryption, virtual private networks, policies, practices, access controls, secure systems development, software assurance arguments, verification and validation; firewall architectures, anti-virus, patching practices, personnel security practices, and physical security practices. Topics also include business continuity plans and disaster recovery plans. Strategies for large-scale prevention, such as critical infrastructure protection, international collaboration, and law enforcement, are examined.

CSIA 535 National Cybersecurity Policy and Law (6)

(For cybersecurity majors only. May also be applied to the Master of Science in cybersecurity policy at UMUC as equivalent to CSEC 635, if completed with a grade of B or better.) Prerequisites: 24 credits of coursework in the major, including CSIA 520 and a minimum GPA of 3.0 in the major at UMUC. An exploration of the role of government in securing cyberspace. Topics include federal, state, and local entities involved in cybersecurity; relevant laws and regulation; concepts of civil liberties, intellectual property, and privacy; policy formulation and analysis; law enforcement; development and diffusion of standards; and national security. Discussion also covers public/private engagement models and opportunities and tools for government to encourage cybersecurity education, awareness, and research.

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 or homeland security;
- a minor in economics;
- a certificate in Financial Management;
- related requirements for most business-related majors and minors; and
- electives.

ECON 201 Principles of Macroeconomics (3)

An introduction to the study of the macroeconomy. The objective is to apply select macroeconomic theories to real world situations. Discussion covers economic growth, unemployment, inflation, and the roles of monetary policy and fiscal policy in determining macroeconomic performance. Students may receive credit for only one of the following courses: ECON 201 or ECON 205.

ECON 203 Principles of Microeconomics (3)

An analysis of the economic principles underlying the behavior of individual consumers and business firms. The goal is to apply select microeconomic theories to real world situations. Emphasis is on market theory. Topics include the implications of government intervention, the advantages and disadvantages of different market structures, and income distribution and poverty.

ECON 301 Current Issues in Economic Policy (3)

Prerequisites: ECON 201 and 203. An analysis of contemporary economic issues. The goal is to evaluate and analyze contemporary issues within an economic framework. Topics are drawn from micro-, macro-, and international economics and may include the U.S. government deficit, globalization, social programs, and environmental and development issues.

ECON 305 Intermediate Macroeconomic Theory and Policy (3)

Prerequisite: ECON 201. An analysis of the forces that determine a nation's income, employment, and price levels. The aim is to analyze macroeconomic indicators and trends and evaluate the impact. 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. An analysis of the principles underlying the behavior of individual consumers and business firms. The objective is to analyze microeconomic indicators and trends and evaluate the impact. Discussion covers theories of welfare, taxation, marketing systems, and income distribution. Students may receive credit for only one of the following courses: ECON 306 or ECON 403.

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. The goal is to evaluate how the banking and business environment has changed, describe the functions and measurement of money, discuss and evaluate the money supply creation process, and analyze the impact of the Federal Reserve's policies on both the U.S. economy and the economies of other nations. Topics include the composition of the Federal Reserve, the money supply creation process, the tools of monetary policy, the term structure of interest rates, the demand for and supply of money, and interest rate theories. 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. An examination of international trade and finance theory and their application to contemporary economic issues. The aim is to use economic frameworks to explain international trade and financial flows and analyze information and data on economic policy and institutions. Topics include the costs and benefits of trade, exchange rate markets, global financial imbalances, regional trading blocks, and the role of international economic institutions. Students may receive credit for only one of the following courses: ECON 440, ECON 441, or BEHS 440.

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 and 103 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 academic, interpersonal, and life-management skills and attitudes needed to thrive in the academic setting. A series of self-assessments serve as tools to identify values and goals for individual life planning and educational achievement.

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. The objective is to learn and apply specific steps within the writing process; write effective sentences, paragraphs, and short essays; and edit writing for grammar and punctuation. Topics include the writing process; strategies for developing academic paragraphs and essays; and key aspects of grammar, punctuation, and mechanics. Practice in refining writing skills is provided. Students may receive credit for only one of the following courses: EDCP 103, EDCP 103X, or ENGL 100.

Education: Teacher Preparation

The courses in education: teacher preparation (designated EDTP) may be applied only as an elective to the bachelor's degree. They are designed to articulate with UMUC's Master of Arts in Teaching (MAT) and are 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 students majoring in computer science, English, history, and social science, as well as those with coursework consistent with the areas in which UMUC's Master of Arts in Teaching offers eligibility for Maryland state teacher certification.) Prerequisites: 30 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.

EDTP 535 Adolescent Development and Learning Needs (6)

(Available to students majoring in computer science, English, history, and social science, as well as those with coursework consistent with the areas in which UMUC's Master of Arts in Teaching offers eligibility for Maryland state teacher certification.) Prerequisites: 30 credits of major coursework and a minimum GPA of 3.0 in the major. Preparation to support the unique development of adolescents from various backgrounds, with varying beliefs, and with varied abilities. Learners are examined from the standpoint of developmental characteristics; social, cultural, racial, and gender affiliation; socioeconomic status; religious influences; learning styles; special needs; and exceptionality. Adolescents are also examined from biological, psychological, cognitive, and social perspectives; within the tapestry of their family and community; and through the influences of societal and cultural norms. Discussion covers theories and concepts associated with human growth and development across the lifespan, focusing on typical and atypical development of the adolescent.

Emergency Management

Courses in emergency management (designated EMGT) may be applied as appropriate (according to individual program requirements) toward

- a major in emergency management or homeland security;
- a minor in emergency management;
- certain UMUC graduate degree programs, where recognized as equivalent coursework (specific equivalencies are detailed in the UMUC graduate catalog); and
- electives.

EMGT 302 Concepts of Emergency Management (3)

Prerequisite: WRTG 101. An introduction to emergency management at the global, national, regional, state, and local levels. The objective is to identify and analyze forces that formulate policy, apply the principles of policy and law to real-world situations, and analyze emerging political, legal, and policy issues to improve organizational preparedness. 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)

Prerequisites: EMGT 302 and either MATH 106 or MATH 107. A study of the planning process, the format, and response procedures for disasters and emergency events. The goal is to evaluate risk vulnerabilities and capabilities, design an emergency plan, and evaluate and critically assess an emergency plan. 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. An examination of the legal and regulatory principles, policies, and issues that affect emergency management. The aim is to analyze key forces that influence policy, apply the principles of policy and law, and identify and analyze emerging issues to improve organizational preparedness. Emphasis is on how emergency management policy and legislation is developed and maintained at international, national, regional, state, and local levels.

EMGT 308 Exercise and Evaluation Programs (3)

Prerequisites: EMGT 304 and 306. An examination of the role of disaster exercises in emergency management and business crisis management programs. The objective is to develop exercises in all four phases of emergency management, analyze emergency management capabilities, and use exercises to enhance strategic planning. 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)

Prerequisites: EMGT 304 and 306. An exploration of the process for developing, implementing, exercising, and evaluating continuity of operations for both government and industry. The goal is to identify critical and essential functions to ensure continuity of operations, evaluate and improve continuity plans, and recognize triggers and events that activate continuity plans. 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)

Prerequisites: EMGT 304 and 306. 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. The aim is to evaluate social factors that contribute to increased risk to disaster, design plans and processes that consider social factors, and design strategies and plans to enable communication with diverse social groups. 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 314 Terrorism Issues in Emergency Management (3)

Prerequisites: EMGT 304 and 306. A study of the role and responsibilities of the emergency manager in preparing for, responding to, mitigating, and recovering from situations related to terrorism. The protection of critical infrastructure is linked to national, state, and local guidelines, and the role of first responder groups and other stakeholders is discussed. The objective is to devise and prepare plans, use appropriate guidelines in response to terrorism, and use interagency dynamics in the planning and response to terrorism.

EMGT 404 Planning and Response for Catastrophic Disasters (3)

Prerequisites: EMGT 304 and 306. An examination of the preparation for and response to disasters beyond the capability of available resources from geographical, international, national, or local perspectives. The goal is to identify triggers and events, assign leadership roles and responsibilities to respond to and recover from a catastrophic event, and analyze and apply historical lessons and current emergency management best practices to planning. Recent case studies are used to determine the characteristics of a catastrophic disaster. Discussion also covers the special issues of response and recovery and preparation issues at international, national, and local levels.

EMGT 486A Internship in Emergency Management Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

EMGT 486B Internship in Emergency Management Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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 in English or humanities;
- a minor in African American studies, English, humanities, or women's studies; and
- electives.

ENGL 201 Western Literature from the Beginnings to the Renaissance (3)

Prerequisite: WRTG 101 or ENGL 101. 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 or ENGL 101. An examination of representative Shakespearean plays from each genre (comedy, history, tragedy, and romance), as well as poems and sonnets. The goal is to analyze and interpret texts; demonstrate relevance of texts in today's culture; and ethically locate, assess, and use secondary source materials.

ENGL 212 English Literature: 1800 to the Present (3)

Prerequisite: WRTG 101 or ENGL 101. 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 or ENGL 101. An introduction to fiction, poetry, drama, film, and the literary essay, with an emphasis on developing critical reading and writing skills. The objective is to identify elements of literature and explicate texts. 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 246 The Short Story (3)

Prerequisite: WRTG 101 or ENGL 101. An analysis of the attributes of the well-written story. Discussion covers theme, plot, characterization, point of view, setting, tone, imagery, irony, and symbolism as exemplified in representative works from the 19th century to the present. The aim is to assess texts and apply knowledge of text to life experience. Biographical and historical backgrounds are examined, but the focus is on the selected readings.

ENGL 281 Standard English Grammar (3)

(Formerly WRTG 288. Fulfills the general education requirement in communications but is not a writing course.) An overview of standard edited English, a standard central to academic and professional communications. Topics include producing clear, effective prose; applying advanced grammatical and linguistic descriptions and prescriptions; and attending to the needs of diverse audiences while making writing and editing decisions. Tasks focus on parts of speech, sentence patterns, and sentence transformations. Students may receive credit for only one of the following courses: ENGL 281, ENGL 281X, or WRTG 288.

ENGL 294 Introduction to Creative Writing: Fiction and Creative Nonfiction (3)

(Fulfills the general education requirements in communications.) Prerequisite: WRTG 101 or ENGL 101. An introductory survey and practical study of key areas of creative writing in creative nonfiction and fiction. The objective is to write original fiction and creative nonfiction and critique, revise, and edit writing. 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 or ENGL 101. A study of the techniques of literary criticism, emphasizing close reading, critical thinking, and critical writing. The goal is to apply a variety of theoretical approaches to literature, analyze texts, and create professional written communications.

ENGL 309 Medieval British Literature (3)

Prerequisite: WRTG 101 or ENGL 101. An overview of British medieval literature within its historical context. The aim is to analyze literary works in their sociohistorical contexts, interpret medieval literary works, and apply research and writing skills to new concepts and information. Topics include major works, authors, and genres from c. 500–1500 AD, with an emphasis on early English works such as *Beowulf, Sir Gawain and the Green Knight,* and the *Booke of Margery Kempe,* among others.

ENGL 310 Renaissance Literature (3)

Prerequisite: WRTG 101 or ENGL 101. 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. The goal is to locate and evaluate appropriate sources, create professional written communications, and apply MLA documentation to written work. Major authors may include Spenser, Marlowe, and Shakespeare, among others.

ENGL 311 17th- and 18th-Century British Literature (3)

Prerequisite: WRTG 101 or ENGL 101. A study of the literature of 17th- and 18th- century Britain, with an emphasis on the development of individualism. The aim is to locate and evaluate appropriate sources; create professional written communications; and gain a historical perspective through analysis of race, class, and gender issues. Authors may include Dryden, Swift, Pope, Montagu, Fielding, and Johnson, among others.

ENGL 312 Romantic to Modern British Literature (3)

Prerequisite: WRTG 101 or ENGL 101. A study of representative authors and works in British literature from the early 19th century to 1945. The goal is to evaluate and synthesize source materials; create professional written communications; and gain a historical perspective through analysis of race, class, and gender issues. 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 or ENGL 101. An exploration of business and leadership in the workplace as described in various literary works. The aim is to assess and evaluate elements of text and apply knowledge of text to workplace situations and needs. Case studies are taken from fiction, drama, and poetry. Analysis covers attitudes toward work, definitions of success and the American Dream, ethics in the workplace, leadership and management strategies, interpersonal conflict at work, occupational and personal identity, diversity issues, and power relationships in the workplace.

ENGL 345 Modern Poetry: 1914 to 1945 (3)

Prerequisite: WRTG 101 or ENGL 101. A survey of English and American modernist poetry from 1914 to 1945. The goal is to interpret and analyze literature, apply critical theory, form evidence-based conclusions, and identify elements of modernist poetry. Topics include the poets of World War I (Owen, Sassoon, Thomas), high modernism (Yeats, Pound, Eliot), modernism (Stevens, Williams, Frost), and the Harlem renaissance (Hughes, Cullen, McKay).

ENGL 354 American Women Writers Since 1900 (3)

Prerequisite: WRTG 101 or ENGL 101. 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 or ENGL 101. 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 from the Colonial Era to 1900 (3)

Prerequisite: WRTG 101 or ENGL 101. An examination of African American authors before 1900, including Phillis Wheatley, Frances Harper, Maria W. Stewart, David Walker, Frederick Douglass, William Wells Brown, Charles Chesnutt, and Paul Laurence Dunbar. The goal is to research historical issues; integrate findings into discussion; and articulate, develop, and advance a persuasive argument in written form.

ENGL 364 African American Authors from 1900 to Present (3)

Prerequisite: WRTG 101 or ENGL 101. An examination of early 20th-century to early 21st-century African American authors, including James Weldon Johnson, Zora Neale Hurston, Richard Wright, James Baldwin, Ann Petry, Helene Johnson, Dorothy West, and Langston Hughes. The goal is to research historical issues; integrate findings into discussion; and articulate, develop, and advance a persuasive argument in written form. Students may receive credit for only one of the following courses: ENGL 364 or HUMN 364.

ENGL 381 Special Topics in Creative Writing (3)

Prerequisite: WRTG 101 or ENGL 101. Recommended: ENGL 294 or other creative writing course. A study of special topics in creative writing. The goal is to develop creative writing skills within the scope of the special topic. Focus may be on a specific format (such as the novella, novel, or screenplay) or genre (such as mystery, horror, or teen fiction; travel writing; or epic poetry). May be repeated to a maximum of 6 credits when topics differ.

ENGL 382 Stage and Screen Script Writing (3)

Prerequisite: WRTG 101 or ENGL 101. A presentation of various ideas and techniques for writing stage and/or screen scripts (for commercials, short films, and television). The aim is to apply writing skills to a script for screen or stage. Emphasis is on format; market; and creating strong characters, plot, and dialogue.

ENGL 384 Advanced Grammar and Style (3)

(Formerly WRTG 388. Fulfills the general education requirement in communications but is not a writing course.) An examination of the basic units of grammatical descriptions, the nature of grammatical categories and structure, the methods and reasons for creating and using those structures, and the application of grammatical concepts to editorial and written style. Focus is on creating dynamic texts that convey complex subject matter to diverse audiences. Students may receive credit for only one of the following courses: ENGL 384 or WRTG 388.

ENGL 386 History of the English Language (3)

Prerequisite: WRTG 101 or ENGL 101. An examination of the development and usage of the English language. Discussion traces the history of English from its origins and examines contemporary issues and controversies. The objective is to explore various texts and research tools to examine the linguistic heritage and continuing evolution of English.

ENGL 389P Introduction of Film as Literature (3)

Prerequisite: WRTG 101 or ENGL 101. 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 Seminar in Shakespeare Studies (3)

Prerequisite: WRTG 101 or ENGL 101. An intensive study of Shakespeare's dramatic masterpieces both in a historically specific social and cultural context and as timeless concerns reflecting the human condition. The objective is to evaluate and synthesize source materials and apply critical theory to demonstrate understanding of dramatic text. Histories, comedies, tragedies, romances, and sonnets may be examined. 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 or ENGL 101. Intensive study of one or two British writers from the period before 1800. Authors may include Chaucer, Spenser, Marlowe, Jonson, Milton, Defoe, Richardson, Pope, Swift, or Johnson, among others. May be repeated to a maximum of 6 credits when topics differ.

ENGL 419 Major British Writers After 1800 (3)

Prerequisite: WRTG 101 or ENGL 101. In-depth study of the lives and works of one or two major British writers from the period after 1800.

ENGL 425 20th-Century British Literature (3)

Prerequisite: WRTG 101 or ENGL 101. A critical examination of representative authors and works in British literature of the 20th century, with emphasis on historical and cultural influences and literary themes and techniques. The aim is to analyze works, question the role of literature as change agent, and analyze literary style and technique to develop cultural literacy. Writers and works represent modernism, postmodernism, and postcolonialism.

ENGL 430 American Literature: Discovery to 1914 (3)

Prerequisite: WRTG 101 or ENGL 101. A comprehensive study of literature in America from European discovery until 1914. The aim is to examine literary periods, movements, and styles; interpret literature as a reflection of national and world events; recognize the differences among types of American literary works; and apply critical methodology. Topics include settlement and exploitation, revolution and government, American Romanticism, slavery, women's rights, the Civil War and Reconstruction, and naturalism and realism.

ENGL 433 Modern American Literature: 1914–1945 (3)

Prerequisite: WRTG 101 or ENGL 101. A study of key eras and theories concerning the uniqueness of American fiction, creative nonfiction, nonfiction, and drama. The goal is to interpret and analyze literature and apply critical theory in the formation of logical conclusions. Focus is on the major changes that occurred in society and history as they affected literature after World War I and before the end of World War II.

ENGL 434 Modern American Drama (3)

Prerequisite: WRTG 101 or ENGL 101. An examination of representative authors in the development of American drama, with emphasis on post–World War II writers. The goal is to examine the dramatic re-creation of historical themes and events and relate them to contemporary social issues.

ENGL 439 Major American Writers (3)

Prerequisite: WRTG 101 or ENGL 101. A study of works by selected American authors. The goal is to understand the place these authors and their works hold in the canon of American literature. Authors may include Mark Twain, Stephen Crane, Ernest Hemingway, William Faulkner, Edgar Allan Poe, Emily Dickinson, Langston Hughes, Truman Capote, Harper Lee, and Cormac McCarthy, among others. Emphasis is on the impact of historical and social events, as well as biographical influences, on the literature. May be repeated to a maximum of 6 credits when topics differ.

ENGL 441 Postmodern American Literature: 1945 to 1999 (3)

Prerequisite: WRTG 101 or ENGL 101. A comprehensive study of literature in America from 1945 to the end of the 20th century. The objective is to interpret American literature as a reflection of national and world events, recognize the differences among types of American literary works, and apply critical methodology. Topics include the American Dream; war; fear and paranoia; rebellion and counterculture; civil rights, feminist, and gay movements; postmodernism; multiculturalism; and environmentalism.

ENGL 454 Modern World Drama (3)

Prerequisite: WRTG 101 or ENGL 101. An examination of 20th-century theatre, with an emphasis on the social, cultural, and historical context of drama. The goal is to analyze the elements of drama, evaluate human motivations and behavior, and interpret the dramatic re-creation of historical events. Drama from around the globe is examined. Discussion covers 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.

ENGL 457 The Modern Novel (3)

Prerequisite: WRTG 101 or ENGL 101. An examination of the development of the novel from the late 19th century to the present, with emphasis on British and American works. Authors and works vary each semester but may include writers such as Thomas Hardy, Henry James, Theodore Dreiser, Edith Wharton, Virginia Woolf, William Faulkner, James Joyce, Anne Tyler, Alice Walker, and Tim O'Brien.

ENGL 459 Contemporary World Literature (3)

Prerequisite: WRTG 101 or ENGL 101. An examination of diverse literature from the last decade of the 20th century and the early 21st century, focusing on development of genre and authors' responses to sociopolitical events. The objective is to develop perspective on the role of writers in the contemporary world.

ENGL 466 The Arthurian Legend (3)

Prerequisite: WRTG 101 or ENGL 101. 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 476X Fantasy, Horror, and Science Fiction (3)

(Formerly ENGL 476.) Prerequisite: WRTG 101 or ENGL 101. 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. Students may receive credit for only one of the following courses: ENGL 476 or ENGL 476X.

ENGL 481 Seminar in Creative Writing: Fiction and Creative Nonfiction (3)

Prerequisite: WRTG 101 or ENGL 101. An overview of the scope, power, and techniques of narration, the oldest and most versatile form of writing. The goal is to write, critique, analyze, and revise original fiction and creative nonfiction. Focus is on identifying, analyzing, and practicing the following skills: free-writing, 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 Seminar in Creative Writing: Poetry (3)

(Fulfills the general education requirement in communications.) Prerequisite: WRTG 101 or ENGL 101. A presentation of various ideas and techniques for writing poetry. The goal is to critically read, write, critique, and evaluate original poetry. Discussion covers professional poetry but emphasizes critiquing students' work. 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: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

ENGL 486B Internship in English Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

ENGL 495 Advanced Seminar in English Language, Literature, and Writing (3)

(Intended as a final capstone course to be taken in a student's last 15 credits.) Prerequisites: ENGL 240 and 303 and another 15 credits in ENGL coursework. The creation and submission of a comprehensive research thesis or project under the guidance of a faculty mentor. The aim is to synthesize knowledge, skills, and abilities acquired through previous study and apply it to professional and postgraduate objectives. Careers and postgraduate work for English majors and minors are also explored.

ENGL 499 Independent Study in English (1–6)

Prerequisite: 6 credits in upper-level ENGL coursework. 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, or management studies;
- a minor in environmental management;
- 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.

ENMT 301 Environment and Ecosystems Management (3)

Prerequisite: CHEM 297 or an environmental chemistry course. An overview of the scientific principles governing ecosystems, particularly as they relate to the environmental consequences of resource development and industrial processes. The objective is to identify and apply scientific reasoning and knowledge of ecological principles to make informed decisions about environmental management issues and other issues that affect the ecosystem. Topics include Earth's ecosphere, atmosphere, hydrosphere, and lithosphere. Discussion also covers the current state of the environment, the history of the environmental movement, and concepts of risk assessment and management. The historical development of environmental management issues and approaches is introduced.

ENMT 303 Environmental Regulations and Policy (3)

(Formerly ENMT 493.) Prerequisite: ENMT 301. Recommended: LIBS 150. An analysis of the development and implementation of the principles of constitutional and administrative law that are fundamental to both environmental and health and safety management. The goal is to use information literacy skills to locate applicable policies, laws, and regulations and to apply knowledge of process and regulatory communication systems for effective environmental management. Emphasis is on federal legislation and the use of the *Federal Register* and *Code of Federal Regulations.* Discussion covers the relationship between regulations and public policy at local, state, and federal levels. Students may receive credit for only one of the following courses: ENMT 303 or ENMT 493.

ENMT 307 An Introduction to Geographical Information Systems (3)

An introduction to the basic concepts of geographic information systems (GIS). The aim is to apply various functions of GIS software to create and interpret various spatial data representations for decision making. Discussion covers the capacity for GIS to store, retrieve, analyze, model, and map spatial data from a wide array of applications including land use planning, utilities management, ecosystems modeling, landscape assessment and planning, transportation and infrastructure planning, market analysis, visual impact analysis, facilities management, tax assessment, and real estate analysis.

ENMT 310 Emergency Planning and Operations Management (3)

Prerequisite: ENMT 301. Recommended: BIOL 301 or a health-related biology course. An overview of emergency planning and the management of disaster response operations. The objective is to work safely in a hazardous environment and to prepare hazardous substances for transportation, processing, and disposal. Regulations, laws, and practices related to human-made and natural hazards and emergency-preparedness are examined. Topics include the relationships between industrial processes and hazardous substances and elements of hazardous substances emergency planning, such as direction and control of emergency preparedness, 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 emergency plans for handling 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 laws, regulations, and methods of performing due diligence audits. The goal is to conduct environmental health and safety audits that reduce the potential for harmful or hazardous environmental or health incidents. Emphasis is on regulations and various audits and permits, such as property transfer audits, waste contractor audits, waste minimization/pollution prevention evaluations, Title V air permits, and National Pollutant Discharge Elimination System (NPDES) permits. Discussion also covers management systems and their influence on environmental health and safety audits. Audit systems covered include ISO 14000 and CERES principles.

ENMT 321 Environmental Health (3)

Prerequisite: ENMT 301. Recommended BIOL 301 or a health-related biology course. A study of the effects of environmental hazards, particularly hazards created or influenced by human activities, on human health. The aim is to evaluate environmental and health hazards and formulate strategies for controlling environmental health hazards through hazard management. 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.

ENMT 322 Occupational Health and Safety (3)

Prerequisite: ENMT 301. A study of the principles of health and safety management in the workplace. The objective is to evaluate occupational hazards and formulate strategies to control occupational health and safety hazards and minimize injury. Topics include anticipation, recognition, evaluation, and control of occupational hazards. The strategies used by industrial hygienists and safety professionals to prevent or minimize the 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. Recommended: MATH 115 or MATH 107–108. An introduction to technology for multimedia (i.e., air, water, land) environmental management, control, and remediation. The objective is to recognize and apply appropriate technological solutions to prevent, treat, detect, and remediate air, water, and land pollution. Discussion 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. The aim is to effectively manage urban watersheds to reduce the impact of land development. 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.

ENMT 365 Individuals, Society, and Environmental Sustainability (3)

(Formerly BEHS 365.) Recommended: WRTG 101. 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 is examined. Emphasis is on sustainable consumer behavior. Discussion covers the identification of barriers to participation in sustainability and mechanisms for the elimination of those barriers. The objective is to evaluate and develop strategies to promote personal and public behaviors that support environmental sustainability. Students may receive credit for only one of the following courses: BEHS 365, BEHS 398O, or ENMT 365.

ENMT 380 Air Quality Management (3)

Prerequisite: ENMT 301. Recommended: BIOL 301 or a health-related biology course. An overview of air quality management principles and strategy. The goal is to evaluate air quality management strategies and identify the risk and possible causes of air pollution. Discussion covers atmospheric processes and mechanisms, pollutants and sources of air pollution, 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 Health Risk Assessment (3)

Prerequisite: ENMT 301. Recommended: BIOL 301 (or a health-related biology course). An overview of the scientific principles and government guidelines for the conduct of environmental health risk assessments. The aim is to conduct risk assessments; collect, analyze, and interpret data; and characterize potential adverse effects of chemical, physical, and biological agents. Topics include the Nuclear Regulatory Commission paradigm for managing risk assessments, identification of health hazards, quantification of dose-response relationships, conduct of exposure assessments, and preparation of risk characterization and uncertainty analyses. Discussion also covers the pros and cons of different risk assessment methods and the way to plan, perform, report, and communicate environmental health risk assessments.

ENMT 398A Industrial Ecology (1)

An exploration of the intrinsic interpendency between production of consumer goods and natural ecosystems. The limited capacity of natural ecosystems to self-replenish following resource extraction by humans is discussed. Input of natural resources and output of human-derived goods in various industries is investigated. 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. The goal is to integrate knowledge about environmental systems and environmental regulations 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: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

ENMT 486B Internship in Environmental Management Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

ENMT 495 Global Environmental Management Issues (3)

(Intended as a final, capstone course to be taken in the student's last 15 credits.) Prerequisites: ENMT 301, 303, 321, 322 (or ENMT 405), 340, and 390. Recommended: MATH 115 (or MATH 107–108) and WRTG 393. 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. The goal is to develop and evaluate environmental management projects and plans in a manner based on effective, practical approaches. 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. 228. 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 complete requirements.) 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 analyzing the relationship of experiential learning to conventional learning. Completed portfolios are evaluated by faculty to assess possible award of credit; up to 30 credits may be awarded.

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 laboratory management;
- a minor in finance, business administration, international business management, or strategic and entrepreneurial management;
- a certificate in various business-related areas; and
- electives.

FINC 310 Entrepreneurship and New Venture Planning (3)

(Formerly BMGT 330.) Recommended: BMGT 364. An overview of entrepreneurship and planning new business ventures for aspiring entrepreneurs and managers. The objective is to create and present a high-quality business plan for a new venture using marketing research and financial analytical techniques. Topics include profiles of entrepreneurs; benefits, risks, and challenges; financial management; access to capital; and franchising. 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 wealth creation that blends financial theory and application. The goal is to develop personal financial management skills (e.g., budgeting income and expenditures and planning for financial security and retirement) and understand elements of the U.S. financial structure (including savings and investment alternatives, financing and credit sources, and the role of insurance in protecting income and assets). 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 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. The aim is to examine financial information, identify issues and solve business problems, and make sound business decisions. 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.) Development of the financial skills needed by functional experts in human resources, marketing, production, and general management. The objective is to interpret finance and accounting documents and apply that information to sound business decision making. Topics include financial statements and forecasting, capital budgeting, project evaluation, working capital management, stocks and bonds, time value of money, and international financial management. Emphasis is on practical applications to facilitate informed discussions with business professionals for financial decision making. 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. An introduction to financial investments and portfolio management. The goal is to evaluate and critically analyze asset selection and allocation and perform basic portfolio management activities. Topics include types of securities and securities markets; investment risks, returns, and constraints; portfolio policies and management; and institutional investment policies. Theories, practices, and real-world examples are examined and analyzed. 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: FINC 330 and 340. A study focused on recognizing and evaluating pure risk facing organizations. The aim is to identify risks to cost control and develop risk management strategies. Discussion covers guides for risk-management decisions concerning the retention, control, and transfer of risk (including insurance). Students may receive credit for only one of the following courses: BMGT 346 or FINC 351.

FINC 352 Life and Health Insurance (3)

Prerequisites: FINC 330 and 340. A study of the tools and principles of life insurance and health insurance in financial planning for businesses and individuals. The goal is to assess personal needs in order to determine which types of life and health insurance plans fit best. 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 Early-Stage Business and Entrepreneurial Ventures (3)

Recommended: FINC 310. A project-driven study of financial management in a new venture environment. The goal is to evaluate, improve, and implement a business plan using financial and marketing analysis to determine advantages and risks critical to successful venture development. Discussion also covers managing resources by creating and enhancing relationships with stakeholders. 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.) Prerequisites: FINC 330 and 340. 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)

Prerequisites: FINC 330 and 340. A study of financial management. The objective is to apply financial principles and concepts to assess and solve financial problems and make financial and corporate policy at the executive level. Topics include assessments of the financial health of the organization, company valuation, cost of capital, risk analysis, investment decisions, and financial systems 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.) Prerequisites: FINC 330 and 340. A comprehensive and quantitative examination of financial investments and portfolio management. The aim is to quantitatively evaluate and value assets, critically analyze asset selection and allocation, and apply financial statistics and other evaluation methods to perform basic portfolio management activities and functions. Topics include the analysis, valuation, and selection of securities; investment risks, returns, and constraints; portfolio policies and management; institutional investment policies; and the operation and efficiency of financial markets. Theory, practice, and real-world examples are analyzed to value financial assets and compare alternatives. Students may receive credit for only one of the following courses: BMGT 443 or FINC 440

FINC 441 Financial Derivatives and Portfolio Risk Management (3)

(Formerly BMGT 444.) Prerequisites: FINC 330 and 340. A comprehensive and quantitative examination of risk management, financial engineering, and financial derivatives. Focus is on the application of financial derivatives to mitigate risk, enable investment strategies, and improve portfolio performance. Topics include risk management; hedging; speculation; stock and other options; structure of futures prices; interest-rate futures; and efficiency in futures and forwards markets, swaps, and synthetic securities. Discussion also covers investment risks, returns, and constraints; portfolio policies and management; institutional investment policies; and the operation and efficiency of financial markets. Theory, practice, and real-world scenarios are analyzed to value financial assets and compare alternatives. The objective is to quantitatively evaluate and value assets, critically analyze asset selection and allocation, and apply financial statistics and other evaluation methods to perform basic portfolio management. 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.) Prerequisites: FINC 330 and 340. An analysis of commercial bank management. The aim is to examine how the changing commercial banking environment has affected profitability and evaluate bank business strategies. 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 451 Financial Markets and Institutions (3)

Prerequisites: FINC 330 and 340. An advanced study of financial markets and institutions. The goal is to determine profit-earning strategies of financial institutions; assess the impact of government regulations on financial markets, institutions, and the global economy; and analyze major financial crises and their effects on the global financial landscape. Topics include various types of financial products, markets, and institutions, including the Federal Reserve, the World Bank, and the International Monetary Fund.

FINC 460 International Finance (3)

Prerequisites: FINC 330 and 340. An analysis and discussion of financial management issues for the multinational enterprise. The aim is to use financial and economic strategies in quantitative decision making. Topics include the organization and functions of the foreign exchange market and international capital markets; financing foreign trade; and identifying, analyzing, and evaluating the globalization strategies of the multinational enterprise. 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: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

FINC 486B Internship in Finance Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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 330 and 340. 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 international finance. 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 service administration or investigative forensics;
- a minor in fire service administration; 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.

FSCN 302 Fire and Emergency Services Administration (3)

Prerequisite: WRTG 101. A presentation of modern management and planning techniques that apply to organizing a fire department. The objective is to apply management concepts to fire service administration and analyze the community approach to risk reduction. Discussion covers procedures for evaluation and control of budgeting, personnel, communications, and planning. Topics also include the traditional and evolving roles of the fire department in protection, prevention, and community service.

FSCN 303 Analytic Approaches to Public Fire Protection (3)

Prerequisites: FSCN 304 and 305 and either MATH 106 or MATH 107. A presentation of techniques of operations research and systems analysis as they apply to problems in fire protection. The goal is to develop a plan to provide quality services and use technologies and statistics. Discussion covers cost-benefit analysis, statistical analysis, and methods for locating fire stations. Techniques for collecting data on fires and for managing information are also explained.

FSCN 304 Personnel Management for Fire and Emergency Services (3)

Prerequisite: FSCN 302. An examination of personnel practices, including management procedures, collective bargaining, binding arbitration, and applicable legislative and administrative procedures. The aim is to manage emergency service personnel; develop, communicate, and implement organizational goals and objectives; lead personnel in compliance with regulations and within an ethical framework. 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)

Prerequisite: FSCN 302. An examination of prevention as the primary community-based strategy for fire protection. The objective is to design, implement, and manage programs addressing community risks; administer prevention programs; and influence change and development of legislation, regulation, and policy. Emphasis is on applying principles to anticipate problems and develop strategies for fire prevention. 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.

FSCN 306 Fire Investigation and Analysis (3)

Prerequisites: FSCN 304 and 305. An examination of the technical, legal, and social aspects of fire investigation. The goal is to apply legal precedents and the scientific method to fire investigations and analyze data critical to fire investigation. Topics include the scientific method, basic fire science, fire origin and cause determination, fire investigation management, and legal aspects of fire investigation.

FSCN 401 Disaster Planning and Control (3)

Prerequisites: FSCN 304 and 305. An examination of emergency management, including preparation for, response to, recovery from, and mitigation of natural and man-made disasters. The aim is to use concepts of risk and hazard analysis in developing emergency plans and apply emergency management concepts to define the fire service role in disaster response. Focus is on the role of the fire service in disaster planning and management.

FSCN 402 Fire-Related Human Behavior (3)

Prerequisites: FSCN 304 and 305. A study of human behavior in fire and emergency situations. A best-practice building life-safety system is presented as one that combines knowledge of psychology and sociology with engineering and education skills to produce the best possible outcomes in terms of human survivability in an emergency. The objective is to predict human behavior, recognize factors that influence human behavior, and analyze the impact of building safety systems on human behavior. Topics include current and past research on human behavior, systems models, life safety education, and building design to determine how these elements interrelate in emergency situations.

FSCN 403 Managerial Issues in Hazardous Materials (3)

Prerequisites: FSCN 304 and 305. A presentation of current issues in the management of department-wide hazardous materials programs. The goal is to analyze regulations, identify potential threats, and develop a hazardous materials response plan. Discussion covers regulations and requirements for hazardous materials preparedness and response, as well as emergency response to terrorist threats and incidents. Topics include state, local, and federal emergency response planning; personnel and training; and operational considerations, such as determining strategic goals and tactical objectives.

FSCN 411 Fire Protection Structure and Systems (3)

Prerequisites: FSCN 304 and 305. A presentation of design principles involved in protecting structures from fire. The aim is to analyze building structural components and determine appropriate fire detection and suppression systems. 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. Review covers recent innovations in the field.

FSCN 412 Political and Legal Foundations of Fire Protection (3)

Prerequisites: FSCN 304 and 305. A consideration of the legal basis for the police powers of the government in connection with public safety. The objective is to ensure compliance with regulations and policies, guide decision making and operations in accordance with ethical best practices, and help improve public safety. The responsibility, legal limitations, and liability of fire-prevention organizations and personnel are examined. Review covers judicial decisions, focusing 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)

Prerequisites: FSCN 304 and 305. An examination of the ethical, sociological, organizational, political, and legal components of community risk reduction. The goal is to analyze environments and design and develop a community risk reduction plan and implementation of that plan. A framework for understanding these issues and a methodology for developing a comprehensive community risk reduction plan are provided.

FSCN 414 Fire Dynamics (3)

Prerequisites: FSCN 304 and 305 and either MATH 106 or MATH 107. A study of the physics and chemistry of fire dynamics phenomena. The aim is to quantify fire threat and behavior, apply mathematical analysis to fire growth and spread, and use fire dynamics principles to analyze compartment fires. Topics include ignition, energy release, heat transfer, fire growth and spread, smoke production and movement, and flashover in compartment fires.

FSCN 415 Applications of Fire Research (3)

Prerequisites: FSCN 304 and 305. A practical, up-to-date review of fire research and its application. The objective is to develop a research project, apply existing research to public safety outcomes, and influence public safety research agenda. The transfer of research to practical application and its implications for fire prevention and protection programs are addressed. Focus is on both national and international studies and on maintaining awareness of ongoing research developments.

FSCN 416 Emergency Services Training and Education (3)

Prerequisites: FSCN 304 and 305. An examination of the management and administration of training and education in fire and emergency services. The objective is to manage and administer development programs, integrate concepts in training programs, and analyze and assess programs. Discussion explores how higher education/training contributes to the professional development of fire-service personnel. Topics include the many systems of training and education available and professional development on both individual and organizational levels. Focus is on safety, especially understanding and preventing training deaths and injuries.

FSCN 486A Internship in Fire Science Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

FSCN 486B Internship in Fire Science Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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. The aim is to describe how geographic technologies are used to analyze local, regional, and global issues; identify the physical systems and processes that shape the earth; and interpret information from the spatial perspective to apply geography to world events. Topics include human/environment interactions and cultural, geopolitical, human, and physical geography.

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;
- a minor in natural science; 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. The aim is to communicate knowledge about geological principles and recognize how human activity affects geological processes. 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.

GERM 111 Elementary German I (3)

(Not open to native speakers of German; assumes no prior knowledge of German. Students with prior experience with the German language should take a placement test to assess appropriate level.) An introduction to the German language. The objective is to communicate in German in some concrete, real-life situations using culturally appropriate language. Aspects of German life and culture are explored through the German language. Students may receive credit for only one of the following courses: GERM 101 or GERM 111.

GERM 112 Elementary German II (3)

(Not open to native speakers of German.) Prerequisite: GERM 111 or appropriate score on a placement test. A continued introduction to spoken and written German. The goal is to communicate in German in concrete, real-life situations relating to oneself and others. German culture and language are explored. Students may receive credit for only one of the following courses: GERM 102 or GERM 112.

GERM 211 Intermediate German I (3)

(Prerequisite: GERM 112 or appropriate score on placement test.) Further development of listening, speaking, reading, and writing skills in German. The aim is to communicate in German in real-life situations and social contexts in culturally appropriate ways. Students may receive credit for only one of the following courses: GERM 114, GERM 201, or GERM 211.

GERM 212 Intermediate German II (3)

Prerequisite: GERM 211 or appropriate score on placement test. Further development of listening, speaking, reading, and writing skills in German. The objective is to interact effectively with German-speaking individuals in a variety of personal settings and on issues of topical interest in culturally appropriate ways. Students may receive credit for only one of the following courses: GERM 115, GERM 202, or GERM 212.

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 or social science;
- a minor in gerontology or women's studies;
- a certificate in Applied Behavioral and Social Sciences, Diversity Awareness, or Health Issues for the Aging Adult; and
- electives.

GERO 100 Introduction to Gerontology (3)

(Fulfills the general education requirement in behavioral and social sciences.) An overview of the study of aging and the older adult population. The objective is to gain a historical and sociocultural understanding of how the experience of aging has evolved over the last 100 years. The biological, psychological, and social processes of aging in the 21st century and the impact of an aging population on society are examined from a multidisciplinary perspective

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, pereptual, 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. The goal is to distinguish normal aging from disease and evaluate factors that affect the health of older adults. 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. Recommended: GERO 302. An overview of the impact of policy related to older adults on U.S. society. The aim is to examine the role of legislative mandates on older adults at both societal and individual levels. Topics include Social Security, Medicare, and the Older Americans Act. 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 Gender 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. A project-based exploration of health promotion for an aging population. The objective is to articulate different models of health promotion for older adults and design a health promotion campaign.

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 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" (working 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 Alzheimer's and other dementias and their assessment and treatment.

GERO 486A Internship in Gerontology Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop).* The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

GERO 486B Internship in Gerontology Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop).* The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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 Issues (1)

A theoretical and practical study of Alzheimer's disease, covering its etiology and establishing its place among the chronic dementias. The aim is to analyze the health, legal, ethical, and caregiver issues associated with Alzheimer's disease. Topics include medical ethics, 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 Sensory Changes and Aging (1)

A review of age differences in sensory processes. The goal is to apply knowledge of age-related sensory changes to inform and communicate effectively with older adults and their families. Topics include physical changes and the social and psychological implications of these sensory impairments, prosthetic devices and other human factors, and concepts and strategies to improve communication with family and friends.

GERO 495H Illness and Aging (1)

A broad overview of illness and wellness in elderly people. The aim is to examine the effects of the aging process on the manifestation and treatment of disease in the elderly. Topics include avoidable illness, principles of drug therapy, unique aspects of illness presentation, biology of aging, and demographics.

GERO 495K Geriatric Nutrition (1)

An overview of the physiological, social, and psychological changes that affect nutritional status and intake in aging. The goal is to use knowledge of age-related changes in nutritional status to inform and support older adults. Topics include 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 Issues Affecting Older Workers and Their Employers (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. The objective is to use knowledge of the older worker and the skills they bring to the workplace to inform others. Discussion covers 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 implications for the future 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 who are no longer able to live independently. The aim is to analyze an individual's medical, personal, and financial needs to determine the best options for the individual's long term care. Topics include the continuum from independent living to home care and assessments of living situations suited to individual needs. 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. The objective is to explore the evolving role of Social Security and Medicare in long-term financial planning. Topics include basic benefits, current conflicts, and implications for the future of both programs.

GERO 496R Geriatric Case Management (1)

A review of the concept of geriatric case management. The aim is to discuss the role of the geriatric care manager in the assessment, planning and coordination of the health and human service needs of older adults. Topics include the needs of older adults and appropriate interventions to meet those needs.

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 techniques for achieving financial independence at retirement and the economic, governmental, and business factors that work against reaching this goal. The objective is to evaluate present and future needs to determine the most effective strategies for retirement planning. Topics 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 lifespan.

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. The objective is to explore the various roles of professionals in gerontology and the pathways that lead to those roles. 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 East Asian studies, emergency management, homeland security, or political science;
- a minor in African American studies or political science;
- a certificate in Terrorism and Institutions: Prevention and Response; and
- electives.

GVPT 100 Introduction to Political Science (3)

A survey of the basic principles of political science. The objective is to define the main features of primary political systems to understand differing methods of governance and articulate consequences of government actions in a globally interdependent system. Topics include the relationship of political science to the other social sciences; 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.

INFORMATION ON COURSES

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. The aim is to explain the vertical and horizontal structure of the American government and the roles of the three federal branches, bureaucracies, and the state governments; describe the development of the American political system and its impact on the political landscape; and explain the processes of the electoral system, political parties, and interest groups to persuade and influence. Institutions, processes, and public policies are examined from a cross-cultural perspective.

GVPT 200 International Political Relations (3)

A study of the major factors underlying international relations, the methods of conducting foreign relations, and the means of avoiding or alleviating international conflicts. The objective is to interact with global communities, contribute to policy formation, analyze differing worldviews, and apply historical and cultural contexts to identify probable outcomes of disputes. Students may receive credit for only one of the following courses: GVPT 200 or GVPT 300.

GVPT 280 Comparative Politics and Government (3)

An introductory study of institutional patterns and trends in a variety of countries with dissimilar governmental styles. The goal is to compare the stages of political development in the modern state system on a spectrum ranging from liberal democracies to authoritarian regimes. Discussion covers ethnic conflict and economic inequality in relation to the success and failure of governmental approaches in solving compelling issues.

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 International Human Rights (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 401 Understanding 21st Century Global Challenges (3)

Prerequisite: WRTG 101. 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. The aim is to analyze world events to evaluate global development and formulate scenarios predicated on the roles of various actors and institutions. 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 403 Law, Morality, and War (3)

Prerequisite: WRTG 101. A study of just war traditions. The objective is to make informed decisions and analyze conflict. Discussions cover the theoretical and practical connections between law, war, and morality.

GVPT 404 Democratization (3)

Prerequisite: WRTG 101. 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)

Prerequisite: WRTG 101. An examination of the development of global terrorism and its impact on the international community. The goal is to participate in strategy and policy formulation and implementation, evaluate threats, and assess infrastructures that support global terrorist organizations. Students may receive credit for only one of the following courses: GVPT 401A or GVPT 406.

GVPT 407 State Terrorism (3)

An examination of the use of force and power (terrorism) by states against various populations to advance the interests of their civilization or state. The objective is to apply knowledge of culture, tradition, ideology, and methodology to comprehend state terrorism; analyze risk to national security; and explain how domestic climates and international relationships interact to support state terrorism. Topics include state behavior and norms; state interests, power, and force; application of power and force; and coercion within and among civilizations.

GVPT 408 Counterterrorism (3)

An investigation of counterterrorism (including its historical context), focusing on the evaluation of threats and the formulation of defeat strategies. The aim is to evaluate response strategies, help improve offensive and defensive planning, and construct a defeat strategy for a terrorist threat. Students may receive credit for only one of the following: 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 cyberterrorism, 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 444 American Political Theory (3)

Prerequisite: WRTG 101. A study of the development and growth of American political concepts from the colonial period to the present. The objective is to apply the rule of law to the decision-making process; interpret, apply, and synthesize the concepts of individual rights and collective responsibilities; and evaluate the interconnection between war, peace, and diplomacy.

GVPT 457 American Foreign Relations (3)

Prerequisite: WRTG 101. A study of the principles and machinery of American foreign relations. The goal is to apply historical themes of American foreign policy to contemporary international relations, incorporate tenets of international law into American diplomatic approaches, and inform and influence policy making. 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 475 The Presidency and the Executive Branch (3)

Prerequisite: WRTG 101. A study of the president's influence on legislative matters, the president's function in the executive branch (including domestic and foreign policy), and the president's role in his or her political party. The aim is to analyze contemporary uses of the presidency, evaluate an election strategy, and communicate realities of the presidential office.

GVPT 486A Internship in Government and Politics Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

GVPT 486B Internship in Government and Politics Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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 495 Advanced Seminar in Political Science (3)

(Intended as a capstone course to be taken in a student's last 15 credits.) Prerequisites: WRTG 101 and 9 upper-level GVPT credits. A study of political science that integrates knowledge gained through previous coursework and experience. The aim is to build on that conceptual foundation through integrative analysis, practical application, and critical thinking. Concepts and methods of political science are applied in producing a political, policy, or position paper for a project organization.

GVPT 498 Advanced Topics in Government and Politics (1–3)

Recommended: GVPT 100. In-depth study of topics of specialized interest.

Graphic Communication

Courses in graphic communication (designated GRCO) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major in graphic communication;
- a certificate in Computer Graphics and Design, Desktop Publishing, or Web Design; and
- electives.

GRCO 100 Introduction to Graphic Communication (3)

An introduction to graphic communication and the various roles and responsibilities of the profession. The aim is to build the skills and knowledge necessary for graphic communication professional. Topics include legal and ethical obligations, portfolios, and research and assessment practices.

GRCO 230 Typography (3)

Prerequisite: ARTT 110. An introduction to typography as a compositional tool. The goal is to analyze and distinguish appropriate application of typefaces and fonts and apply typographical skills to layout design and construction. Emphasis is on the individual aspects of the letterform and the interaction of letters as text on the page.

GRCO 350 Commercial Design (3)

(Formerly ARTT 250.) Prerequisite: GRCO 230. 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 visual systems, collateral corporate and marketing materials, and advertising campaigns. Discussion also covers the relationship between word and image, symbolism, visual structure, continuity, ethical standards and practices, and creative problem solving. Students may receive credit for only one of the following courses: ARTT 250 or GRCO 350.

GRCO 354 Digital Media (3)

(Formerly ARTT 354.) Prerequisite: GRCO 230. An introduction to computer graphics programs and digital media and design. The objective is to use current technologies in the production of digital art and design, integrate images and text in a cohesive design, and conceive and create a product and follow it through all stages of production. Focus is on the production of artwork for both mass media and noncommercial media. Current technologies are used to explore various formats, including print and the Web. Students may receive credit for only one of the following courses: ARTT 354 or GRCO 354.

GRCO 458 Illustration (3)

(Formerly ARTT 458.) Prerequisite: ARTT 210. A hands-on, project-based exploration of illustration. Focus is on developing fundamental skills in illustration, including the interpretation of texts and ideas to create images. The goal is to translate ideas into images, compose effective images, and use appropriate techniques for media. Topics include drawing, composition, meaning, and communication of mood. Projects include works in a variety of areas, including storyboarding and scientific, technical, advertising, and children's materials. Students may receive credit for only one of the following courses: ARTT 458 or GRCO 458.

GRCO 479 Motion Graphics (3)

(Formerly ARTT 479.) Prerequisite: GRCO 354 or ARTT 354. A study of media production. Discussion covers the aesthetic and practical aspects of creating moving images in a short movie or documentary. The goal is to understand the principles of preproduction, production, and postproduction. Students may receive credit for only one of the following courses: ARTT 479 or GRCO 479.

GRCO 495 Graphic Communication Portfolio (3)

(Formerly ARTT 495. Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: GRCO 350 and 354, MRKT 310, and 15 credits in ARTT or GRCO coursework. A project-driven study of business and professional practices in the field of graphic communication. The objective is to be prepared for a career in graphic communication. Topics include portfolio review, teamwork, and assessment of professional goals. Focus is on applying skills (in areas such as motion graphics, typography, digital media, illustration, and commercial design) acquired through previous study. Students may receive credit for only one of the following courses: ARTT 495 or GRCO 495.

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 in history, East Asian studies, or humanities;
- a minor in African American studies, East Asian studies, history, or women's studies;
- a certificate in Terrorism and Institutions: Prevention and Response; and
- electives.

HIST 107 Classical Foundations (3)

(Formerly HUMN 102.) Recommended: WRTG 101. A study of the ancient Greco-Roman world. Original sources of history, art, philosophy, poetry, and drama are consulted. The objective is to compare and contrast works of key thinkers to trace the evolution of ideas. 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)

(Formerly HUMN 102.) Recommended: WRTG 101. A survey of global civilizations and cultures from prehistory to the 1500s. The aim is to identify important elements of political theory. Focus is on the interaction of those cultures and their political, social, and cultural development. Students may receive credit for only one of the following courses: CLAS 100, HUMN 102, or HIST 107.

HIST 116 World History II (3)

Recommended: WRTG 101. A survey of Western and non-Western civilizations and cultures from 1500 to the present. The aim is to identify important elements of political theory and explain the influence of those elements on history. Emphasis is on the political, social, and cultural development of the major civilizations; the interactions between those civilizations; and the development of a global community since 1500.

HIST 141 Western Civilization I (3)

Recommended: WRTG 101. A survey of the history of Western civilization from antiquity through the Reformation. The objective is to chart major societal changes; identify major conflicts and wars; describe the evolution of religions; and recognize how philosophy and the arts reflect and influence peoples' lives, cultures, and societies. The political, social, and intellectual developments that formed the values and institutions of the Western world are examined.

HIST 142 Western Civilization II (3)

Recommended: WRTG 101. A survey of the history of Western civilization from the Reformation to modern times. The goal is to chart major societal changes; identify major conflicts and wars; describe the evolution of religions; and recognize how philosophy and the arts reflect and influence peoples' lives, cultures, and societies.

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. The aim is to locate, evaluate, and use primary and secondary sources and interpret current events and ideas in a historical context. 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 objective is to use primary and secondary sources to describe U.S. historical events and interpret current events and ideas in a historical context. Discussion covers the rise of industry and the emergence of the United States as a world power. 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. The aim is to use primary and secondary historical resources to explore how past theory and practice have shaped the underlying policy, strategic planning, and operational procedures of today's military and national security 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 289 Historical Methods (3)

Prerequisite: A 100-level HIST course. An introduction to historical methods, approaches, and techniques. The goal is to explain what history is and why it matters, identify historical paradigms, and employ the moral and ethical standards of the historical profession. Focus is on the philosophical and practical skills employed by historians.

HIST 309 Historical Writing (3)

Prerequisite: HIST 289. A study of the historical research and writing process. The goal is to construct a framework for an original historical research project, locate and evaluate source materials, and demonstrate proficiency in research methods.

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 whether it may be applied to the situation in Darfur is 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 The 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)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. A study of the ancient Greeks from Homer to Socrates, from 800 to 400 BC. 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)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. A study of the history of the Greeks from 400 to 30 BC. 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)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. A study of ancient Rome during the period 753 to 44 BC, 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)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. A study of Roman history from Augustus to Heraclius, from 44 BC to AD 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)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. 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. The aim is to describe and evaluate the emergence and evolution of modern schools of thought and their effects on contemporary society.

HIST 337 Europe's Bloodiest Century (3)

An investigation of the political, economic, and cultural development of Europe since 1914, with emphasis on the factors involved in the two world wars and their worldwide effects and significance. The objective is to evaluate causes, courses, and consequences of armed conflicts in Europe during the 20th century to interpret their effects on contemporary society.

HIST 341 A History of Anti-Semitism (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. A study of the historical development of anti-Semitism in its European context. Anti-Semitism is examined both as a set of ideas and as a political movement from the ancient era to the present, with emphasis on the modern era.

HIST 353 Latin America: From Moctezuma to Bolivar (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. 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 Modern Latin American History: 1810 to the Present (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. An examination of political, economic, social, cultural, and gender changes and conflict in Latin America, from political independence to recent developments. The aim is to understand the context of Latin American affairs and interpret U.S. policy and its relationship to the region. Topics include agrarian transformation, economic development and underdevelopment, emancipation of slaves, gender hierarchies, national identity, urbanization and populism, labor politics, social revolution, and global relationships. Students may receive credit for only one of the following courses: HIST 251 or HIST 354.

HIST 360 America in the Colonial Era: 1600 to 1763 (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. A study of the American colonial era. The goal is to locate, evaluate, and use primary and secondary source materials; articulate and interpret events and ideas; and analyze current events in a historical context. Discussion covers the colonial experiences of early Americans and developments in economy, religion, law, gender and race relations, politics, and culture.

HIST 361 America in the Revolutionary Era: 1763 to 1803 (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. An extensive examination of the issues and events in colonial British America that resulted in the American Revolution and an exploration of the early development of the United States through 1803. The aim is to locate, evaluate, and use primary and secondary source materials; evaluate the impact of events, individuals, movements, and economic systems; and analyze the formation of an "American" identity. Emphasis is on political events and social issues, including the creation of a new government under the Constitution and challenges facing the new nation.

HIST 363 The Civil War and the New Industrial Society in the United States: 1860 to 1900 (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. A focused study of the Gilded Age from Reconstruction to the dawn of the Progressive Era. The goal is to analyze the transformation from a union of states to the United States as a result of the social, cultural, technological, and economic events of the era. Topics include Reconstruction, the westward movement, urbanization, industrialization, imperialism, and the expansion and contraction of rights and liberties.

HIST 364 Emergence of Modern America: 1900 to 1945 (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. A study of the emergence of modern American institutions and identities in the years 1900–45. The aim is to identify events, individuals, movements, and technological developments; synthesize primary and secondary resources; and analyze the significance of social, cultural, and political events. Topics include the presidencies of McKinley, Roosevelt, Taft, and Wilson; the world wars; the Great Depression; and the period of the New Deal. Discussion also covers 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)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. An investigation of U.S. history from the end of World War II to the events of September 11, 2001. The goal is to identify events, individuals, movements, and technological developments; synthesize primary and secondary resources; and analyze the significance of social, cultural, and political events. Topics include social turmoil, the Cultural Revolution, the role of the United States in the world, economic trends, military conflicts, consumerism, political and public scandals, and globalization.

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 history of women in the United States from European and Native American contact to 1870. The objective is to examine primary and secondary sources and documents to comprehend and articulate the impact of gender on the historical experiences of American women. Historical methodologies that pay particular attention to the ways in which race, class, ethnicity, and sexuality have shaped these experiences are used to analyze the varied experiences of U.S. women. The relationship between these experiences and the larger historical forces of the era—including the American Revolution, nation building, migration, slavery, and changing family roles and structure—is evaluated.

HIST 377 United States Women's History: 1870 to 2000 (3)

An examination of the history of women in the United States from 1870 to the eve of the 21st century. The goal is to examine primary and secondary sources and documents to comprehend and articulate the impact of gender on the historical experiences of American women. Historical methodologies that pay particular attention to the ways in which race, class, ethnicity, and sexuality have shaped these experiences are used to analyze the varied experiences of U.S. women. The relationship between these experiences and the larger historical forces of the era—including social movements, technology, and changing family roles and structure—is evaluated. Students may receive credit for only one of the following courses: HIST 211, HIST 367, or HIST 377.

HIST 381 America in Vietnam (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. An examination of the complexity of the lengthy involvement of the United States in Vietnam. The goal is to engage in divergent historical interpretations and develop personal conclusions and perspectives about America's role in Vietnam and its legacy. Discussion covers the social, cultural, political, and military dimensions of the Vietnam War, beginning with the declaration of Vietnamese independence at the conclusion of World War II. Emphasis is on influence of the media in shaping government policy and public opinion. 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)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. 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)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. A survey of the Ottoman Turkish Empire from 1300 AD to its collapse during World War I. The objective is to analyze the shifts in political, social, cultural, and economic arenas; examine the roles and influences of art, philosophy, and religion; and evaluate the roles of war and conflict in the formation and decline of the Ottoman Empire. 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)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. 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)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. 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 396I Cultural Heritage Protection: Iraq (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. 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 History: 1500 to 1865 (3)

An examination of African American communities in the Western Hemisphere from 1500 to 1865. The aim is to examine the impact of slavery on the social, political, and economic landscape of the African continent; explain the origins of the transatlantic slave trade; and discuss how slavery is central to the history and economic development of the United States. Topics include the African continent before the arrival of the Europeans, the enslavement and dispersion of Africans throughout North America, and the events preceding the Civil War and emancipation.

HIST 461 African American History: 1865 to the Present (3)

Prerequisite: A writing course. Recommended: WRTG 291. An examination of African Americans in the United States since the Civil War. The objective is to examine the significance of the emancipation of African Americans and various leadership and philosophical perspectives within the African American community. Topics include emancipation and Reconstruction; segregation, accommodationism, and institution building; migration and urbanization; resistance and the birth and growth of the civil rights movement; and the problem of race and racism as a national issue with global impact in the modern world.

HIST 462 The U.S. Civil War (3)

An examination of the origins, conduct, and impact of the American Civil War and Reconstruction (1850–77). The goal is to apply historical methodology to issues of the Civil War and Reconstruction; assess Civil War strategies, tactics, and operations; and evaluate how race, culture, politics, and technology affected the course of the Civil War and Reconstruction.

HIST 463 U.S. Military History Since 1865 (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. 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 investigation of the nature of the Second World War. The aim is to analyze the factors that contributed to World War II, investigate the influences of wartime ideologies, and examine how warfare accelerated advances in science and technology. Topics include the origins of the war; the political, military, economic, and social circumstances of the war and their impact and legacy; and the extent to which the war changed the world that we live in.

HIST 466 The Cold War (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. 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)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. 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 480 A History of China from Confucius to the Demise of the Qing Dynasty (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. A study of the history of China from Confucius (around 500 BC) to the demise of the Qing Dynasty in 1912. The objective is to interpret, educate, and advise others based on a historical, cultural, and social awareness of traditional China. Emphasis is on the changes within Chinese political, social, cultural, and philosophical structures that have molded the history of China and its people.

HIST 481 History of China from the Opium War to Deng Xiaoping (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. A study of the history of China from the Qing Dynasty to Deng Xiaoping. The goal is to interpret, educate, and advise others based on a historical, cultural, and social awareness of modern China. Emphasis is on revolution and reform and the effects these changes had on the emergence of China as a world power.

HIST 482 History of Japan to the Late Edo Period (3)

Prerequisite: A writing course. Recommended: WRTG 101 and 291. An examination of traditional Japanese civilization from the age of Shinto mythology to the late Edo period. The aim is to interpret, educate, and advise others based on a historical, cultural, and social awareness of traditional Japan.

HIST 483 History of Japan Since the Late Edo Period (3)

Prerequisite: A writing course. Recommended: WRTG 291. An examination of Japan's emergence as an industrial society and world power. The goal is to interpret, educate, and advise others based on a historical, cultural, and social awareness of modern Japan. Discussion covers Japan's role in World War II, postwar recovery, and re-emergence as an exporter of cultural goods.

HIST 486A Internship in History Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

HIST 486B Internship in History Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

HIST 495 Senior Thesis in History (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits, preferably a year after completing HIST 309.) Prerequisites: At least 21 credits in HIST coursework, including HIST 289 and 309. Intensive research into a specific topic in history of the student's choice. The objective is to produce a substantial, original historical research project suitable for presentation or publication.

Homeland Security

Courses in homeland security (designated HMLS) may be applied as appropriate (according to individual program requirements) toward

- a major in homeland security, criminal justice, emergency management, or fire service administration;
- a minor in homeland security;
- certain UMUC graduate degree programs, where recognized as equivalent coursework (specific equivalencies are detailed in the UMUC graduate catalog); and
- electives.

HMLS 302 Introduction to Homeland Security (3)

Prerequisite: WRTG 101. An introduction to the theory and practice of homeland security in both the public and private sector at the national, regional, state, and local level. The objective is to apply management concepts to homeland security, identify legal and policy issues related to homeland security, and compare the four phases of homeland security. 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 the public and private sectors. The goal is to develop and analyze homeland security strategic plans. Topics include organizational priorities, planning documents, policy development, legislation, financial operations, and the evaluation process. Analysis covers threat, risk, vulnerability, probability, and impact as parameters for decision making and resource allocation.

HMLS 310 Homeland Security Response to Critical Incidents (3)

Prerequisites: HMLS 304 and 406. A real-world assessment of the issues involved in responding to homeland security critical incidents. The aim is to prepare for future challenges, integrate critical incident responses at all levels, and analyze the effect of regulations and laws on critical incidents. Discussion covers historical and potential incidents as they relate to resources, cooperation, politics, regulations, operations, and postincident response.

HMLS 312 Technology in Homeland Security (3)

Prerequisites: HMLS 304 and 406. An overview of the existing and potential technology that may be used in homeland security in both the private and public sectors. The goal is to analyze the issues and benefits of the application of technology in homeland security and differentiate the uses and challenges of technology in public versus private sectors. Focus is on knowledge management, protection, response, and communication, as well as ethical and operational issues in technology.

HMLS 406 Legal and Political Issues of Homeland Security (3)

Prerequisite: HMLS 302. A study of the legal aspects of and public policy in homeland security. The aim is to analyze governmental and private sector roles and form a model homeland security policy. The development of public policy in homeland security is examined at 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 of 2001, 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 in Homeland Security (3)

Prerequisites: HMLS 304 and 406. An examination of infrastructure protection at international, national, regional, state, and local levels. The objective is to assess threat, risk, and vulnerabilities and recommend protective measures. Topics include critical infrastructure at all levels of government, the private sector, and the international community. 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 using available resources and partnerships between the public and private sectors.

HMLS 414 Homeland Security and Intelligence (3)

Prerequisites: HMLS 304 and 406. A study of the role of intelligence in homeland security. The goal is to assess existing and potential threats and environmental change and interpret, evaluate, and present field intelligence. Topics include the intelligence process—the collection, analysis, sharing, and dissemination of information between governments and between government and the private sector. Emphasis is on evaluating current intelligence and enforcement efforts. Discussion also covers future challenges and opportunities for intelligence operations.

HMLS 416 Homeland Security and International Relations (3)

Prerequisites: HMLS 304 and 406. An examination of the relationship of international institutions to U.S. homeland security policy, intelligence, and operations. The aim is to incorporate a global perspective in the development of U.S. homeland security, analyze international institutions that influence U.S. homeland security, and integrate international information sharing in public- and private-sector approaches to security. Domestic security operations abroad are compared to U.S. policy, laws, and procedures. Topics include the commonality of global approaches to domestic security everywhere and the value of information sharing between governments and international institutions.

HMLS 486A Internship in Homeland Security Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

HMLS 486B Internship in Homeland Security Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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 credits in upper-level FSCN, EMGT, CCJS, 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 and 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;
- a certificate in Diversity Awareness; and
- electives.

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 societies express their ideas through art, literature, architecture, music, and philosophy. Focus is on developing the conceptual tools to understand cultural phenomena critically.

HUMN 351 Myth in the World (3)

A presentation of myths from around the globe. The goal is to examine the interface between myths and cultural forms such as literature, art, and religion. Topics include sacred places and objects, goddesses and gods, heroes and tricksters, and stories of creation and destruction. Discussion also covers implicit values in the myths that shape cultural and individual identity and affect the social landscape.

HUMN 486A Internship in Humanities Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

HUMN 486B Internship in Humanities Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

HUMN 495 Humanities Seminar (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: HUMN 100 and 115–116 (or HIST 141–142), ARTT 205, and PHIL 140. A study of humanities that synthesizes knowledge gained through previous study. An individually chosen research project is used to address various questions: What is the nature of human responsibility to self, others, and the environment? What is the role of inquiry in human life? What is the role of creativity in human life? Career options are also examined.

Human Resource Management

Courses in human resource management (designated HRMN) may be applied as appropriate (according to individual program requirements) toward

- a major in human resource management, business administration, global business and public policy, or management studies;
- a minor in human resource management, business administration, business law and public policy, customer service management, global business and public policy, or strategic and entrepreneurial management;
- a certificate in Business Project Management, Human Resource Management, or Management Foundations; and
- electives.

HRMN 300 Human Resource Management (3)

A basic study of the strategic role of human resource management. The objective is to apply knowledge of human behavior, labor relations, and current laws and regulations to a working environment. Topics include employment laws and regulations, diversity in a global economy, total rewards management, and training and development for organizational success. 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. The goal is to apply theory and examples to improve managerial effectiveness in communication and negotiation. Problems, issues, and techniques of organizational communication are analyzed through case histories, exercises, and projects. 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 survey of contemporary labor relations practices. The aim is to research and analyze labor relations issues and support the labor relations process. Discussion covers the history of organized labor in the United States, the role of third parties, organizing campaigns, the collective bargaining process, and the resolution of employee grievances. Students may receive credit for only one of the following courses: BMGT 362 or HRMN 362.

HRMN 365 Conflict Management in Organizations (3)

Recommended: HRMN 300. An introduction to the sources and causes of conflict in organizations, as well as effective strategies and systems for managing conflict. The objective is to identify, analyze, and evaluate strategies and systems for managing conflict in the workplace. Topics include alternative approaches to negotiation, facilitation, mediation, and arbitration. Students may receive credit for only one of the following courses: BMGT 398X, HRMN 365, or MGMT 398X.

HRMN 367 Organizational Culture (3)

An examination of the nature, definitions, theories, and aspects of organizational culture. The goal is to apply knowledge of organizational culture to develop a change-management plan. 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)

(Formerly MGST 398H.) An overview of the impact of stress in the workplace. The aim is to identify and apply strategies to reduce the impact of stress in the workplace. 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 that define total rewards as everything that employees value in the employment relationship. The objective is to design a total rewards program that ensures organizational success. Topics include building and communicating a total rewards strategy, compensation fundamentals, the conduct 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 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: Issues 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 goal is to research and evaluate issues and present strategic solutions. The influence of federal regulations (including equal opportunity, sexual harassment, discrimination, and other employee-related regulations) is analyzed. A review of research findings, readings, discussions, case studies, and applicable federal regulations supports the critical evaluation of human resource problems. 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. The goal is to create and implement a training-needs analysis and to develop the skills necessary to create, implement, and evaluate training plans. Issues in employee development (including assessment of employee competencies, opportunities for learning and growth, and the roles of managers in employee development) and organizational change 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. The aim is to analyze employment law, compliance with laws and regulations, and evaluate rights, obligations, and liabilities in the employment process. Topics include discrimination based on race, national origin, religion, sex, affinity and sexual orientation, age, and disability; the hiring process, testing and performance appraisal; employee privacy; wrongful discharge, employee benefits; and liability protection. Students may receive credit for only one of the following courses: BMGT 468, BMGT 498G, HRMN 408, or MGMT 498G.

HRMN 486A Internship in Human Resource Management Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

HRMN 486B Internship in Human Resource Management Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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. The goal is to consider and analyze emerging issues in human resource management. 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 networking and security, digital media and Web technology, cybersecurity, emergency management, homeland security, investigative forensics, or laboratory management;
- a minor in computing;
- a certificate in various computer-related disciplines; and
- electives.

IFSM 201 Concepts and Applications of Information Technology (3)

(Access to a standard office productivity package, i.e., word processing, spreadsheet, database, and presentation software, required.) A practical application of information technology for personal and professional productivity. The objective is to use technology appropriately and fluently to organize, analyze, and communicate information. Topics include hardware, software, office applications, information security and ethics, and the Internet. 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)

(Access to Microsoft Office Professional required.) Prerequisite: IFSM 201. An overview of information systems and how they provide value by supporting organizational objectives. The goal is to analyze business strategies to recognize how technology solutions enable strategic outcomes and to identify information system requirements by analyzing business processes. Discussion covers concepts of business processes and alignment of information systems solutions to strategic goals.

IFSM 301 Foundations of Enterprise and Information Systems (3)

Prerequisites: IFSM 300 and CMIS 102. A basic study of information systems. The goal is to apply information technology best practices and methodologies to identify and evaluate enterprise solutions for the best fit for organizational strategic outcomes.

IFSM 304 Ethics in Information Technology (3)

Recommended: IFSM 201. A comprehensive study of ethics and of personal and organizational ethical decision making in the use of information systems in a global environment. The aim is to identify ethical issues raised by existing and emerging technologies, apply a structured framework to analyze risk and decision alternatives, and understand the impact of personal ethics and organizational values on an ethical workplace.

IFSM 310 Software and Hardware Infrastructure Concepts (3)

Prerequisite: IFSM 301. A study of the hardware, software, and network components of computer systems and their interrelationships. The objective is to select appropriate components for organizational infrastructures. Discussion covers the application of system development life cycle methodology to build secure integrated systems that meet business requirements. Students may receive credit for only one of the following courses: CMIS 270, CMIS 310, CMSC 311, or IFSM 310.

IFSM 311 Enterprise Architecture and Systems (3)

Prerequisite: IFSM 301. A study of enterprise architecture and frameworks, including the transition of current business processes and functional systems to an enterprise solution. The aim is to analyze how enterprise architecture and resulting enterprise systems support an organization's ability to adapt and respond to a continually changing business and competitive environment.

IFSM 432 Business Continuity Planning (3)

Prerequisite: IFSM 311. An analysis of the requirements for business continuity and disaster recovery planning related to mission critical business information systems. The goal is to assess the risk to continuity of business processes, develop a business continuity/disaster recovery plan according to industry standards and best practices, and develop a test plan. Topics include risk assessment and organizational requirements for maintaining systems. A group project is designed to produce and validate a comprehensive business continuity and disaster recovery plan. Students may receive credit for only one of the following courses: IFSM 432 or IFSM 498N

IFSM 433 Information Security Planning and Needs Assessment (3)

Prerequisite: IFSM 301. In-depth practice in developing an information security plan that documents security solutions for an enterprise business application. The aim is to analyze a business environment for information security risks, identify security requirements and controls to address threats and vulnerabilities and conduct appropriate evaluation and cost-benefit analysis, and develop a comprehensive information security plan. Topics include security requirements based on business needs; key domains based on industry-accepted standards and best practices, including standard National Institute of Standards and Technology (NIST) and International Organization for Standardization (ISO) frameworks; the roles and responsibilities of the ISSM (information systems security manager) and the ISSO (information systems security officer); and the need for ongoing monitoring and updating of information security plans to address new vulnerabilities and emerging threats. Students may receive credit for only one of the following courses: CSIA 303, IFSM 430, IFSM 433, or IFSM 498N.

IFSM 438 Information Systems Project Management (3)

Prerequisite: IFSM 301. A practical application of project management principles and procedures. The objective is to manage and control IT projects in alignment with organizational strategic goals and within resource constraints and to manage high-performing project teams to implement IT solutions. Topics include the development, control, and execution of plans to manage information systems projects as part of a team and the use of Microsoft Project to develop project schedules and related components. 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)

Prerequisites: CMIS 320, IFSM 311, and IFSM 438. A project-driven study of tools and techniques for translating business requirements into operational systems. The goal is to plan, build, and maintain systems that meet organizational strategic goals by applying enterprise architecture and enterprise governance principles and practices. Topics include processes and system development life cycle methodologies, data modeling methods, and the importance of stakeholder involvement. Students may receive credit for only one of the following courses: IFSM 436, IFSM 460, and IFSM 461.

IFSM 486A Internship in Information Systems Management Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

IFSM 486B Internship in Information Systems Management Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

IFSM 495 Trends and Practical Applications in Information Systems Management (3)

(Intended as a capstone course to be taken in a student's last 6 credits of major coursework.) Prerequisite: IFSM 461. A practical application of the knowledge and experience gained from previous study in information systems management. The aim is to demonstrate a mastery of information systems management concepts. Emerging issues and trends in information systems management are considered.

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 East Asian studies; and
- electives.

UMUC offers a limited number of foreign language courses each session.

JAPN 111 Elementary Japanese I (3)

(Not open to native speakers of Japanese: assumes no prior knowledge of Japanese. Students with prior experience with the Japanese language should take a placement test to assess appropriate level.) An introduction to spoken and written Japanese language. The objective is to communicate in Japanese in some concrete, real-life situations using culturally appropriate language; read and write hiragana; and read some katakana words in context.

JAPN 112 Elementary Japanese II (3)

(Not open to native speakers of Japanese.) Prerequisite: JAPN 111 or appropriate score on a placement test. A continued introduction to spoken and written Japanese. The goal is to communicate in Japanese in concrete, real-life situations using culturally appropriate language; read and write katakana; and recognize some kanji characters in context. Practice is provided in improving pronunciation and developing the oral and written skills used in everyday communication.

JAPN 114 Elementary Japanese III (3)

(Not open to native speakers of Japanese.) Prerequisite: JAPN 112 or appropriate score on a placement test. Further study of spoken and written Japanese. The aim is to communicate in Japanese in a variety of concrete, real-life situations, using culturally appropriate language and to expand recognition of kanji characters in context. Practice is provided in improving pronunciation and developing the oral and written skills used in everyday communication.

JAPN 115 Elementary Japanese IV (3)

(Not open to native speakers of Japanese.) Prerequisite: JAPN 114 or appropriate score on a placement test. Further development of skills in elementary spoken and written Japanese. The aim is to interact effectively with native speakers of Japanese in a variety of real-life situations using culturally appropriate language and to recognize and distinguish more commonly used kanji characters in context. Practice is provided in fine-tuning pronunciation and applying language skills to a range of contexts.

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.

JOUR 201 Introduction to News Writing (3)

(Fulfills the general education requirement in writing.) Prerequisite: WRTG 101 or ENGL 101. An introduction to writing news articles for print and electronic media. The aim is to evaluate the newsworthiness of information and events and write in journalistic style. Emphasis is on writing—from mechanics (grammar, spelling, punctuation, and journalistic style) to content (accuracy, completeness, audience, and readability)—and reporting.

JOUR 202 Editing for Mass Communication (3)

Prerequisite: JOUR 201. Presentation of the basic editing skills that apply to print and electronic media. The objective is to make informed and ethical editorial decisions; edit stories for style, mechanics, and content; and write headlines and cutlines for publication. 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 evolution, scope, and contemporary practice of public relations and its strategic value in business, nonprofits, government, associations, and other organizations. The goal is to apply legal, ethical, and professional standards to the everyday practice of public relations. Topics include communication theory, social science, and audience dimensions as they are applied to a four-step process: research, planning, communication, and evaluation.

JOUR 331 Public Relations Techniques (3)

Prerequisite: JOUR 330. An exploration of public relations techniques. The aim is to write a comprehensive public relations plan and to create and communicate messages targeting audiences through traditional and emerging media. 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 developments of webzines and online newspapers.

JOUR 371 Introduction to Feature Writing (3)

Prerequisite: JOUR 201. A study of various types of feature articles for magazines, newspapers, and online media. The objective is to choose appropriate topics and write an effective feature story, compose feature leads, and organize and write feature articles in appropriate journalistic style. Practice in interviewing sources and in researching and writing the feature article is provided.

JOUR 459 Special Topics in Mass Communication (3)

Prerequisite: WRTG 101 or ENGL 101. 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: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

JOUR 486B Internship in Journalism Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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 101 Introduction to Law (3)

A survey of the U.S. legal system and the role of the paralegal in the legal environment. The objective is to participate as an effective member of a legal team, draft legal writings, and analyze legal issues. 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 and computer-assisted methods used to locate relevant, mandatory, and current rules and interpretations. The goal is to conduct and update book-based and computer-based research using Bluebook rules and formats to explain case law and enacted law relevant to a topic or issue. Topics include the analysis, publication, and citation of judicial opinions; statutory provisions; administrative law and the features and use of secondary sources; digests; and citators. Some 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 101. An introduction to the principles of writing clearly and effectively in the legal environment. The objective is to analyze legal issues by explaining and synthesizing case law in a clear, effective, and well-organized manner. Assignments include a legal synthesis memo, an office memo, and a client letter. 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. The objective is to identify ethical problems, draft writings that apply ethical rules and interpretations to legal ethical dilemmas, and avoid and resolve legal ethical problems through appropriate use of office procedures. 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 Advanced Legal Research and Analysis (3)

(Formerly LGST 400.) 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 300, LGST 400, or PLGL 400.

LGST 301 Advanced Legal Writing (3)

(Formerly LGST 401.) 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 301, LGST 401, or PLGL 401.

LGST 302 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.* The goal is to appropriately apply the rules of 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)

Prerequisites: LGST 300 and 301. 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. The goal is to investigate and evaluate tort claims in order to develop litigation strategies and to research law in order to draft legal writings that support a legal conclusion. Topics include intentional torts, negligence, strict liability, damages, and civil procedure. Students may receive credit for only one of the following courses: LGST 312 or PLGL 312.

LGST 314 Workers' Compensation Law (1)

Prerequisites: LGST 300 and 301. 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)

Prerequisites: LGST 300 and 301. A study of the processes, procedures, and writings of family law practice. The aim is to identify, analyze, and apply the rules of professional conduct to support the resolution of domestic issues; research applicable law and factual information related to domestic relations issues to draft legal writings; and complete standardized forms to support the resolution of domestic issues. Topics include divorce, separation, and annulment and alimony; child custody and visitation; child support; disposition of property; and the legal rights of children. Relevant aspects of civil procedures, enforcement, and the modification of orders and agreements are covered. Students may receive credit for only one of the following courses: FMCD 487, LGST 315, or PLGL 315.

LGST 316 Estates and Probate (3)

Prerequisites: LGST 300 and 301. 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)

Prerequisites: LGST 300 and 301. A study of the substantive and procedural aspects of the criminal justice system. The objective is to identify, analyze, and apply the rules of professional conduct to develop ethical strategies, research law, and draft legal writings to support the prosecution or defense of crimes. Topics include crimes and defenses, penalties, and court procedures. Students may receive credit for only one of the following courses: LGST 320 or PLGL 320.

LGST 322 Evidence (3)

Prerequisites: LGST 300 and 301. An in-depth study of the Federal Rules of Evidence that govern the admissibility of evidence for establishing or controverting facts at trial and in administrative proceedings. The goal is to organize, track, retrieve, and prepare evidence in support of the litigation process and apply knowledge of the rules to develop a case strategy that supports the effective and ethical representation of a variety of clients. Students may receive credit for only one of the following courses: LGST 322, PLGL 222, or PLGL 322.

LGST 325 Litigation (3)

Prerequisites: LGST 300 and 301. A comprehensive study of the Federal Rules of Civil Procedure and the process of civil litigation. The aim is to use technology and administrative best practices to collect, track, retrieve, and prepare evidence during the litigation process to interpret and apply the rules to support the development of case strategies and to interact with individuals within the legal system to effectively and ethically support the litigation process. 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. The objective is to evaluate the appropriateness of various methods of dispute resolution and prepare applicable documents, evidence, and arguments for use in various dispute resolution forums to support client objectives. Emphasis is on the preparation of documents, evidence, and arguments for use in alternative dispute resolution. Students may receive credit for only one of the following courses: LGST 327, PLGL 327, or PLGL 398G.

LGST 330 Administrative Law (3)

Prerequisites: LGST 300 and 301. An overview of the functions and procedures of federal and state administrative agencies. The goal is to monitor and analyze administrative agency actions in order to make recommendations to proposed and final agency rules and administrative decisions. Topics include rulemaking, adjudication, the use and control of agency discretion, and disclosure of information. Focus is on researching relevant law and writing effective and persuasive communications for use in administrative adjudications or to obtain information held by government agencies. Students may receive credit for only one of the following courses: LGST 330 or PLGL 330.

LGST 335 Elder Law (3)

Prerequisites: LGST 300 and 301. A focused study of the legal issues relevant to the aging U.S. population. The aim is to apply communication, interpersonal, and advocacy skills consistent with the rules of professional conduct to support the resolution of elder law issues. Topics include housing, health care, quality of life, and financial matters. Emphasis is on conducting research and drafting legal writings using applicable law and factual information to support elder client objectives. Students may receive credit for only one of the following courses: LGST 335, PLGL 335, or PLGL 398E.

LGST 340 Contract Law (3)

Prerequisites: LGST 300 and 301. A comprehensive study of the major areas of contract law. The objective is to identify and analyze contractual precedent and statutory authority to develop litigation strategies and to explain contract concepts, remedies, and procedures that support a legal conclusion. Topics include formation, interpretation and enforcement, discharge, breach, and remedies for breach. Students may receive credit for only one of the following courses: LGST 340 or PLGL 340.

LGST 343 Real Estate Transactions (3)

Prerequisites: LGST 300 and 301. 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.) 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: LGST 350 or LGST 398A.

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 are covered including procedures in formal and informal hearings.

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 and 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; preparation and filing of 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, discovery, answers, 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, discovery, answers, 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 411 Consumer Protection Law (3)

Prerequisites: LGST 300 and 301. An overview of consumer protection law and the roles of federal, state, and local agencies. The objective is to apply communication, interpersonal, and advocacy skills to identify and analyze consumer protection law issues; research applicable law and factual information to determine appropriate judicial or administrative remedies; draft legal writings and complete standardized forms; and use effective office and case management methods to support the functioning of a consumer protection law practice. Topics include debt, credit, consumer goods, and fraud. Students may receive credit for only one of the following courses: LGST 411 or PLGL 411.

LGST 415 Intellectual Property (3)

Prerequisites: LGST 300 and 301. An overview of intellectual property rights, with special emphasis on patents, trademarks, and copyrights. The objective is to identify and analyze issues concerning intellectual property rights and conduct legal and factual research that supports the filing of federally registered copyrights, trademarks, and patents. Discussion also covers related legal writing and forms. Students may receive credit for only one of the following courses: LGST 415, PLGL 398D, or PLGL 415.

LGST 420 Immigration Law (3)

Prerequisites: LGST 300 and 301. 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 Advocacy (3)

Prerequisites: LGST 300 and 301. 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 442 Business Organizations (3)

A study of common business organizations that support client objectives. The aim is to support client goals by appropriately evaluating and forming business entities. Topics include the determination and establishment of business organizations based on legal and factual information. Students may receive credit for only one of the following courses: LGST 442, PLGL 342, or PLGL 442.

LGST 450 Bankruptcy Law (3)

Prerequisites: LGST 300 and 301. A study of the bankruptcy code and related rules of procedure. The objective is to identify and analyze issues related to bankruptcy petition and debtor and creditor rights. Focus is on researching applicable law and factual information related to bankruptcy law to draft legal writings, completing bankruptcy forms, and employing effective office and case management methods to support the functioning of a bankruptcy law practice. Students may receive credit for only one of the following courses: LGST 450 or PLGL 450.

LGST 460 Law Office Management (3)

Prerequisites: LGST 300 and 301. A comprehensive study of law office management focused on the management of people, documents, and technology. The aim is to apply appropriate leadership and communication styles to different clienteles in the court system, including pro se attorneys, litigants, victims, indigent clients, and various participants.

LGST 470 Court Management (3)

Prerequisites: LGST 300 and 301. A detailed study of how successful court managers use modern leadership and management approaches, along with best internal court practices and technology, to manage the business of courts in the 21st century. The aim is to examine both the operational and community-serving aspects of court management from a problem-solving perspective.

LGST 486A Legal Studies Internship Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

LGST 486B Legal Studies Internship Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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 Introduction to Research (1)

An introduction to the research process and methods for retrieving information in a library or through online sources. The aim is to identify an information need and locate, evaluate, and use appropriate resources in keeping with academic integrity and ethical standards. Focus is on implementing effective strategies for finding relevant information—including selecting appropriate print and electronic sources and effectively using Web search engines and UMUC Information and Library Services' electronic resources to find information—and evaluating and correctly citing the information found. Students may not earn credit for LIBS 150 through challenge exam or portfolio credit and 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, business supply chain management, or customer service management;
- a certificate in Management Foundations; and
- electives.

MRKT 310 Marketing Principles (3)

A foundation in the principles of marketing used to manage profitable customer relationships. The objective is to understand the pivotal role of marketing within both an organization's strategic plan and the marketing process and determine marketing strategies and tactics. Topics include consumer behavior, competitive analysis, segmentation, target marketing, positioning, branding, new product development, 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 overview of the key issues of marketing in a nonprofit organization. The aim is to develop marketing plans that maximize exchange relationships with multiple stakeholders. Topics include the application of marketing-mix principles. Projects include researching and writing a grant proposal. 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. A project-driven study of the integration of marketing communication tools used to achieve customer-centered marketing communications objectives. The goal is to develop and evaluate an integrated marketing communications plan and manage the marketing communications function. Topics include advertising, direct marketing, public relations, sales promotion, interactive and social media, buzz marketing, and personal selling. 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 comprehensive study of marketing strategies focused on identifying profitable customers, retaining those customers, and growing their lifetime value. The aim is to identify and differentiate individual customers and customer groups, use data to determine customer interactions, and determine how to provide customization within a mass customization environment. Topics include data mining to identify 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. Discussion also covers various customer relationship management (CRM) technology-related tools and metrics to support management's 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. A study of the increasing importance of understanding consumers in the marketing system. The objective is to assess internal, external, and situational factors in developing marketing strategies; apply internal factors to market segmentation; and formulate marketing-mix strategies. Discussion covers the foundations of consumer behavior (such as economic, social, psychological, and cultural factors) and the influence of well-directed communications. 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. Students may receive credit for only one of the following courses: BMGT 451, CNEC 437, or MRKT 410.

MRKT 412 Marketing Research (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. The goal is to assess marketing research needs, design and implement a marketing research plan, and use results to formulate marketing strategies. Discussion covers procedures for planning survey projects, designing statistical samples, tabulating data, and preparing reports. 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. The aim is to apply marketing principles and strategies to a global organization and markets. Discussion covers 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 also 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 information technology can enhance the marketing process and create relationships with customers. The objective is to incorporate e-consumer expectations into an e-marketing plan, analyze effective Web site design, evaluate competitive e-marketing strategies, and explore the ethical and legal issues created by the new technology. Topics include the use of the Internet in developing marketing strategy, conducting market research, and making marketing-mix decisions. Students may receive credit for only one of the following courses: BMGT 398O, BMGT 398R, MGMT 398O, MGMT 398R, or MRKT 457

MRKT 475 Selling and Sales Management (3)

Prerequisite: MRKT 310. A comprehensive study of the selling function of integrated marketing communications and sales management. The goal is to design and evaluate a customer-centered selling strategy and to organize and manage a sales department and sales force. Pertinent concepts of behavioral science are applied to the management of the sales effort. 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: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

MRKT 486B Internship in Marketing Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

MRKT 495 Strategic Marketing Management (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: MRKT 354, 410, and 412. A study of marketing that integrates knowledge gained through previous coursework and experience in marketing and builds on those concepts through integrative analysis, practical application, and critical thinking. The aim is to manage the marketing process, perform root-cause analysis, formulate alternative solutions, and propose marketing strategies and tactics. Emphasis is on the use of appropriate decision models. Topics include the analysis of consumers and markets. Discussion also covers emerging issues. 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. 2-2600, or by e-mail at *exams@umuc.edu.*

Students are expected to own and use scientific calculators in all mathematics and statistics courses.

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 real number properties and operations, including fractions, percentages, operations with signed numbers, and geometric formulas. The objective is to develop fluency in the language of introductory algebra; develop number sense and estimation skills; and use mathematical modeling to translate, solve, and interpret applied problems. Topics include linear equations and inequalities, equations of lines, graphs on number lines and rectangular coordinate systems, rules of exponents, and operations on polynomials. 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. The goal is to demonstrate number sense and estimation skills; interpret mathematical ideas using appropriate terminology; manipulate, evaluate, and simplify real-number and algebraic expressions; and translate, solve, and interpret applied problems. Emphasis is on numbers and algebraic properties, graphing skills, and applications drawn from a variety of areas (such as finance, science, and the physical world). Topics include polynomials; factoring; exponents and their notation; rational expressions and equations; rational exponents and radical expressions; 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, or MATH 199A,

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 study of mathematical models in finite mathematics, including linear models, systems of linear equations, linear programming, sets and counting, probability, descriptive statistics, and the mathematics of finance. The aim is to demonstrate fluency in the language of finite mathematics; find, solve, and graph linear equations and inequalities; describe sample spaces and event; assign probabilities to events and apply probability rules; and apply the mathematics of finance to formulate and solve problems.

MATH 107 College Algebra (3)

(The first course in the two-course series MATH 107–108. An alternative to MATH 115). Prerequisite: MATH 012 or an appropriate result on the placement test. An introduction to equations, inequalities, and a study of functions and their properties, including the development of graphing skills with polynomial, rational, exponential, and logarithmic functions. The objective is to demonstrate fluency in the language of algebra; communicate mathematical ideas; perform operations on real number, complex numbers, and functions; solve equations and inequalities; analyze and graph circles and functions; and use mathematical modeling to translate, solve, and interpret applied problems. Discussion also covers applications. Students may receive credit for only one of the following courses: MATH 107 and 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). Prerequisite: MATH 107 or an appropriate result on the placement test. An introduction to trigonometric functions, identities, and equations and their applications. Discussion covers analytical geometry and conic sections, systems of linear equations, matrices, 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. An explication of equations, functions, and graphs. The goal is to acquire the skills and knowledge needed for studying calculus. Topics include polynomials, rational functions, exponential and logarithmic functions, trigonometry, and analytical geometry. 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. The goal is to solve problems by identifying, representing, and modeling functional relationships. 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. The aim is to demonstrate fluency in the language of calculus; discuss mathematical ideas appropriately; model and solve problems using integrals and interpret the results; and use infinite series to approximate functions to model real-world scenarios. 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 140. An explication of the basic concepts of linear algebra. The aim is to analyze and evaluate matrices to determine solubility and solve systems of linear equations. Topics include systems of linear equations, linear transformations, vectors, vector spaces, matrix separations, products and separations, subspaces, bases, and linear independence. Discussion also covers solutions of problems in physics, engineering, and the sciences. 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. 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. The objective is to use multivariate calculus to solve real-world problems.

MATH 246 Differential Equations (3)

Prerequisite: MATH 141 or MATH 132. An introduction to the basic methods of solving differential equations. The goal is to demonstrate fluency in the language of differential equations; communicate mathematical ideas; solve boundary-value problems for first- and second-order equations; and solve systems of linear differential equations. Topics include solutions of boundary-value problems for first- and second-order differential equations; solutions of systems of linear differential equations; series solutions, existence, and uniqueness; and formulation and solution of differential equations for physical systems.

MATH 301 Concepts of Real Analysis I (3)

Prerequisite: MATH 141. A study of real analysis. The aim is to construct formal mathematical proofs and solve problems. 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. 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 I (3)

(The first in a two-course sequence on algebraic structures.) Prerequisite: MATH 141. An overview of algebraic structures. The aim is to construct mathematically correct and concise proofs. Topics include techniques of proofs, set theory, and group theory and the application of those techniques.

MATH 403 Algebraic Structures II (3)

(The second in a two-course sequence on algebraic structures.) Prerequisite: MATH 402. An overview of rings, polynomial rings, irreducible polynomials, integral domains, vector spaces, fields, finite fields, and Galois theory. The objective is to synthesize mathematical concepts and theories to make informed and effective decisions.

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 141. A study of the theory and practice of complex variables to enrich study of differential equations and numerical analysis. The aim is to use complex variables to analyze problems that have direct application to physical problems. Topics include complex numbers, functions, inverse functions, mappings, integrals, series, and poles.

MATH 466 Numerical Analysis (3)

Prerequisite: MATH 246. An introduction to numerical analysis. The objective is to communicate mathematical ideas, analyze large-scale problems, and apply concepts of numerical analysis to practical problem solving. Topics include single nonlinear equations and systems of linear equations, numerical differentiation and integration, multivariate least squares, interpolation, polynomial approximation, and data compression. Discussion also covers numerical integration and solution of linear systems. Applications may include coupled mechanical and electrical systems, economics, and population dynamics.

MATH 486A Internship in Mathematics Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

MATH 486B Internship in Mathematics Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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 in humanities;
- a minor in African American studies or humanities; and
- electives.

UMUC offers a limited number of courses each session in this discipline.

MUSC 210 Music as Cultural Expression (3)

A study of the role of music in various cultures. The objective is to identify key features that define various genres of world music, articulate the roles and functions of music in world cultures, use the medium of music to explore intercultural relationships, and consciously define personal musical perspectives. Discussion covers music from various cultural traditions and the contexts in which composers and musicians practice their craft. 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 biotechnology or laboratory management;
- a minor in natural science; and
- electives.

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 and chemistry, with applications to geology, oceanography, meteorology, and astronomy. The objective is to use scientific and quantitative reasoning to make informed decisions about topics related to physical science. 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.) Prerequisite: MATH 012 or higher. Prerequisite or corequisite: NSCI 100. A laboratory study of the basic principles of physics and chemistry, with applications to geology, oceanography, meteorology, and astronomy. The objective is to apply the scientific method and use scientific and quantitative reasoning to make informed decisions about experimental results in the physical sciences. 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.

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 and chemistry, with applications to geology, oceanography, meteorology, and astronomy. The objective is to apply the scientific method and use scientific and quantitative reasoning to make informed decisions about experimental results in the physical sciences. 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. The goal is to use scientific and quantitative reasoning to make informed decisions about topics related to atmospheric science. Topics include the effect of different weather elements (such as temperature, pressure, winds, and humidity) on weather patterns and climate. Discussion also covers weather phenomena such as El Niño, thunderstorms, tornadoes, tropical cyclones, and midlatitude cyclones, as well as the impact of humans on Earth's atmosphere. 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. The aim is to apply the scientific method and use scientific and quantitative reasoning to make informed decisions about experimental results in 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.) Recommended: WRTG 101. An overview of the day-to-day organization and management of research and development laboratories. The aim is to manage personnel, space, inventory, equipment, and safety and health compliances, as well as to communicate effectively in different formats with a broad array of stakeholders. Topics include laboratory operating systems, finances and recordkeeping, communication systems, safety regulations and procedures, data management, project planning, problem solving, procurement, personnel matters and 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 global environment and human impact on it. The goal is to apply scientific reasoning to make informed decisions about the role of human impact on global environmental sustainability. Emphasis is on the concept of sustainability as it applies to human 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. Discussion covers the environment as "global commons" and individual responsibility in environmental sustainability. Students may receive credit for only one of the following courses: BEHS 361, BEHS 365, ENMT 365, 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 the world's energy sources, 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 East Asian studies or humanities;
- a minor in philosophy or women's studies; and
- electives.

UMUC offers only a limited number of courses each session in this discipline.

PHIL 100 Introduction to Philosophy (3)

An introduction to the literature, problems, and methods of philosophy. The goal is to identify and consider central, recurring problems of philosophy. Students are encouraged to become aware of the significance of philosophical problems and to learn to offer rationally justifiable solutions. 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. The goal is to apply logical arguments to practical decision making. Topics include 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 Living Religions of the World (3)

(Formerly HUMN 127.) An examination of the cultural construction of religious or nonreligious identity within the diverse world community. The goal is to understand the role of religion in current events. Discussion covers the world's major living religious traditions: Hinduism, Buddhism, Christianity, Judaism, and Islam. 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 serve as a foundation for thinking clearly about moral issues. The aim is to offer rational argument about ethical problems. 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 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, application of these concepts to solving problems in business and management. Students may receive credit for only one of the following courses: HUMN 312 and PHIL 312.

PHIL 315 Ethical Issues in American Business (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 ideas and philosophies likely to affect humanity and this planet in the early 21st century. The goal is to identify and understand predominant modes of thought to critically evaluate ideas that affect ways of living; articulate the principles underlying cooperation and dissention among different cultures, institutions, and individuals; and trace the influence of key ideas across various realms of human activity to navigate the challenges of the modern world. 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 examination of the religions of the East, including Jainism, Sikhism, Hinduism, Buddhism, Chinese religions, and Shinto. The aim is to gain a historical perspective on world. 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 examination of the religions of the West, including the Zoroastrian, Judaic, Christian, and Islamic traditions. The goal is to gain a historical perspective on world events. 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 349, 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 or social science;
- a minor in psychology or women's studies;
- a certificate in various disciplines; and
- electives.

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. The goal is to apply major concepts and use the scientific method to enhance the understanding of individual, community, and organizational life experiences. 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 survey of psychological principles and their applications to areas such as stress coping strategies, social influence, interpersonal communication, relationships, careers and work, and physical health. The objective is to apply knowledge of the scientific approach and psychological principles to issues of adjustment in everyday life. Students may receive credit for only one of the following courses: PSYC 101 or PSYC 235.

PSYC 300 Research Methods in Psychology (3)

(Formerly PSYC 305.) Prerequisites: PSYC 100 and STAT 225 (or PSYC 200). Recommended: PSYC 306A. 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. Students may receive credit for only one of the following courses: PSYC 300 or PSYC 305.

PSYC 301 Biological Basis of Behavior (3)

Prerequisite: PSYC 100. Recommended: PSYC 300. An introduction to the anatomical structures and physiological processes that determine behavior. The objective is to use scientifically valid resources to effectively communicate about the biological basis of 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, and language), as well as the basic functioning of the nervous system.

PSYC 306 Special Topics in Psychology (1–3)

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)

An introduction to the effective use and applications of APA style for research projects, technical papers, and expository writing in the psychological and behavioral sciences. The objective is to communicate effectively following APA style guidelines. Topics include the application of the mechanics of the APA publication manual.

PSYC 306F Psychology of Happiness (1)

An introduction to the theories, concepts, and research related to the psychology of happiness, as well as implications for psychotherapy. The objective is to identify biological, cultural, and social theories in the study of happiness. 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 Biological Psychology (1–3)

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)

An introduction to the theories and methods of improving memory and thinking. The goal is to apply psychological research models to explain the memory process. Topics include the memory functions of encoding, storage, retrieval, and loss, as well as strategies for improving memory.

PSYC 307H Sleep and Dreams (1)

An introduction to the clinical, cultural, and research aspects of sleep and dreams. The aim is to understand the various scientific theories on the nature 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)

An introduction to the study of substance abuse. The objective is to apply knowledge of historical, evolutionary, biological, and psychological models of substance use and abuse. Topics include the causes, symptoms, and models of substance abuse, as well its prevention and treatment.

PSYC 308 Special Topics in Social Psychology (1–3)

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)

A presentation of relevant behavioral and managerial science theory, research, and real-world applications of leadership training. The objective is to apply key components of social and cognitive psychology relating to leadership within the workplace. Topics include workplace diversity, technology, and effective use of human resources.

PSYC 308H Psychology of Motivating People at Work (1)

An examination of successful strategies for motivating people in work settings. The goal is to apply knowledge of the evolutionary, learning, social, and cognitive theories of motivation in the workplace. Topics include managerial and personal motivational strategies in organizations.

PSYC 308K Introduction to Black Psychology (1)

An introduction to issues and perspectives in the study of the psychological development of black people, particularly in America. The objective is to apply knowledge of alternative psychological theories of behavior and personality in ways consistent with the African American cultural context. 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 relationship between psychological research and social policy.

PSYC 308Q Psychology of Religion and Spirituality (1)

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. The aim is to compare and contrast the major approaches in the psychological study of spirituality and religion. Topics include attitudes toward anxiety, issues of guilt, existential trust, the nature of suffering and evil, and the function of belief.

PSYC 309 Special Topics in Professional Psychology (1–3)

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)

An introduction to the current research on eating disorders—anorexia nervosa, bulimia nervosa, and obesity. The goal is to differentiate between psychodynamic, learning, cognitive, neurobiological, and sociocultural causes of eating disorders. Topics include adolescent eating behavior, theoretical explanations, factors associated with eating disorders, and the general management of eating disorders.

PSYC 309H Psychological Consequences of War and Violent Conflict (1)

A study of the effects of war on various vulnerable groups of people. The objective is to understand the research and theories related to the psychological consequences of war and violent conflict. Topics include theoretical bases and issues of the development, expression, treatment, and rehabilitation of associated disorders.

PSYC 309K Managing Interpersonal Stress and Conflict (1)

An exploration of the nature and causes of stress and techniques for its management. The aim is to identify a variety of techniques to mitigate stress. Topics include 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 309M Military Psychology (1)

An introduction to the basic principles of and issues in military psychology. The aim is to identify and explain how psychological principles and concepts can be applied to military environments and settings. Topics include the selection and training of personnel, the interaction of soldiers and machine systems, the use of psychology in warfare, and the clinical implications of military organizations.

PSYC 309S Introduction to the Psychology of Parenting (1)

An overview of psychological issues relevant to parenting. The objective is to identify cognitive, social, emotional, and physical developmental issues affecting parenting. Topics include key theories and relevant research findings that directly apply to effective and ineffective parenting.

PSYC 309W Professional Psychology (1)

An overview of the profession of psychology. Career goals and aspirations are addressed. Topics include professional opportunities such as teaching, research, therapy, and organizational consulting.

PSYC 309X Ethics in Mental Health and Psychological Treatment (1)

A general introduction to ethical considerations in the diagnosis and treatment of psychological disorders. The objective is to apply knowledge of ethics in evaluating psychological research and case studies. Topics include confidentiality, dual relationships, credentialing, recordkeeping, informed consent, and legal concerns.

PSYC 309Y Introduction to Hypnosis (1)

An introduction to some of the basic concepts and principles of hypnosis for psychological practice. The goal is to understand the uses of hypnosis and learn practical exercises in self-hypnosis. Topics include the relationship between hypnosis and systematic desensitization and their roles in affecting human behavior.

PSYC 309Z Parapsychology (1)

(Formerly PSYC 307G.) An introduction to parapsychology and experimental methods used in that field. Rival explanations for phenomena that occur within parapsychology are examined. Topics include history of parapsychology, superstition and science, ESP in the laboratory, evidence for life after death, and reincarnation. Students may receive credit for only one of the following courses: PSYC 307G or PSYC 309Z.

PSYC 310 Sensation and Perception (3)

Prerequisite: PSYC 100. Recommended: PSYC 300 and 301. A survey of theories and historical and contemporary research in how the auditory, visual, gustatory, olfactory, kinesthetic, and tactile senses acquire information and how psychological, anatomical, physiological, and environmental factors help us perceive the world. The objective is to apply an understanding of complex neural and behavioral processes to evaluate research and analyze variations within and between species.

PSYC 321 Social Psychology (3)

Prerequisites: PSYC 100. Recommended: PSYC 300. An examination of the influence of social factors on individual and interpersonal behaviors. The objective is to analyze the underlying causes of individual and group behavior and the ways in which group attitudes and behaviors are related. Topics include conformity, attitudinal change, personal perception, 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. An examination of human sexuality and sexual behavior. The objective is to apply knowledge of the physiology and psychology of human sexuality. Topics include sexual anatomy, intimate relationships, sexual health, and sexual identity across the lifespan. 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. A study of interpersonal dynamics and how relationship skills can result in healthy or unhealthy behaviors, from the beginning to the end of a relationship. The goal is to apply knowledge of interpersonal dynamics to evaluate behaviors. Discussion covers effective communication and conflict resolution skills as well as ways that advances in technology have altered societal understandings of interpersonal dynamics.

PSYC 335 Theories of Personality (3)

(Formerly PSYC 435.) 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. Students may receive credit for only one of the following courses: PSYC 335 or PSYC 435.

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. The aim is to apply knowledge of cultural and historical influences relating to gender. Topics include conceptions of gender, gender roles, and gender similarities and differences.

PSYC 341 Memory and Cognition (3)

Prerequisite: PSYC 100. Recommended: PSYC 300. An introduction to basic models; methods of research; and findings in the fields of memory, problem solving, and language. The objective is to apply knowledge of cognitive processes to a variety of situations including organizational and educational settings. Both applications and theory are explored.

PSYC 342 Foundations of Learning (3)

(Formerly PSYC 441.) 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. Students may receive credit for only one of the following courses: PSYC 342 or PSYC 441.

PSYC 351 Lifespan Development (3)

Prerequisite: PSYC 100. Recommended: PSYC 300. An integrated study of the biological, socioemotional, and cognitive development of humans from conception through death. The aim is to apply knowledge of lifespan development to interpersonal, community, and organizational relationships. Emphasis is on the interaction of nature and nurture on one's physiology, capability, and potential at each progressive stage of development.

PSYC 352 Child and Adolescent Psychology (3)

Prerequisite: PSYC 100. Recommended: PSYC 300. An examination of research and theory focusing on psychological development, from conception through adolescence. The objective is to apply knowledge of child and adolescent development through critical and creative analysis of cases and situations. Topics include physiological, conceptual, and behavioral changes and the social and biological context in which individuals develop. Students may receive credit for only one of the following courses: PSYC 352, PSYC 355, or PSYC 356.

PSYC 353 Abnormal Psychology (3)

Prerequisite: PSYC 100. Recommended: PSYC 300. An examination of mental disorders across the lifespan. The goal is to evaluate emerging issues in abnormal psychology. Topics include the identification and diagnosis of specific disorders and the evolution of treatment protocols. 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: PSYC 300. An examination of the interplay of individual, ethnic, and cultural factors in psychosocial growth and well-being. The aim is to apply analysis of cultural factors to make decisions, solve problems, and communicate effectively. Issues of globalization, diversity, cultural bias, and cross-ethnic communication are addressed.

PSYC 357 Adulthood and Aging (3)

Prerequisite: PSYC 100. Recommended: PSYC 300. An overview of the development of physiological, intellectual, and interpersonal social functioning from early adulthood through the end of life. The objective is to apply knowledge of adult development critically and creatively to explain particular cases. Topics include theory and research in adult development.

PSYC 361 Industrial and Organizational Psychology (3)

Prerequisite: PSYC 100. Recommended: PSYC 300 and 321. A general survey of the field of industrial/organizational psychology. The objective is to examine the behavioral, sociocultural, and ethical factors that influence workplace environments. Topics include entering into the organization and evaluating and changing individual workplace behaviors.

PSYC 370 Foundations of Forensics Psychology (3)

Prerequisites: PSYC 300 and 321. A survey of the major concepts and historical development of forensic psychology. The goal is to apply knowledge of forensic psychology to gain an integrated understanding of the factors relating to various offending groups. Topics include the relationship of behavioral sciences to the law and the impact of sociocultural and environmental factors on offender behavior. Various offender groups are examined in detail.

PSYC 386 Psychology of Stress (3)

Prerequisite: PSYC 100. An examination of the forces that define and determine the stress response. The aim is to apply stress management techniques to remediate the negative impact of stress. Stress is studied as the product of the interactions among one's social structure, occupational status, and psychological and physiological levels of well-being. The psychological perspective is examined in relation to the stresses produced in a variety of contexts, such as families and work organizations. Students may receive credit for only one of the following courses: BEHS 463, HLTH 285, or PSYC 386.

PSYC 415 History and Systems (3)

(Recommended as preparation for graduate study in psychology.) Prerequisite: PSYC 300. 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. The objective is to apply an understanding of historical context, integrating various communities of thought to analyze emerging trends in psychology. Discussion covers theorists and theories and the influence of societal events.

PSYC 432 Introduction to Counseling Psychology (3)

Prerequisite: PSYC 100. Recommended: PSYC 300 and 335. A survey and critical analysis of research and intervention strategies developed and used by counseling psychologists. The goal is to evaluate current trends in content and methodology. Topics include counseling protocols in various applied settings.

PSYC 436 Introduction to Clinical Psychology (3)

Prerequisite: PSYC 100. Recommended: PSYC 300 and PSYC 353. A survey of diagnostic and therapeutic strategies employed by clinical psychologists. The objective is to evaluate current trends in content and methodology. Topics include the identification, diagnosis, and treatment of mental health disorders. Emphasis is on the scientist-practitioner model and the critical analysis of theories and empirical research.

PSYC 437 Positive Psychology (3)

Prerequisite: PSYC 100. A survey of the science of positive psychology. The aim is to analyze and evaluate theories and applications 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 442 Educational Psychology (3)

(Formerly PSYC 339.) Prerequisite: PSYC 342. 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, PSYC 339, or PSYC 442.

PSYC 451 Tests and Measurements (3)

Prerequisites: PSYC 100 and 300. An examination of concepts and theories of psychological tests, measurements, and assessments, including their development, evaluation, and use. The goal is to evaluate measurements and determine appropriate applications. Discussion covers social, legal, cultural, and ethical issues in psychological testing.

PSYC 486A Psychology Field Experience Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

PSYC 486B Psychology Field Experience Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

PSYC 495 Senior Seminar in Psychology (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisite: Completion of all requirements for the psychology major except supplemental coursework. A study of psychology that integrates knowledge gained through previous coursework and experience. The aim is to build on that conceptual foundation through case study, reflective essays, and portfolio development.

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, African American studies, or women's studies;
- a major in homeland security or social science;
- various certificates; and
- electives.

SOCY 100 Introduction to Sociology (3)

An introduction to the basic concepts, theoretical perspectives, and research methods in sociology. The objective is to apply sociological imagination, perspectives, and research to uncover patterns of social behavior. Topics include culture, socialization, groups, deviance, stratification, institutions, 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 309 Social Demography (3)

(Formerly SOCY 410.) Prerequisite: SOCY 100. A study of social demography. The goal is to identify, evaluate, and interpret key demographic concepts and develop an understanding of global population dynamics. Topics include types of demographic analysis, demographic data, population characteristics, migration, mortality, fertility, population theories, world population growth, and population policy. Students may receive credit for only one of the following courses: SOCY 309 or SOCY 410.

SOCY 312 Family Demography (3)

Prerequisite: SOCY 100 or SOCY 243. A study of the family and population dynamics. The aim is to identify, evaluate, and interpret data sources and develop an informed opinion about family trends and current policy. Discussion covers issues of fertility (such as teenage pregnancy, the timing of parenthood, and 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).

SOCY 313 The Individual and Society (3)

Prerequisite: SOCY 100. An examination of changing concepts of the interaction between the individual and society. The objective is to analyze the roles of the individual and society in the creation of and change in persistent social problems, such as poverty and social inequality. Analysis employs the framework of classical functional, conflict, and social constructivist theories, as well as the context of rapidly changing communication technology and globalization and their impact on the individual. 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, modernity, postmodernism, globalization, and social change. 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 how gender is socially constructed and reconstructed in contemporary society. The aim is to assess the interaction between gender and other social identities.

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 423 Minorities in the United States (3)

Prerequisite: SOCY 100. An examination of basic social processes in the relations of minority groups in the United States. The aim is to analyze current and historical events and use sociological tools to critically evaluate ethnic and racial issues.

SOCY 424 Race and Ethnic Relations (3)

Prerequisite: SOCY 100. An analysis of race- and ethnic-related issues in society. The goal is to examine, analyze, project future trends in, and communicate effectively about minority-majority issues. Discussion covers the impact of inequality, prejudice, and discrimination on minority/majority relations. Topics include theories of race relations; the historical emergence, development, and institutionalization of racism; effects of racism; conflicts that are racially and ethnically based; and contemporary issues.

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 Conflict, Migrants, and Refugees (3)

Prerequisite: SOCY 100. An exploration of global conflict and migration. The objective is to analyze data and historical evidence and assess the role of globalization on migration. Topics include migrants and refugees, immigration, politics and laws regarding migrants and refugees, and the role of globalization 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: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

SOCY 486B Internship in Sociology Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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 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.

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.) An introduction to the Spanish language. The objective is to listen to, speak, read, and write elementary Spanish in concrete, real-life situations and in culturally appropriate ways. The diverse language and culture of the Spanish-speaking world is explored. 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 continued introduction to the Spanish language. The goal is to listen to, speak, read, and write Spanish in concrete, real-life situations and in culturally appropriate ways. The diverse language and culture of the Spanish-speaking world is explored. 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. An intermediate-level study of the Spanish language. The aim is to improve listening, speaking, reading, and writing skills in Spanish and apply them in a variety of real-life situations and social contexts in culturally appropriate ways. Students may receive credit for only one of the following courses: SPAN 201, SPAN 114, or SPAN 211.

SPAN 212 Intermediate Spanish II (3)

Prerequisite: SPAN 211 or appropriate score on a placement test. Further intermediate-level study of the Spanish language. The objective is to listen to, speak, read, and write Spanish and interact effectively with native speakers in a variety of personal and professional settings in culturally appropriate ways. 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. An exploration of business formats and practices in the Spanish-speaking world. The goal is to use knowledge of diverse business cultures to communicate and interact effectively with native speakers of Spanish in a business environment. Topics include contemporary economic conditions in various Spanish-speaking areas (including areas within the United States), enterprise management, human resources, and cultural issues that influence the workplace. Projects involve preparing a job search portfolio and making a business presentation in Spanish. Class is conducted entirely in Spanish. Students may receive credit for only one of the following courses: SPAN 315 or SPAN 318.

SPAN 486A Internship in Spanish Through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

SPAN 486B Internship in Spanish Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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, communication studies, or women's studies;
- a major in communication studies, East Asian studies, or laboratory management;
- a certificate in Diversity Awareness; and
- electives.

SPCH 100 Foundations of Oral Communication (3)

(Fulfills the prerequisite for all upper-level SPCH courses.) An introduction to oral communication, with emphasis on interpersonal communication, small-group communication, and public speaking. The objective is to prepare speeches, provide feedback to others, and participate in group activities. 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)

(Fulfills the prerequisite for all upper-level SPCH courses.) An exploration of the role interpersonal communication plays in our personal and professional lives. The aim is to apply theoretical frameworks and key concepts in communication to personal behavior and personal and professional contexts. Topics include self-identity, perception, listening, verbal and nonverbal communication, relationship development, and conflict management.

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. The objective is to apply theoretical frameworks and key concepts of gender to contexts, situations, and messages. Discussion covers gender roles, gender variation across 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 within a student's final 15 credits) Prerequisite: SPCH 100, 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 Conflict Management (3)

Prerequisite: Any SPCH course or COMM 300. A comprehensive investigation and evaluation of conflict management strategies and tools. The goal is to analyze conflict situations and develop and apply strategies to manage and/or resolve them at the lowest possible level of conflict. Topics include identifying causes of interpersonal conflict, evaluating the impact of culture and gender differences on conflicts, and selecting appropriate tools to manage and resolve conflict in one's personal and professional lives.

SPCH 470 Effective Listening (3)

Prerequisite: Any SPCH course or COMM 300. An exploration of the complexities of message reception and interpretation as related to personal growth, social relationships, and professional development. The goal is to assess and modify listening practices. Topics include the role of listening in communication, types of listening, and listening skills for specific contexts.

SPCH 472 Nonverbal Communication (3)

Prerequisite: Any SPCH course or COMM 300. A comprehensive investigation of nonverbal communication in human interaction. The aim is to analyze the impact of nonverbal messages on interpersonal, organizational, and public communication. Emphasis is on hands-on application of principles and practices to real-world situations. Topics include foundations of interpersonal attraction, use and abuse of personal space, and cross-cultural and gendered behaviors.

SPCH 482 Intercultural Communication (3)

Prerequisite: Any SPCH course or COMM 300. An examination of the major variables of communication in an intercultural context. The objective is to develop and apply communication strategies. 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: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

SPCH 486B Internship in Speech Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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 or psychology;
- 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.

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 (preferably in the last two years). An introduction to statistics. The objective is to assess the validity of statistical conclusions; organize, summarize, interpret, and present data using graphical and tabular representations; and apply principles of inferential statistics. Focus is on selecting and applying appropriate statistical tests and determining reasonable inferences and predictions from a set of data. Topics include methods of sampling; percentiles; concepts of probability; probability distributions; normal, t-, and chi-square distributions; confidence intervals; hypothesis testing of one and two means; proportions; binomial experiments; sample size calculations; correlation; regression; and analysis of variance (ANOVA). 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, and STAT 230.

STAT 225 Introduction to Statistics for the Behavioral Sciences (3)

Prerequisite: MATH 103, MATH 106, or MATH 107 (preferably in the last two years). Recommended: PSYC 100 or an introductory social sciences course. An introduction to quantitative methods in behavioral science and psychological research. The objective is to assess the validity of statistical conclusions; organize, summarize, interpret, and present data using graphical and tabular representations; and apply principles of inferential statistics. Focus is on selecting and applying appropriate statistical tests and determining reasonable inferences and predictions from a set of data. Discussion covers ethics in research involving humans and animals. Topics include the measurement of variables, measures of central tendency and dispersion, correlation, statistical inference and probability, normal distribution, hypothesis testing, t-tests, analysis of variance, and chi-square. Statistical software is used to analyze and present data. Students who receive credit for STAT 225 may not receive credit for the following courses: BEHS 202, BEHS 302, and BMGT 230,

STAT 230 Introductory Business Statistics (3)

Prerequisite: MATH 103, MATH 106, or MATH 107 (preferably in the last two years). An introduction to the essential concepts of statistics for business and management. The objective is to assess the validity of statistical conclusions; organize, summarize, interpret, and present data using graphical and tabular representations; and apply principles of inferential statistics. Focus is on selecting and applying appropriate statistical tests and determining reasonable inferences and predictions from a set of data. Topics include sampling methods; measures of dispersion and central tendency; probability; random variables; binomial experiments; normal distribution; hypothesis testing; z-, t- and chi-square tests; margin of error and confidence intervals; linear regression and correlation; and analysis of variance (ANOVA). Software programs are used to analyze and present data. 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 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: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

STAT 486B Internship in Statistics Through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop)*. The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

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.

THET 110 Introduction to the Theatre (3)

An introduction to the experience of the theatre. The objective is to gain a historical perspective and critically appraise dramatic content in performing arts. Focus is on engaging in theatrical performances as an informed audience member and assessing one's roles within the script-performance-audience dynamic. Attending two live professional performances is required.

Women's Studies

Courses in women's studies (designated WMST) may be applied as appropriate (according to individual program requirements) toward

- a major in social science;
- a minor in women's studies; and
- electives.

UMUC offers a limited number of courses each session in this discipline.

WMST 200 Introduction to Women's Studies: Women and Society (3)

An interdisciplinary study of the status, roles, and experiences of women in contemporary society. The aim is to recognize the impact of gender in all academic disciplines; analyze political, economic, social, and cultural issues through a feminist lens; and apply knowledge of local and global issues to affect positive change in women's lives. Discussion covers women's experiences across geography and history. Topics include gender and other identities, systems of privilege and inequality, sexuality, and power relations.

Writing

Courses in writing (designated WRTG) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in communications;
- a major in communication studies or English;
- a minor in communication studies;
- a certificate in Business Project Management, Desktop Publishing, or Workplace Communications; and
- electives (including related requirements in various majors).

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. 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. 2-2600, 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.

The description of the general education requirements begins on p. 8.

WRTG 101 Introduction to Writing (3)

(Formerly ENGL 101.) 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. The objective is to apply specific steps within the writing process, including formulating purpose, identifying an audience, and selecting and using research resources and methods of development. Revision and recursive writing practice are emphasized and encouraged. Assignments include comparison-contrast and research essays, as well as other rhetorical tasks. Students may receive credit for only one of the following courses: ENGL 101, ENGL 101X, WRTG 101, or WRTG 101X.

WRTG 289 Principles of Text Editing (3)

(Formerly ENGL 278F. Fulfills the general education requirement in writing.) Prerequisite: WRTG 101 or ENGL 101. Recommended: ENGL 281 or WRTG 288. An introduction to the principles of text editing. The aim is to document situations, make and justify editing decisions, address a range of critical concerns, and select and use editing tools. Emphasis is on the relationships among editors, authors, and audiences and the publication process. Students may receive credit for only one of the following courses: ENGL 278F or WRTG 289.

WRTG 291 Research Writing (3)

(Formerly ENGL 291. Fulfills the general education requirement in writing.) Prerequisite: WRTG 101 or ENGL 101. Continued practice in critical reading, thinking, and writing skills. The objective is to analyze, evaluate, and synthesize diverse sources and viewpoints to develop persuasive and academic writing projects. Assignments include prewriting exercises, an annotated bibliography, a synthesis research essay, and a reflective paper. Students may receive credit for only one of the following courses: ENGL 291, ENGL 291H, or WRTG 291.

WRTG 293 Introduction to Professional Writing (3)

(Fulfills the general education requirement in writing.) Prerequisite: WRTG 101 or ENGL 101. An overview of professional writing. The goal is to analyze professional communication scenarios to develop effective workplace writing. Topics include the standards, conventions, and technologies of professional writing; communicating to a variety of audiences; and developing appropriate written responses to workplace challenges. Students may receive credit for only one of the following courses: COMM 293, ENGL 293, or WRTG 293.

WRTG 387 Issues in Tutoring Writing (3)

(Fulfills the general education requirement in writing, but not in upper-level advanced writing.) Prerequisite: WRTG 101 or ENGL 101. A study of tutoring for writing. The goal to develop the theoretical knowledge and practical skills in writing, research, and critical thinking needed to be effective as a tutor, particularly of writing. Topics include 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 391 Advanced Research Writing (3)

(Formerly ENGL 391. Fulfills the general education requirement in upper-level advanced writing.) Prerequisite: WRTG 101 or ENGL 101. Instruction and practice in academic research skills. The objectives are to critically analyze scholarly sources and effectively integrate source material into a complex argument. Assignments include prewriting exercises, a critique, a critical annotated bibliography, a literature review, and a statement of proposed research. Students may receive credit for only one of the following courses: ENGL 391/391X or WRTG 391/391X.

WRTG 393 Advanced Technical Writing (3)

(Formerly COMM 393. Fulfills the general education requirement in upper-level advanced writing.) Prerequisite: WRTG 101 or ENGL 101. Recommended: WRTG 291 or WRTG 293. A comprehensive, project-based study of applied technical writing. The aim is to design and develop appropriate and effective technical documents for a variety of audiences. Students may receive credit for only one of the following courses: COMM 393/393X, ENGL 393/393X, or WRTG 393/393X.

WRTG 394 Advanced Business Writing (3)

(Formerly COMM 394. Fulfills the general education requirement in upper-level advanced writing). Prerequisite: WRTG 101 or ENGL 101. A comprehensive, project-based study of applied business writing. Topics include context, purpose, audience, style, organization, format, results, and strategies for persuasion in typical workplace messages. The goal is to design and develop a substantial formal report that incorporates research and support for conclusions or recommendations. Students may receive credit for only one of the following courses: COMM 394/394X, ENGL 394/394X, or WRTG 394/394X.

WRTG 486A Internship in Writing through Co-op (3)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

WRTG 486B Internship in Writing through Co-op (6)

Prerequisite: 9 credits in the discipline and prior Co-op program approval (requirements detailed on pp. 228–29 and online at *www.umuc.edu/coop*). The integration of discipline-specific knowledge with new experiences in the work environment. Tasks include completing a series of academic assignments that parallel work experiences.

WRTG 489 Advanced Technical Editing (3)

(Formerly COMM 491. Fulfills the general education requirement in writing, but not in upper-level advanced writing.) Prerequisites: WRTG 393, WRTG 394, COMM 393, or COMM 394 and advanced knowledge of grammar. A project-driven study of technical editing and the role of the editor. The aim is to analyze and plan complex editing projects, address a range of critical concerns, and apply visual design strategies. Students may receive credit for only one of the following courses: COMM 491, ENGL 489B, or WRTG 489.

WRTG 490 Writing for Managers (3)

(Formerly COMM 390 and WRTG 390. Fulfills the general education requirement in writing, but not in upper-level advanced writing.) Prerequisite: WRTG 101 or ENGL 101. 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 493 Contemporary Trends in Technical Writing (3)

(Formerly COMM 490. Fulfills the general education requirement in writing, but not in upper-level advanced writing.) Prerequisite: WRTG 393. An analysis and study of contemporary trends in technical writing. The aim is to analyze technical scenarios and use emerging technologies and contemporary media to develop communication solutions for a variety of audiences. Focus is on nontraditional approaches to effective technical communication, including the use of multimedia, social media, and other emerging technologies. 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 writing, but not in upper-level advanced writing.) Prerequisite: Either WRTG 393 (or COMM 393) or WRTG 394 (or COMM 394). An advanced study of technical writing, focusing on composing competitive proposals in response to Requests for Proposal (RFPs) and other funding solicitations from the federal government and community and private sources. The aim is to apply skills needed in the proposal development process; assess an RFP to determine evaluation and competitive criteria; and synthesize the required elements into a successful proposal. 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 writing a grant request and working in teams to prepare a competitive business proposal. Students may receive credit for only one of the following courses: COMM 492, ENGL 489C, or WRTG 494.

WRTG 496 Writing for Technology and Applied Sciences (3)

(Formerly COMM 496. Fulfills the general education requirement in writing, but not in upper-level advanced writing.) Prerequisite: WRTG 393. An analysis and study of writing about technology and applied sciences. The goal is to blend technical expertise and writing skills in order to design and develop appropriate communication for specialized audiences. 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 term (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 first week of classes.

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 first week of classes. Auditing students do not have to complete

course assignments, but may choose to do so 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 before 65 percent of the total number of days in a session has expired. (For intensive format 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. 215). 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 term (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 sequential 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 term or to a maximum of 4 credits per eight-week session. Additional limitations may apply during the student's first term on academic warning.

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 term and 4 credits per eight-week session. Additional limitations may apply during the student's first term on academic probation.

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 term 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.

Students who have been reinstated may be subject to additional term enrollment limitations during their first term after they return to study.

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 terms. 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.

NATIONAL SOCIETY OF COLLEGIATE SCHOLARS

The National Society of Collegiate Scholars is an honor society recognizing students who have completed fewer than 60 credits towards an associate's or a bachelor's degree and have shown academic excellence. The honor society encourages students to participate in honor society, university, and community events and provides resources to enable them to focus on their professional and leadership development.

To be eligible, students must be seeking a first associate's or bachelor's degree. Students must have completed at least 12 credits at UMUC in courses graded A, B, C, D, or F and have a cumulative GPA of 3.4 or higher. In addition, students must have completed between 12 and 59 credits toward their degree. Students are invited to join the honor society in the spring session.

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. Teachers may base part of the final grade on class participation.

For an eight-week course, students should expect to spend about 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 shorter intensive 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.

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, and the student may need to be able to submit assignments electronically.

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.

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. 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 7 credits, and students are strongly advised not to exceed this limit. Students should carefully and realistically assess other commitments before registering for more than 7 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

** The UMUC policy on religious holidays is stated in the appendices.*

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 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.

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 pp. 223–24.

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 term.

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 pp. 223–24.

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. 225.

Reenrollment

Undergraduate 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 have attended UMUC overseas within the last two years 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 an approved 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 approved 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. 222.

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.

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. 216). Undergraduate students must officially withdraw before 65 percent of the total number of days in a session has expired.

Policies and procedures for withdrawing from a course are available online at *www.umuc.edu/register.* Students receiving financial aid are strongly encouraged to contact the Financial Aid Office before withdrawing to fully understand the impact on their current and future aid. Students are responsible for withdrawing themselves.

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 and allow blended formats to suit student 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. 236–41).

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 longstanding partnerships with overseas military commands; and at work sites through contractual arrangements with employers. With so many course and service locations (listed on pp. 267–69) 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 and generally require online participation as part of UMUC's support of technology fluency for students.

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. 231). 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. 2-2890.

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. 215). 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. 2-2890.

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 designated upper-level supplemental requirements 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. 2-2890.

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 and for submitting all official transcripts from colleges and universities attended, as well as documentation of military and professional learning and pertinent test scores (e.g., CLEP, AP, etc.)—regardless of whether they appear on a previous college transcript or not.

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.

Students who are in doubt about whether a UMUC course duplicates previous study should consult an advisor before registering. Further information about academic advising and the review of transfer credit may be found on p. 234.

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 because of 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 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 College Credit Recommendation Service (formerly PONSI).

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), DSST 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.

DSST Examinations

Credit may be awarded for successfully completing certain DSST Tests (formerly known as DANTES Subject Standardized Tests). 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.

International Baccalaureate Examinations

Students may earn credit for successfully completing subject tests offered as part of an International Baccalaureate program before earning their secondary school diploma. 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. 267–69). 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

Anacostia-Bolling (Joint Base Anacostia-Bolling)

Phone 202-563-3611

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

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

Hagerstown (University System of Maryland)

Phone 240-527-2711

Largo (UMUC Academic Center)

umucinfo@umuc.edu

Phone 800-888-UMUC

Myer-Henderson Hall (Joint Base Myer-Henderson Hall)

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

SERVICES AND RESOURCES

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. 224.

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. 222.

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. (A description of sources of credit begins on p. 227 and may be found 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

DISABILITY 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. 7 for bachelor's degree programs, p. 87 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. 2-2287, or 240-684-2287 (TTY) or by e-mail at *disabilityservices@umuc.edu.*

FINANCIAL AID

UMUC's Financial Aid Office 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. In 2010–11, students were 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 $500 per semester, based on need.

UMUC scholarship programs, which include the UMUC President's Scholarship and the UMUC Community College Scholarship, 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 for most programs range from $200 to $1,500 per semester. UMUC Community College Scholarships provide awards up to $3,300 for full-time students and up to $1,560 for part-time students who are outstanding community college graduates. 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 3, but fewer than 12, credits per semester. Awards are based on financial need. Typical awards are $750 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. 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 without adverse 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 various 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*.

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 requirements are not eligible to receive financial aid. 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. The FAFSA may be completed online at *www.fafsa.gov.*

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)
  - Yellow Ribbon Program
  - Transfer of Post-9/11 GI Bill Benefits to Dependents
  - Marine Gunnery Sergeant John David Fry Scholarship
- 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.gibill.va.gov.*

SERVICES AND RESOURCES

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.gibill.va.gov.*

With the exception of Post-9/11 GI Bill recipients, benefits are paid directly to students. 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. 231; these include military training and service schools, postsecondary education, certain correspondence courses, and credit by examination.) Each student must have a degree progress report 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.

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 pp. 234–35), filed an application for a diploma (available online at *https://my.umuc.edu)* with Undergraduate Student Affairs, and paid 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.

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 course-

work 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 Introduction to Research. 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. 2-2020, 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/ewc)* 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. Various other multimedia resources are also available.

By special agreement with the Effective Writing Center, students may also receive writing tutoring at the University of Maryland, College Park (UMCP) Writing Center, located in room 1205 of the Tawes Fine Arts Building. Students should go to the UMCP Writing Center Web site at *www.english.umd.edu/academics/writingcenter* to schedule 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*.

ADMINISTRATION

UNIVERSITY SYSTEM OF MARYLAND

Board of Regents (2010–11)

Clifford M. Kendall, *Chairman*

Orlan M. Johnson, *Vice Chairman*

Patricia S. Florestano, *Treasurer*

Barry P. Gossett, *Assistant Treasurer*

C. Thomas McMillen, *Secretary*

Thomas G. Slater, *Assistant Secretary*

Gary L. Attman

Norman R. Augustine

Louise Michaux Gonzales

Linda R. Gooden

Leslie Hall, *Student Regent*

Earl F. Hance, *Ex Officio*

Francis X. Kelly Jr.

Frank M. Reid III

James L. Shea

Paul L. Vance

John L. Young

Officers

William E. Kirwan, *Chancellor*

Irwin Goldstein, *Senior Vice Chancellor for Academic Affairs*

Leonard Raley, *Vice Chancellor for Advancement*

Joseph F. Vivona, *Chief Operating Officer and Vice Chancellor for Administration and Finance*

Anne Moultrie, *Associate Vice Chancellor for Communications*

Donald F. Boesch, *Vice Chancellor for Environmental Sustainability*

Patrick J. Hogan, *Associate Vice Chancellor for Government Relations*

David Mosca, *Director of Auditing*

Presidents of the Institutions

Mickey L. Burnim, *Bowie State University*

Reginald S. Avery, *Coppin State University*

Jonathan C. Gibralter, *Frostburg State University*

Janet Dudley-Eshbach, *Salisbury State University*

Marcia G. Welsh (interim), *Towson University*

Robert L. Bogomolny, *University of Baltimore*

Jay A. Perman, *University of Maryland, Baltimore*

Freeman A. Hrabowski III, *University of Maryland, Baltimore County*

Wallace D. Loh, *University of Maryland, College Park*

Thelma B. Thompson, *University of Maryland Eastern Shore*

Susan C. Aldridge, *University of Maryland University College*

Donald F. Boesch, *University of Maryland Center for Environmental Sciences*

Executive Directors of the Regional Higher Education Centers

Stewart Edelstein, *Universities at Shady Grove*

David Warner, *University System of Maryland at Hagerstown*

UMUC

Susan C. Aldridge, *President*

Greg von Lehmen, *Provost*

Allan J. Berg, *Vice President and Director, UMUC Europe, and Acting Director, UMUC Asia*

Dennis Blumer, *Senior Advisor to the President*

Marky Campbell, *Senior Vice President, Partnerships and Strategic Alliances*

Sean Chung, *Vice President, Enrollment Management*

Marie A. Cini, *Vice President and Dean, School of Undergraduate Studies*

Andrea Y. Hart, *Senior Executive Assistant to the President*

Blair H. Hayes, *Director, Diversity Initiatives*

Eugene D. Lockett, *Vice President and Chief Financial Officer*

Javier Miyares, *Vice President, Institutional Effectiveness*

Nadine Porter, *Vice President, Human Resources*

James H. Selbe, *Vice President, Military Operations*

George Shoenberger, *Chief Operating Officer*

Cathy Sweet-Windham, *Vice President, Institutional Advancement*

Nancy Williamson, *Vice President and General Counsel*

Peter C. Young *Chief Information Officer and Vice President, Information Technology*

Nicholas H. Allen, *Provost Emeritus*

School of Undergraduate Studies

Office of the Dean

Marie A. Cini, *Vice President and Dean, School of Undergraduate Studies*

Cynthia Davis, *Associate Dean, Academic Affairs, and Collegiate Professor*

Cleopatra White, *Assistant Dean, Administration and Budget*

Caroah Cohen, *Associate Administrative Director, Transfer Credit and Articulation*

Evelin Letarte, *Associate Administrative Director, Academic Projects*

Amy Mobley, *Assistant Director, Student Issues*

Harold Pittenger, *Director, Administrative Services*

Pamela Risik, *Executive Assistant to the Dean*

Anna Van Wie, *Director, Learning Outcomes Assessment*

Takeisha Walker, *Executive Director, Systems and Communications*

Business and Professional Programs

Adelaide Lagnese, *Assistant Dean and Collegiate Professor*

Patricia Beckenholdt, *Academic Director, Business Administration, Economics, Finance, Management Studies, and Women in Business, and Collegiate Associate Professor*

Harold Blackmon, *Assistant Administrative Director, Academic Support*

Stephen S. Carter, *Academic Director, Fire Service Administration, Emergency Management, and Homeland Security, and Collegiate Associate Professor*

Liliana Meneses, *Acting Academic Director, Global Business and Public Policy and Human Resource Management, and Collegiate Associate Professor*

Donna Nichols, *Assistant Administrative Director, Academic Support*

Jaylene Sarracino, *Academic Director, Legal Studies, and Collegiate Associate Professor*

Kathleen Sobieralski, *Assistant Academic Director, Accounting, and Collegiate Associate Professor*

Joseph M. Whelan, *Academic Director, Accounting, and Collegiate Associate Professor*

Communication, Arts, and Humanities

Mark Parker, *Acting Assistant Dean and Collegiate Associate Professor*

Robert Bromber, *Academic Director, African American Studies, History, and Political Science, and Collegiate Professor*

Linda DiDesidero, *Academic Director, Communication Studies, and Collegiate Professor*

Liz Enriquez, *Assistant Director, Academic Support*

David Epstein, *Academic Director, Graphic Communication and Arts, and Collegiate Associate Professor*

Lisa Beth Hill, *Assistant Academic Director, African American Studies, Government and Politics, and History, and Collegiate Associate Professor*

Gretchen I. Jones, *Academic Director, Foreign Languages and Asian Studies, and Collegiate Associate Professor*

Mary Frances Lebamoff, *Assistant Academic Director, Political Science, and Collegiate Assistant Professor*

Claudia Guidi Stier, *Assistant Academic Director, Foreign Languages, and Collegiate Assistant Professor*

Theresa Zukowski, *Academic Coordinator*

Computer Information Systems and Technology

S. K. Bhaskar, *Assistant Dean and Collegiate Professor*

Farideh Asghari, *Assistant Administrative Director*

Julann Donnelly, *Assistant Administrative Director*

David P. Johnson, *Academic Director, Digital Media and Web Technologies, and Collegiate Associate Professor*

Donna McKalip, *Academic Director, Information Systems Management, and Collegiate Professor*

Elizabeth Ring, *Assistant Academic Director, Information Systems Management, and Collegiate Associate Professor*

James Robertson, *Academic Director, Computer and Information Science and Computer Science, and Collegiate Associate Professor*

Preeti Soolibhavi, *Program Support Specialist, Computer and Information Science and Computer Science*

Jeff Tjiputra, *Academic Director, Computer Networking and Security, and Collegiate Associate Professor*

Social, Behavioral, Natural, and Mathematical Sciences

Kathleen Warner, *Assistant Dean and Collegiate Professor*

Andrew Au, *Assistant Academic Director, Math and Statistics, and Collegiate Professor*

Thomas Bailey, *Academic Director, Psychology, and Collegiate Associate Professor*

John Beyers, *Academic Director, Mathematics and Statistics, and Collegiate Professor*

Michelle Denevan, *Assistant Director, Academic Support*

Katherine Humber, *Academic Director, Gerontology, and Collegiate Associate Professor*

ADMINISTRATION

Debra McLaughlin, *Academic Director, Sciences, and Collegiate Professor*

Darcie Rothwell, *Assistant Director, Academic Support*

Robin Searles-Adenegan, *Assistant Academic Director, Biology, and Collegiate Associate Professor*

Darlene Smucny, *Academic Director, Social Sciences, and Collegiate Professor*

Jennifer Thompson, *Assistant Academic Director, Psychology, and Collegiate Associate Professor*

Center for Student Success

Shawna Acker-Ball, *Director, Experiential Learning and Student Engagement*

Andrew Cavanaugh, *Director, Academic Writing, and Collegiate Associate Professor*

David Gallagher, *Academic Director, Research and Writing, and Collegiate Assistant Professor*

Shelley Hintz, *Coordinator, Student Engagement*

Cheryl Horton, *Associate Director, Experiential Learning*

Elizabeth Mulherrin, *Academic Director, LIBS 150, and Collegiate Associate Professor*

Sonya-Marie Mercer, *Director, EDCP 100 and Better Opportunities in Online Education*

Lanetra Solomon, *Assistant Director*

Tonya Whitaker, *Assistant Director, Experiential Learning*

Exams and Testing Services

Scott Perry, *Executive Director*

Military Operations

James H. Selbe, *Vice President*

James Cronin, *Associate Vice President*

Kelly Wilmeth, *Associate Vice President*

Patricia Walls, *Assistant Vice President*

Noelle Atwell, *Director*

John Brooks, *Assistant Director*

Beth Havens, *Director*

Christopher Palermo, *Associate Director*

Suzanne Rapen, *Assistant Director*

Sevgi Rochford, *Deputy Director*

Bethany Taylor, *Assistant Director*

Tanya Tinajero, *Assistant Director*

Community Relations

Lisa Romano, *Associate Vice President*

Matthew Arlington, *Assistant Director, Out-of-State Community Colleges*

Lisa Huffman, *Assistant Director, Western Maryland*

Morgan Martin, *Director, Out-of-State Community Colleges*

Cynthia Seidan, *Assistant Director, Western Maryland*

Kathea Smith, *Director, Dorsey Station and Arundel Mills*

Megan Tuozzo, *Assistant Director, Maryland Community Colleges*

Marcus Wright, *Assistant Director, Out-of-State Community Colleges*

Student Affairs

Michelle Samuels-Jones, *Associate Provost and University Registrar*

Lee T. Williams, *Assistant Provost, Information Technology and Office Automation*

Pershail C. Young, *Assistant Provost, Academic Progress*

Lisa Andrews, *Director, Career Services*

Keith D. Bryant, *Senior Executive Assistant and Director, Administrative Services*

Teri Coughlin, *Associate Registrar, Scheduling*

Lisa Crowe, *Director, Degree Audit*

Nicole Grimes, *Director, Student Relations and Integrity*

Audrey Quade, *Associate Director, Graduation Clearance and Services*

Danielle White, *Director, Registration Operations*

Enrollment Management

Sean Chung, *Vice President, Enrollment Management*

David Newton, *Assistant Vice President, Retention*

Tom Porch, *Assistant Vice President, Recruitment*

Mary Devlin, *Director, New Student Recruitment and Advising*

Melissa Phillips, *Director, Military and Veteran Advising*

Jacob Posko, *Director, Undergraduate Advising*

Stephanie Smolka, *Director, Graduate Advising*

Jessica Sadaka, *Director, Admissions and International Student Affairs*

UMUC Europe

Allan J. Berg, *Vice President and Director, UMUC Europe*

Douglas A. Franklin, *Associate Dean*

Janice A. Keller, *Director, Student Affairs*

Stephanie R. Styll, *Director, Enrollment Management*

UMUC Asia

Allan J. Berg, *Acting Vice President and Director, UMUC Asia*

Christopher Kelly, *Director of Student Affairs*

Eleana Lazarus, *Associate Dean*

Sharon Stoddard, *Registrar*

Faculty

The School of Undergraduate Studies has a large and distinguished faculty. UMUC faculty consistently win awards, publish scholarly works, and contribute to the intellectual understanding of their fields. They are well respected by both practitioner and academic peers. In keeping with UMUC's mission, UMUC faculty are as nontraditional as their students, bringing practical as well as academic experience in their fields of expertise. Because of this, they are uniquely qualified to teach and guide students toward a richer and more robust understanding of how their academic learning translates into practice.

The full list of undergraduate faculty, including the disciplines they teach and their academic credentials, is available online at *www.umuc.edu/faculty.*

CONTACT INFORMATION

UMUC STATESIDE

Adelphi Headquarters

Address

University of Maryland University College
3501 University Boulevard East
Adelphi, MD 20783-8085

Telephone

800-888-UMUC (8682)

Fax

301-985-7977

E-Mail

umucinfo@umuc.edu

Web Site

www.umuc.edu

UMUC EUROPE

Heidelberg Headquarters

Address

- From overseas U.S. military installations or from the United States

  University of Maryland University College
  Unit 29216
  APO AE 09004

- International (civilian from outside the United States)

  University of Maryland University College
  Im Bosseldorn 30
  69126 Heidelberg
  Germany

Telephone

- Military

  DSN: 314-370-6762

- Civilian

  Within Germany
  06221-3780

  Outside Germany
  +49-6221-3780

Fax

Within Germany
06221-378300

Outside Germany
+49-6221-378300

E-Mail

student-services@europe.umuc.edu

Web Site

www.ed.umuc.edu

Catalogs

Requests for undergraduate and graduate catalogs for UMUC Europe should be sent to University of Maryland University College, Unit 29216, APO AE 09004. Catalogs may also be obtained from Overseas Programs, University of Maryland University College, 3501 University Boulevard East, Adelphi, MD 20783-8067.

Yokota Headquarters

Address

- From overseas U.S. military installations or from the United States

  University of Maryland University College
  Unit 5060, Box 0100
  APO AP 96328-0100

- International (civilian from outside the United States)

  University of Maryland University College
  Building 445, Yokota Air Base
  Fussa, Fussa-shi
  Tokyo (197-0001) Japan

Telephone

- Military

  Within Asia

  DSN: 225-3680

  Outside Asia

  DSN: 315-225-3680

- Civilian

  From the continental United States

  +81-3117-55-3680

  From elsewhere

  +81-42-552-2510, ext. 5-3680

Fax

- Military

  Within Asia

  DSN: 225-8485

  Outside Asia

  DSN: 315-225-8485

- Civilian

  +81-42-551-8305

E-Mail

sservices@asia.umuc.edu

Web Site

www.asia.umuc.edu

Japan Office

Address

- From overseas U.S. military installations or from the United States

  University of Maryland University College
  Attn: Japan Area Office
  Unit 5060, Box 0100
  APO AP 96328-0100

- International (civilian from outside the United States)

  University of Maryland University College
  Attn: Japan Area Office
  Building 445, Yokota Air Base
  Fussa, Fussa-shi
  Tokyo (197-0001) Japan

Telephone

- Military

  Within Asia

  DSN: 225-3690

  Outside Asia

  DSN: 315-225-3690

- Civilian

  From the continental United States

  +81-3117-55-3690

  From elsewhere

  +81-42-552-2510, ext. 5-3690

Fax

- Military

  Within Asia

  DSN: 225-3692

  Outside Asia

  DSN: 315-225-3692

- Civilian

  +81-3117-55-3692

  +81-42-552-2510, ext. 5-3692

E-Mail

ojapan@asia.umuc.edu

CONTACT INFORMATION

Korea Office

Address

- From overseas U.S. military installations or from the United States

  University of Maryland University College
  Yongsan Education Center
  Unit 15556
  APO AP 96205-5556

- International (civilian from outside the United States)

  University of Maryland University College
  Building 2212, Room 206B
  Main Post, Yongsan U.S. 8th Army Base
  Yongsan 2 ga dong
  Yongsan-Ku
  Seoul (140-022) Korea

Telephone

- Military

  Within Asia

  DSN: 723-7141

  Outside Asia

  DSN: 315-723-7141

- Civilian

  +82-2-7913-7141

Fax

- Military

  Within Asia

  DSN: 723-4087

  Outside Asia

  DSN: 315-723-4087

- Civilian

  +82-2-797-8843

E-Mail

okorea@asia.umuc.edu

Okinawa Office

Address

- From overseas U.S. military installations or from the United States

  University of Maryland University College
  18th FSS/FSDE
  Unit 5134, Box 40
  APO AP 96368-5134

- International (civilian from outside the United States)

  University of Maryland University College
  Education Center
  Kadena Air Base
  Building 59, Room 223
  Nakagumi-gun, Okinawa-shi,
  Okinawa-ken (904-0204) Japan

Telephone

- Military

  Within Asia

  DSN: 634-3767

  Outside Asia

  DSN: 315-634-3767

- Civilian

  From the continental United States

  +81-6117-34-3767

  From elsewhere

  +81-98-938-1111, ext. 4-3767

Fax

- Military

  Within Asia

  DSN: 634-3318

  Outside Asia

  DSN: 315-634-3318

- Civilian

  +81-98-939-5429

E-Mail

ookinawa@asia.umuc.edu

Guam Office

Address

University of Maryland University College
36 FSS/FSDE (UMD)
Unit 14002, Box 14
APO AP 96543-4002

Telephone

- Military
  Within Asia
  DSN: 366-7132
  Outside Asia
  DSN: 315-366-7132
- Civilian
  1-671-366-7132

Fax

- Military
  Within Asia
  DSN: 366-4785
  Outside Asia
  DSN: 315-366-4785
- Civilian
  1-671-366-4785

E-Mail

oguam@asia.umuc.edu

Catalogs

Catalogs may be obtained by writing to UMUC Asia, Unit 5060, Box 0100, APO AP 96328-0100 or to Overseas Programs, University of Maryland University College, 3501 University Boulevard East, Adelphi, MD 20783-8067. The catalog is also available online at *www.asia.umuc.edu.*

APPENDICES

STATEMENTS ON POLICIES AND PROCEDURES

Appendix A

VIII-2.70 Policy on Student Classification for Admission and Tuition Purposes

(University System of Maryland Policy, Approved by the Board of Regents August 28, 1990; Amended July 10, 1998; Amended November 27, 2000; Amended April 11, 2003; Amended June 23, 2006; Amended February 15, 2008; Amended September 18, 2009)

I. POLICY

A. Purpose

To extend the benefits of its system of higher education while encouraging the economical use of the state's resources, it is the policy of the Board of Regents of the University System of Maryland (USM) to recognize the tuition categories of in-state and out-of-state students for the purpose of admission and assessing tuition at USM institutions.

B. Burden of Proof

The person seeking in-state status shall have the burden of proving by clear and convincing evidence that he or she satisfies the requirements and standards set forth in this policy. Assignment of in-state or out-of-state status will be made by the applicable USM institution upon a review of the totality of facts known or presented to it.

C. In-State Status

To qualify for in-state tuition, a student must demonstrate that, for at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the student seeks in-state tuition status, the student had the continuous intent to

1. Make Maryland his or her permanent home;
2. Abandon his or her former home state;
3. Reside in Maryland indefinitely; and
4. Reside in Maryland primarily for a purpose other than that of attending an educational institution in Maryland.

Satisfying all of the requirements in Section II (and Section III, when applicable) of this policy demonstrates continuous intent and qualifies a student for in-state tuition. Students not entitled to in-state status under this policy shall be assigned out-of-state status for admission and tuition purposes.

D. Presumption

Either of the following circumstances raises a presumption that the student is residing in the state of Maryland primarily for the purpose of attending an educational institution and therefore, does not qualify for in-state status under this policy:

1. A student is attending school or living outside Maryland at the time of application for admission to a USM institution; or
2. A student is financially dependent on a person who is not a resident of Maryland.

This presumption may be rebutted. The student bears the burden of rebutting the presumption. See III. Rebuttal Evidence.

II. REQUIREMENTS

Before a request for classification to in-state status will be considered, a student must comply with all of the following requirements for a period of at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the student seeks in-state tuition status. The student must demonstrate he or she

A. Owns or possesses, and has continuously occupied, including during weekends, breaks, and vacations, living quarters in Maryland. The student must provide evidence of a genuine deed or lease and documentation of rent payments made. In lieu of a deed or lease, a notarized affidavit from a landlord showing the address, name of the student as occupant, term of residence, and history of rent payments made will be considered. As an alternative, a student may demonstrate that he or she shares living quarters in Maryland which are owned or rented and occupied by a parent, legal guardian, or spouse.

B. Has substantially all of his or her personal property, such as household effects, furniture, and pets, in Maryland.

C. Has paid Maryland income tax on all taxable income, including all taxable income earned outside the state, and has filed a Maryland tax return.

D. Has registered all owned or leased motor vehicles in Maryland.

E. Possesses a valid Maryland driver's license, if licensed.

F. Is registered to vote in Maryland, if registered to vote.

G. Receives no public assistance from a state other than the state of Maryland or from a city, county, or municipal agency other than one in Maryland.

H. Has a legal ability under federal and Maryland law to live permanently without interruption in Maryland.

** Annotated Code of Maryland, Education Article, §12-101.*

I. Has rebutted the presumption that he or she is in Maryland primarily to attend an educational institution, if the student's circumstances have raised the presumption.

III. REBUTTAL EVIDENCE

Satisfying the requirements listed in paragraphs A through I of Section II does not rebut the presumption that a student is in Maryland primarily to attend an educational institution. To overcome the presumption, a student must present additional evidence.

To determine a student's intent, the university will evaluate evidence of a student's objectively verifiable conduct. Evidence that does not document a period of at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the student seeks in-state tuition status is generally considered an unfavorable factor under this policy. Evidence of intent must be clear and convincing and will be evaluated not only by the amount presented but also based upon the reliability, authenticity, credibility, and relevance of the evidence.

The absence of objective, relevant evidence is generally considered an unfavorable factor. A student's statement of intent to remain in Maryland in the future is generally not considered to be objective evidence under this policy.

Additional evidence that will be considered includes, but is not limited to, the following:

A. Source of financial support:

   1. Maryland employment and earnings history through sources beyond those incident to enrollment as a student in an educational institution, e.g., beyond support provided by work study, scholarships, grants, stipends, aid, student loans, etc. (Tuition costs will be considered as a student expense only to the extent tuition exceeds the amount of any educational scholarships, grants, student loans, etc.); or

   2. Evidence the student is financially dependent upon a person who is a resident of Maryland.

B. Substantial participation as a member of a professional, social, community, civic, political, athletic, or religious organization in Maryland, including professionally related school activities that demonstrate a commitment to the student's community or to the state of Maryland.

C. Registration as a Maryland resident with the Selective Service, if male.

D. Evidence showing the student uses his or her Maryland address as his or her sole address of record for all purposes, including on health and auto insurance records, bank accounts, tax records, loan and scholarship records, school records, military records, leases, etc.

E. An affidavit from a person unrelated to the student that provides objective, relevant evidence of a student's conduct demonstrating the student's intent to live permanently in Maryland.

IV. NONRESIDENTS WHO MAY TEMPORARILY QUALIFY FOR IN-STATE STATUS

In addition, persons with the following status shall be accorded the benefits of in-state status for the period in which they hold such status:

A. A full-time or part-time (at least 50 percent time) regular employee of USM or a USM institution.

B. The spouse or financially dependent child of a full-time or part-time (at least 50 percent time) regular employee of USM or a USM institution.

C. A full-time active member of the Armed Forces of the United States whose home of residency is Maryland or one who resides or is stationed in Maryland, or the spouse or a financially dependent child of such a person. Students that qualify under this provision will retain in-state status for tuition purposes as long as they are continuously enrolled, regardless of a change in military assignment or status of the active member of the military.

D. A veteran of the United States Armed Forces with an honorable discharge who, within one year of discharge, presents documentation that he or she attended a secondary school in the state for at least three years and graduated or received the equivalent of a high school diploma from a secondary school in the state. The veteran must present documentation and register at a USM institution within one year of discharge for this provision to apply.

E. A member of the Maryland National Guard, as defined in the Public Safety Article of the Maryland Annotated Code, who joined or subsequently serves in the Maryland National Guard to

   1. Provide a critical military occupational skill; or

   2. Be a member of the Air Force Critical Specialty Code as determined by the National Guard.

F. For UMUC, a full-time active member of the Armed Forces of the United States on active duty or the spouse of a member of the Armed Forces of the United States on active duty.

G. A graduate assistant appointed through a USM institution for the semester/term of the appointment. Except through prior arrangement, this benefit is available only for enrollment at the institution awarding the assistantship.

V. PROCEDURES

A. An initial determination of in-state status will be made at the time of admission. The determination made at that time, and any determination made thereafter, shall prevail for each semester/term until the determination is successfully challenged in a timely manner.

B. A change in status must be requested by submitting a USM institution's "Petition for Change in Classification for Tuition." A student applying for a change to in-state status must furnish all evidence that the student wishes the USM institution to consider at the time the petition is due. The due date is based on the deadline set forth by the USM institution at which the student seeks to enroll. If the applicable USM institution has no such deadline, the due date is the last published date to register for the forthcoming semester/term for which the change in classification is sought.

C. The student shall notify the USM institution in writing within fifteen (15) days of any change in circumstances which may alter in-state status.

D. In the event incomplete, false, or misleading information is presented, the USM institution may, at its discretion, revoke in-state status and take disciplinary action provided for by the institution's policy. Such action may include suspension or expulsion. If in-state status is gained because of false or misleading information, the institution reserves the right to retroactively assess all out-of-state charges for each semester/term affected.

E. Each USM institution shall develop and publish additional procedures to implement this policy. Procedures shall provide that on request the institution president or designee has the authority to waive any requirement set forth in Section II if it is determined that the application of the requirements creates an unjust result. These procedures shall be filed with the Office of the Chancellor.

VI. DEFINITIONS

A. Financially Dependent: For the purposes of this policy, a financially dependent student is one who is claimed as a dependent for tax purposes.

B. Parent: A parent may be a natural parent, or, if established by a court order recognized under the law of the State of Maryland, an adoptive parent.

C. Guardian: A guardian is a person so appointed by a court order recognized under the law of the state of Maryland.

D. Spouse: A spouse is a partner in a legally contracted marriage.

E. Child: A child is a natural child or a child legally adopted pursuant to a court order recognized under the law of Maryland.

F. Regular Employee: A regular employee is a person employed by USM or a USM institution who is assigned to a state budget line or who is otherwise eligible to enroll in a state retirement system. Examples of categories NOT considered regular employees are graduate students, contingent employees, and independent contractors.

G. Continuous Enrollment

1. Undergraduate Student: An undergraduate student who is enrolled at a USM institution for consecutive fall and spring semesters, until completion of the student's current degree program or unless on an approved leave of absence or participating in an approved program off-campus.
2. Graduate and Professional: Continuous enrollment for a graduate or professional student is defined by the institution in accordance with program requirement.

VI. IMPLEMENTATION

This policy as amended by the Board of Regents on September 18, 2009 shall be applied to all student tuition classification decisions made on or after July 1, 2009.

UMUC students should also consult UMUC Policy 210.20–Procedures for Student Residency Classification for Admission, Tuition and Charge-Differential Purposes, which implements USM Policy VIII-2.70.

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

A flexible transfer policy makes transition to UMUC seamless. UMUC 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. 234.)

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 approved two-year institutions (details on p. 230 and below).

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. 227–31).
- 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), DSST (formerly 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. 231).
- Up to 15 semester hours of cooperative education credit (details on p. 228). 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. 230).
- 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 National College Credit Recommendation Service (National CCRS, formerly PONSI; details on p. 231).
- Up to 21 semester hours of coherently related vocational and technical credit from regionally accredited or ACE-evaluated institutions (details on p. 231).

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 approved 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.

APPENDICES

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 220.32)

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 at the conclusion of the spring semester. For students enrolled in eligible programs of one academic year or less, satisfactory academic progress is evaluated at the conclusion of the fall and spring semesters. Failure to maintain satisfactory academic progress, as described below, will result in cancellation of financial aid awards, and the student may have to repay any funds already received.

II. MINIMUM STANDARDS FOR UNDERGRADUATE STUDENTS

A. UMUC's institutional requirements for minimum satisfactory academic progress requirements for undergraduate 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 (67 percent).

3. 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).

Students who have graduated from one program at UMUC and then enroll in a second eligible program should contact the Financial Aid Office to determine their satisfactory academic progress status under their new program of study.

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. 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 V) is granted.

III. TREATMENT OF W, I, AU, F, S, P, AND G GRADES; NO GRADE REPORTED; REPEATED COURSEWORK; AND TRANSFER CREDITS

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 grade is replaced with a permanent grade and academic progress can be re-evaluated.

C. Audit (AU) grades are not considered attempted coursework and is not included in completion rate determinations.

D. Satisfactory grades (S) and passing grades (P) are treated as attempted credits, which are earned but not included in calculation of the GPA.

E. Failure (F) and Failure due to Nonattendance (FN) 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 Grade Pending (G) 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. Each repeated course attempt will be included in the completion rate and maximum timeframe determinations.

H. Transfer credits will be counted as attempted and completed credits for the calculation of completion rate and maximum timeframe but will not affect the student's GPA calculation.

V. FINANCIAL AID DENIED STATUS

A. Undergraduate students who fail to maintain the minimum completion rate of 67 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 of enrollment. No financial aid will be disbursed during subsequent semesters until the student is removed from Financial Aid Denied status. (Reinstatement is discussed in Section V of this policy.)

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 of enrollment unless the student has made an appeal and the appeal is granted for that semester (Section V of this policy describes appeal procedures). There are no exceptions to this requirement.

C. Students placed in Financial Aid Denied status will be notified via e-mail.

V. 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 next semester of enrollment. Financial aid probation means that the student who failed to make satisfactory academic progress and who has appealed has had eligibility for aid reinstated. At the end of that probationary semester, his or her satisfactory academic progress will be re-evaluated. The student must meet all satisfactory academic progress requirements at the end of that semester or he or she will return to Financial Aid Denied status and must re-establish eligibility as described in item 2 (below).

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.

3. Students who are beyond the maximum timeframe to completion cannot regain financial aid eligibility except on a semester-by-semester basis through the appeal process.

B Appeal Process

1. The student must submit a written appeal of Financial Aid Denied status before the deadline to the Financial Aid Office. The appeal must include documentation of the circumstance that led to their not meeting satisfactory academic progress standards, as well as a description as to how they will be able to meet satisfactory academic progress at the end of the next enrollment period. Circumstances which may be considered include death of a family member, unexpected injury or illness of the student, or other circumstances as supported with documentation.
2. 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. Appeals will not be granted unless the student's proposed enrollment in the upcoming semester would be adequate to re-establish his or her progress under these standards.
3. All decisions of the Financial Aid Appeals Committee are final.
4. Deadlines are as follows:
   Fall: November 1
   Spring: April 1
   Summer: July 1

VI. EFFECTIVE DATE

This policy is effective July 1, 2011, and will be first calculated for students on probation under the prior policy at the conclusion of the fall 2011 semester.

Note: Students who fail to enroll after an appeal has been granted may be suspended again and may be required to submit a new appeal before they will be eligible to receive financial aid.

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

ARIZONA

Davis-Monthan Air Force Base
Fort Huachuca

CALIFORNIA

Balboa Naval Hospital
Camp Pendleton
Coronado Naval Base
Fort Irwin
Miramar (Marine Corps Air Station)
Point Loma Naval Base
San Diego
- Coast Guard Air Station
- Marine Corps Recruit Base
- Naval Base

Travis Air Force Base (Test Center)
Twenty-Nine Palms (Marine Corps Air Ground Combat Center)

COLORADO

Air Force Academy
Buckley Air Force Base
Fort Carson
Peterson Air Force Base
Schriever Air Force Base

DELAWARE

Dover Air Force Base

DISTRICT OF COLUMBIA

Anacostia Bolling (Joint Base)
Walter Reed Army Medical Center

FLORIDA

Eglin Air Force Base
Hurlburt Air Force Base
Jacksonville Naval Air Station
Mayport Naval Station
Pensacola Naval Air Station
Tyndall Air Force Base

GEORGIA

Fort Gordon

Fort Stewart
Kings Bay Naval Submarine Base

HAWAII

Camp Smith
Hickam Air Force Base
Honolulu (Coast Guard Integrated Support Command)
Kaneohe Bay Marine Corps Base
Pearl Harbor Naval Station
Schofield Barracks
Tripler Army Medical Center

KENTUCKY

Fort Campbell
Fort Knox

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
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

MISSISSIPPI

Camp Lejeune
Cherry Point Marine Corps Air Station
Fort Bragg
Keesler Air Force Base
New River Marine Corps Air Station
Pope Air Force Base

NEW MEXICO

Holloman Air Force Base
White Sands Missile Range

SOUTH CAROLINA

Fort Jackson
Shaw Air Force Base

TEXAS

Fort Bliss
Fort Hood
Fort Sam Houston
Lackland Air Force Base
Randolph Air Force Base

VIRGINIA

Dam Neck Naval Station
Fort Belvoir
Fort Eustis
Langley Air Force Base
Little Creek Naval Air Base
Myer-Henderson Hall (Joint Base)
Norfolk Naval Station
Oceana Naval Air Station
Portsmouth Naval Medical Center
Quantico (Marine Corps Base)
Yorktown (Coast Guard Training Center)

WASHINGTON

Bremerton Naval Station
Everett Naval Station
Fort Lewis
Kitsap at Bangor Naval Base
Seattle Coast Guard Base
McChord Air Force Base
Whidbey Island Naval Air Station

** Administrative center*

Europe

AFGHANISTAN
Bagram
Fenty (Jalalabad)
Kabul
Kandahar
Salerno
Shank
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
Miesau
Ramstein
Schweinfurt
Spangdahlem
Stuttgart
Vilseck
Wiesbaden

GREECE
Souda Bay

IRAQ
Camp Adder
Camp Victory
Joint Base Balad

ITALY
Aviano
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*

INDEX

A

Academic advising, 234
Academic and administrative requirements
    rights and responsibilities of the student, 219
    scholastic and administrative standards, 215
Academic honors, 218
Academic integrity, 220
Academic progress, 217, 235, 237, 260
Academic warning and dismissal, 217
Accounting
    associate's degree curriculum, 78
    certificate programs in, 88
    course descriptions, 105
    major in, 13
    minor in, 14
Accreditation, inside back cover
Adelphi (UMUC headquarters), 4, 246
Address changes, 221
Administration
    UMUC, 242
    University System of Maryland, 242
Admission and enrollment
    application fee, 223, 225
    assistance, 234
    concurrent secondary enrollment, 224
    of previously suspended or dismissed students, 224
    procedures for admission, 223
    reenrollment, 223
    registration, 225
    requirements for admission, 222
    residency determination, 223, 250
    student status categories, 222
    transfer from UMUC Europe or UMUC Asia, 223
    tuition and fees, 225
Advanced Placement (AP) examinations, 231, 259
Advising services, 234
African American studies
    course description, 109
    minor in, 15
Aid, financial, 235
Alcohol and drug awareness, referral services, 240
Alliances, community college, 6
Alpha Sigma Lambda, 218
Alumni Association, 241
American Council on Education (ACE), 229, 230, 259
Anthropology, course descriptions, 110
Appeal process
    denial of financial aid, 261
    denial of transfer credit, 257
    grades, 221
    reinstatement after dismissal, 218
Appendices
    disclosure of students' records policy, 262
    financial aid standard for satisfactory academic
        progress policy, 260
    Maryland Higher Education Commission
        transfer of undergraduate credit policies, 252
    nondiscrimination policy, 260
    religious observances policy, 260
    shared governance policy, 266
    statements on policies and procedures, 250
    student classification for admission and tuition policy, 254
    transfer of undergraduate credits to UMUC policy, 259
    UMUC sites, 267
Application
    admission, 222
    diploma, 239
    fees, 225
    financial aid, 237
    Portfolio, 228
    reenrollment, 223
    scholarships, 236
    veterans benefits, 238
Applied behavioral and social sciences, certificate in, 89
Arabic, course descriptions, 111
Armed Services personnel
    Associate of Arts degree, 77
        credit for educational experiences, 230, 259
Art. *See also* certificate programs in Computer graphics and design and Web design.
    course descriptions, 112
    minor in, 15
Art history
    course descriptions, 113
    minor in, 15
Articulation agreements
    with community colleges, 6, 16, 62
    with the UMUC graduate school, 13, 18, 26, 30, 35, 37,
        50, 52, 73
Arts and humanities, general education requirement in, 8
Asia
    administration, 245
    contact information, 247
    sites in, 269
    transfer from, 223
Asian studies, course descriptions, 114
Associate of Arts degree, requirements and curricula, 77
Astronomy, course descriptions, 115
Attendance policy, 219
Audited courses, 215
Automated services, 234
Availability of services, 233

B

Bachelor's degree
- curricula, 12
- expectations of graduate, 7
- requirements, 7
- second bachelor's degree, 9

Behavioral and social sciences
- certificate in, 89
- course descriptions, 115
- general education requirement in, 8
- major in social science, 73

Biological and physical sciences, general education requirement in, 8
Biology,
- course descriptions, 117
- minor in, 16

Biotechnology, major in, 16
Board of Regents, 242, inside back cover
Bookstores, 239
Business administration
- certificate programs in, 89, 98
- major in, 18
- minor in, 19

Business and management
- associate's degree curriculum, 79
- certificate programs in, 89, 98
- course descriptions, 121

Business law and public policy, minor in, 20
Business project management, certificate program in, 89
Business supply chain management, minor in, 20

C

Career planning, course description, 127
Career services, 239
Certificate programs
- curricula, 87
- descriptions, 88
- requirements, 87

Checks, return fee, 226
Chinese, course descriptions, 127
Classroom-based study, 227
Clinical mental health care, certificate program in, 90
Code of Civility, 221
Code of Student Conduct, 221
College Board Advanced Placement examinations, 231, 259
College credits. See Credit.
College graduates, admission of, 223
College-Level Examination Program (CLEP), 232, 256, 259
Communications, general education requirement in, 8
Communication studies. *See also* Writing.
- certificate program in, 102
- course descriptions, 128
- major in, 21
- minor in, 22

Community College of the Air Force (CCAF), 231
Community colleges
- alliances with UMUC, 6
- transfer of credit from, 230, 256, 259

Computer and information science
- certificate programs in, 92, 99
- course descriptions, 129
- major in, 22

Computer graphics and design, certificate program in, 90
Computer information technology, course descriptions, 133
Computer networking and security
- certificate program in, 91
- major in, 24

Computer labs and services, 239
Computer science
- certificate program in, 95
- course descriptions, 135
- major in, 26

Computer studies. *See also* Digital media and Web technologies.
- associate's degree curriculum, 80
- course descriptions, 137

Computing
- general education requirement in interdisciplinary issues, 8
- minor in, 27

Concurrent secondary enrollment, 224
Cooperative Education
- course explanation, 140
- program description, 228

Course-challenge examinations, 227, 259
Course load, 220
Courses. See also specific courses by discipline name.
- index to course descriptions, 104
- key to course descriptions, 103
- prerequisites, 103
- unit of credit, 103

INDEX

Credit
- by examination, 231
- by transfer, 230
- degree progress report, 234
- estimate of transfer, 234
- fees for options for earning credit, 225
- for military experience, 230, 259
- institutional, 215
- international credit evaluation, 224, 230, 234
- technical and professional, 231
- transfer from other academic institutions, 230, 234, 252–59
- unit of, 103
- ways of earning, 227

Criminal justice
- associate's degree curriculum, 81
- certificate program in, 91
- major in, 28
- minor in, 29

Criminology/Criminal justice, course descriptions, 141
Customer service management, minor in, 29
Cybersecurity
- certificate program in, 97
- course descriptions, 146
- major in, 30

D

Database design and implementation, certificate program in, 92
Database management, certificate program in, 92
Dean's list, 218
Degree planning worksheet, 279
Degree requirements, bachelor's, 7
Delinquent accounts, 226
Desktop publishing, certificate program in, 93
Digital media and Web technologies, major in, 31
Diploma, application fee, 225, 239
Disability services, 235
Disciplinary matters
- for inappropriate file sharing, 220
- nonacademic, 221
- suspension or dismissal, 217, 224

Disclosure of students' records, 262
Discrimination, policy against, 260, inside back cover
Dishonesty, academic, 221
Dishonored check fee, 226
Dismissal
- academic, 217
- from another institution, 224
- reinstatement, 218

Distance education
- awards for program, 4
- online study, 227

Diversity awareness, certificate program in, 94
Divisional transfer, 228
Doctoral program, 4
Dorsey Station, 233, 239, 268
Dropped courses. See Withdrawal.
Drug and alcohol awareness, referral services, 240
DSST examinations, 232, 259
Dual major, 8, 12

E

East Asian studies
- major in, 33
- minor in, 34

Economics
- course descriptions, 148
- minor in, 34

Educational principles, course descriptions, 149
Education: teacher preparation, course description, 150
Electives, requirements, 8
Emergency management
- course descriptions, 150
- major in, 35
- minor in, 36

Employer-provided tuition assistance, 226
Employment programs, 237
English
- course descriptions, 152
- major in, 37
- minor in, 38

Enrollment. See Admission and enrollment.
Enrollment management
- personnel, 244
- services, 233

Environmental management
- course descriptions, 156
- major in, 38
- minor in, 39

Europe
- administration, 245
- contact information, 246
- sites in, 269
- transfer from, 223

Examination
- credit by, 231
- makeup, 220

Excelsior College examinations, 232, 259
Experiential Learning
- course description, 159
- programs, 227

Expenses. See Fees, Tuition.

F

Faculty, 245
Failing grades, 216
Federal Work-Study program, 237
Fees, 225, 228, 234
Finance
    certificate program in, 94
    course descriptions, 160
    major in, 41
    minor in, 42
Financial aid
    application deadlines, 237
    application procedures, 237
    denied status, 261
    eligibility requirements, 235
    employer-provided tuition assistance, 226
    employment programs, 237
    federal return of funds policy, 237
    grants and scholarships, 236
    loans, 236
    programs available, 236
    reinstatement after denied status, 261
    satisfactory academic progress policy, 237, 260
    veterans benefits, 237
Fire science, course descriptions, 162
Fire service administration
    major in, 42
    minor in, 44
Foreign-educated students
    admission requirements, 223
    evaluation of records, 224, 230, 234
    provisional status, 222
Foreign language area studies, associate's curriculum, 81
Forensics. See also Investigative forensics.
    minor in, 44
Fraud investigation, certificate program in, 94

G

Game development, certificate in, 95
General Education Development (GED) test, 222
General education requirements for bachelor's degree, 8
General information, 222. 234
General studies, major in, 45
Geography, course description, 164
Geology, course description, 164
German, course descriptions, 165
Germany
    contact information, 246
    sites in, 269
Gerontology
    certificate program in, 95
    course descriptions, 165
    major in, 45
    minor in, 46
Global business and public policy, major in, 47
Golden Identification Card program, 224
Government and politics. *See also* Political science.
    course descriptions, 169
Grading
    appeal process, 221
    changes in grade, 217
    marking system, 215
    methods, 215
    quality points and, 215, 217
    repeated courses, 217
Graduate School of Management and Technology, 4
    articulation agreements with School of Undergraduate Studies, 13, 18, 26, 30, 35, 37, 50, 52, 73
Graduation
    academic honors, 218
    diploma application fee, 225
    services, 239
Grants, 236
Graphic communication, major in, 49
Grievance procedures for students, 221

H

Health issues for the aging adult, certificate program in, 95
High school students, concurrent secondary enrollment, 224
Historical perspective, general education requirement in the arts and humanities in, 8
History
    course descriptions, 173
    major in, 50
    minor in, 52
Homeland security
    course descriptions, 179
    major in, 52
    minor in, 54
Honors and honor societies, 218
Human development, certificate program in, 96
Humanities
    course descriptions, 180
    general education requirement in arts and, 8
    major in, 54
    minor in, 56
Human resource management
    certificate program in, 96
    course descriptions, 181
    major in, 56
    minor in, 58

INDEX

I

Incomplete (I) mark, 216
Indebtedness to the university, 226
Information, general, 222, 234
Information and Library Services, 240
Information assurance, certificate in, 97
Information literacy
    bachelor's degree expectations, 7
    general education requirement in interdisciplinary issues, 8
Information systems management
    certificate programs in, 92, 95, 97, 101
    course descriptions, 183
    major in, 58
Innovative learning, number of credits allowed for, 230, 259
Institutional credit, 215
Integrity, academic, 220
Interdisciplinary issues, general education requirement in, 8
Interdisciplinary programs
    African American studies, 15
    East Asian studies, 33
    general studies, 45
    humanities, 54
    management studies, 65
    social science, 73
    women's studies, 76
International business management, minor in, 60
International baccalaureate exams, 232
International students. See Foreign-educated students.
Internet access, 220
Internet technologies, certificate program in, 98
Internships. See Cooperative Education.
Investigative forensics. See also Forensics.
    major in, 60

J

J-1 visa holders, 224
Japanese, course descriptions, 185
Job-search services, 239
Journalism
    course descriptions, 185
    minor in, 62
Junior college credits, transfer of, 230, 256, 259

K

Key to course descriptions, 103

L

Laboratory management, major in, 62
Laboratory science
    fees, 225
    requirement, 8
Lambda Pi Eta, 218
Largo, 4, 225, 233, 234, 239, 266, 268
Leadership development, 4
Learning proposal, 229
Legal studies. See also Paralegal studies.
    associate's degree curriculum, 82
    course descriptions, 187
    major in, 64
Library services. See Information and Library Services.
Library skills and information literacy, course description, 192
Loans, 236

M

Major, minor, and elective requirements for bachelor's degree, 8
Majors, 12
Makeup examinations, 220
Management. *See also* Business administration, Business and management, Customer service management, Global business and public policy, Human resource management, Information systems management, International business management, Management studies, Marketing, and Strategic and entrepreneurial management.
    certificate program in, 98
Management studies
    associate's degree curriculum, 83
    certificate program in, 98
    major in, 65
Marketing
    course descriptions, 192
    major in, 67
    minor in, 68
Marking system, 215
MarylandOnline, 6
Master's degree programs, 4
Mathematical sciences, minor in, 68
Mathematics,
    associate's degree curriculum, 84
    course descriptions, 194
    general education requirement in, 8
Mentoring, 240
Microbiology. See also Biology, Laboratory management.
    minor in, 69
Military Occupational Specialties (MOSs), 230

Military personnel
Associate of Arts degree, 77
credit for educational experiences, 230, 259
Minors, 12
Music, course descriptions, 197
MyUMUC, 4, 217, 221, 223, 225, 234, 236

N

National Leadership Institute (NLI), 4
National Fire Academy, 42
Natural science. See also Laboratory management.
course descriptions, 198
minor in, 69
Nonacademic disciplinary matters, 221
Noncitizens. *See* Foreign-educated students.
Noncollegiate course credit, 231
Nondiscrimination policy, 260, inside back cover

O

Object-oriented design and programming, certificate program in, 99
Online study, 227
Orientation for new students, 222
Overseas programs. *See* International programs.

P

Paralegal studies. *See also* Legal studies.
certificate program in, 99
Pass/fail grading, 215
Passing grade, 216
Phi Alpha Theta, 219
Phi Kappa Phi, 219
Philosophy
course descriptions, 199
minor in, 69
Pi Gamma Mu, 219
Placement tests, 103, 165, 194, 208, 212
Plagiarism, 221
Policy statements, 250
Political science. *See also* Government and politics.
certificate program in policy-related area, 100
major in, 70
minor in, 71
Portfolio
course description, 159
program, 228
Prerequisites, 103
Presidents and officers, 242
Prior Learning
course description, 159
program description, 227
Probability. *See* Statistics and probability.
Probation, academic, 217
Professional and technical credit, 231, 259
Program choices, 10–11
Project management for IT professionals,
certificate program in, 100
Provisional student status, 222
Psi Chi, 219
Psychology
certificate programs in related areas, 90, 96
course descriptions, 201
major in, 71
minor in, 73
Public policy. *See* Business law and public policy.

Q

Quality points, 215, 217

R

Readmission procedure, 218
Records
disclosure of, 262
forwarding overseas students' records, 223
transcript requests, 225, 239
Reenrollment, 223
Refund of tuition, 226
Regents, 242, inside back cover
Registration
methods, 225
repeated, 217
waiting list, 225
Regular student status, 222
Reinstatement after dismissal, 218
Religious observances policy, 260
Repeated courses, 217
Requirements
associate's degree, 77
bachelor's degree, 7
certificates, 87
general education, 8
second bachelor's degree, 9
Research assistance, 240
Residency determination, 223, 250
Responsibilities of students receiving veterans benefits, 238
Rights and responsibilities of the student, 219

INDEX

S

Satisfactory/D/Fail grading, 215
Satisfactory grade, 216
Satisfactory progress, 235, 237, 260
Scholarships and grants, 236
Scholastic recognition, 218
School of Undergraduate Studies
    academic programs, 5
    partnerships, 6
    personnel, 243
Second bachelor's degree, 9, 218, 228, 229, 259
Senior Citizen Golden Identification Card program, 224
Servicemembers Opportunity College (SOC), 231, 259
Services and resources, 233
    Academic advising, 234
    Admission assistance, 234
    Alumni Association, 241
    Automated services, 234
    Availability of services, 233
    Bookstores, 239
    Career services, 239
    Computer labs and services, 239
    Disability services, 235
    Financial aid, 235
    Drug and alcohol awareness, 240
    General information, 234
    Graduation services, 239
    Information and library services, 240
    Student Advisory Council, 239
    Transcript services, 239
    Tutoring, 240
    Veterans benefits, 237
    Writing resources and tutoring, 241
Shady Grove, 233, 239, 268
Shared governance, policy on, 266
Sigma Tau Delta, 219
Social science. See also Behavioral and social sciences.
    certificate programs in, 89, 93
    major in, 73
Sociology
    course descriptions, 206
    minor in, 75
Spanish
    certificate program in, 102
    course descriptions, 208
Speech communication. *See also* Negotiation and conflict management.
    course descriptions, 209
    minor in, 75
Standard grading, 215
Statistics and probability, course descriptions, 210
Strategic and entrepreneurial management, minor in, 76
Student Advisory Council, 239, 266
Student Affairs
    personnel, 244
    services, 233
Student clubs, 240
Students. *See also* Financial aid.
    address change, 221
    conduct, 221
    disabled, 235
    disclosure of students' records policy, 262
    employment programs, 237
    grade appeal procedure, 221
    grievance procedures, 221
    new, 222. 234
    rights and responsibilities, 219
    veterans, 237
Student status categories, 222
Suspension or dismissal
    from other institutions, 224
    reinstatement, 218

T

Technical and vocational credit, transfer of, 231, 256
Terrorism and institutions: Prevention and response,
    certificate program in, 100
Textbooks, 239
Theatre, course descriptions, 212
Transcripts
    fees, 225
    requests for, 239
Transfer credit
    armed services personnel, 230, 259
    degree progress report, 234
    denial of, appeal process, 257
    evaluation of international records, 224, 230, 234
    from community and junior colleges, 230
    from Community College of the Air Force (CCAF), 231
    from noncollegiate courses, 231
    from other colleges and universities, 230, 252, 259
    initial estimate of, 234
    policies on, 252, 259
    vocational and technical credit, 231, 256, 259
Transfer from UMUC Europe or UMUC Asia, 223
Transfer students, provisional student status, 222
Tuition
    assistance. See Financial aid.
    current rates, 225
    employer-provided assistance, 226
    interest-free monthly payment plan, 225
    refunds, 226
    residency determination, 223, 250
Tutoring, 238

U

UMUC. See University of Maryland University College.
Unit of credit, 103
University of Maryland University College (UMUC).
See also Appendices.
accreditation, inside back cover
administration, 242
admission and enrollment, 222
Alumni Association, 241
community college alliances, 6
contact information, 246
facilities, 4
faculty, 4, 245
global university, inside front cover, 4
Graduate School, 4, 13, 18, 26, 30, 35, 37, 50, 52, 73
grants, 236
headquarters (Adelphi), 4, 246
military partnerships, 4, 6
programs, 4
service locations in Maryland area, 233
sites worldwide, 267
Web site, 246
University System of Maryland
administration, 242
libraries, 240
Upsilon Pi Epsilon, 219

V

Veterans benefits, 237
Visa holders, 224
Visual Basic programming, certificate program in, 101
Vocational and technical credit, transfer of, 231, 256, 259

W

Waiting list, 225
Waldorf Center for Higher Education, 233, 239, 268
Warning, academic, 217
Web design, certificate programs in, 101
Web pages
admission application, 223
bookstore, 239
Alumni Association, 241
Career services, 239
code of civility, 221
community college alliances, 6
Cooperative Education, 229
disability services, 235
Effective Writing Center, 241
FAFSA, 237
exams and testing, 220
financial aid, 236
Information and Library Services, 240
international credit evaluation, 223
language placement testing, 103
monthly tuition-payment plan, 225
MyUMUC, 234
payment options, 225
Prior Learning, 159, 227
registration, 225
scholarships, 236
student accounts, 226
Student Advisory Council, 239
student handbook, 219
student success, 240
technical requirements for online study, 220
tuition, 225
transcript services, 239
veterans benefits, 237
Withdrawal
from a course, 225
mark of W, 216
refund, 226
Women's studies
associate's degree curriculum, 85
course description, 212
minor in, 76
Workplace communications, certificate program in, 102
Workplace Spanish, certificate program in, 102
Work-study program, 237
Writing. See also Communication studies.
course descriptions, 212
Writing resources and tutoring, 241

NOTES

University of Maryland University College

STUDENT NAME_____ DATE_____

Degree Planning Worksheet 2011–2012

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 (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, ENGL 281, or WRTG 490 (3) *Or other communication, 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, WRTG 393, or WRTG 394 (3) *Upper-level advanced writing GER course*		
◆ Major course requirement (3) *See requirements for specific major*		
◆ Major course requirement (3)		
◆ Major course requirement (3)		
◆ Major course requirement (3)		
◆ Major course requirement (3)		
◆ Major course requirement (3)		
◆ Major course requirement (3)		
◆ Major course requirement (3)		
◆ Major course requirement (3)		
◆ Major course requirement (3)		
◆ Major course requirement (3)		
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*

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.

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, in accordance with UMUC Policy 40.30 Policy and Procedures on Affirmative Action, Equal Opportunity, and Sexual Harassment *(www.umuc.edu/policy/admin04030.shtml)*. 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 of Diversity Initiatives, Office of the President, UMUC, 3501 University Boulevard East, Adelphi, MD 20783-8000 (phone 800-888-UMUC, ext. 1-7940).

Visit UMUC on the Web at
www.umuc.edu.

To speak with a UMUC new student advisor, call
800-888-UMUC (8682)
or send an e-mail to
emteam@umuc.edu.

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 and territories 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

School of Undergraduate Studies
3501 University Boulevard East
Adelphi, MD 20783-8030 USA

11-UGP-012