

THE UNDERGRADUATE SCHOOL

BUILD YOUR FUTURE HERE ...
ONE MOMENT AT A TIME





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 54,000 active-duty military servicemembers, reservists, veterans, and their families. With more than 140 worldwide classroom and service locations in more than 20 countries and territories and more than 90 undergraduate and graduate degree, certificate, and specialization curricula 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 you to register for courses, pay tuition, and order textbooks and other supplies when it's convenient for you. You can also access academic and career advising, financial aid counseling, library services, and much more online via the university's website or by phone or e-mail. All over the world, UMUC gives you what you need to succeed.

This catalog provides the degree requirements and recommended curriculum for students who begin continuous study on or after August 1, 2015. (Details are listed on p. 7.) You should keep your catalog available for easy reference throughout your degree program.

From the Dean



Welcome to The Undergraduate School at University of Maryland University College. For more than 65 years UMUC has been supporting working adults, military personnel, veterans, and all students with a passion to learn and grow. We are proud to have you as our student. Whether this is your first time at college or you are returning for additional credentials to further your career, UMUC is here for you.

Our many and varied career-relevant majors and minors are focused to help you learn and grow as well as to help you meet and exceed the demands of today's fast-paced world.

This catalog is a reference tool that describes the current degree programs and requirements in The Undergraduate School. I encourage you to use this catalog to navigate your path toward your degree, as it contains information and requirements essential to your success. The Undergraduate School continues to develop new programs and support services for students, and I hope you will keep up with new opportunities through your academic department, UMUC's website, and your online portal (MyUMUC).

I am delighted to welcome you to the UMUC community and wish you the very best in your educational and career goals. I welcome your e-mail comments at deanundergrad@umuc.edu.

Sincerely,

A handwritten signature in black ink, consisting of a stylized 'M' followed by a cursive 'P'.

Matthew Prineas, PhD
Vice Provost and Dean
The Undergraduate School

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 pp. 218–20. Sources for any claims made throughout this catalog may be found on the UMUC website (www.umuc.edu).

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Welcome to UMUC

A UNIQUE INSTITUTION

University of Maryland University College (UMUC) is unique among institutions of higher education. From its founding in 1947, UMUC was designed to meet the educational needs of adult students like you—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 you from achieving your educational goals—remains unchanged.

CARRYING OUT THE MISSION

Students First

At UMUC, your success as a student is of paramount importance. The university seeks not only to help you fulfill your current education goals but also to create an educational partnership that will last throughout your life.

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

As a global university, UMUC makes it possible for you 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, D.C., area and at military sites all over the world. You can also

access student services online and by phone, as well as on-site.

Convenience and flexibility are not the only concerns, however. UMUC seeks to create a learning environment that is respectful of 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 you the highest quality programs and services 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 your courses—and the use of the latest technologies. UMUC also is able to provide you with a wealth of resources 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, you can access both courses and services online, using the university's learning management system and MyUMUC, its online gateway to services and information. Through its Center for Innovation in Learning and Student Success, UMUC leads the search for next-generation learning models and best practices for online 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 Undergraduate School and The Graduate School. 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 College Park Marriott Hotel & Conference Center at UMUC. The Academic Center at Largo houses both The Undergraduate School and The Graduate School, as well as all related academic support units. Most classes and services, however, are provided at more than 140 sites worldwide, as well as through cutting-edge technology—online via the university's website, the learning management system, and MyUMUC.

FOR ASSISTANCE

Contact us by e-mail at ugadvising@umuc.edu or by phone at 800-888-UMUC (8682) for assistance.

The Undergraduate School

The mission of The Undergraduate School at UMUC 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. The university 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 Undergraduate School is committed to meeting your 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, the Bachelor of Science in Nursing, and the Bachelor of Technical and Professional Studies degrees, as well as five undergraduate certificates.⁺

PREPARING CITIZENS FOR THE 21ST CENTURY

UMUC strives to prepare you to be effective professionals and citizens in your organizations, communities, and families. We value the contributions of both a broad-based education and specific disciplines to the undergraduate experience, so we incorporate 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 you to demonstrate knowledge and skills not only in your chosen major 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 are the hallmarks of a UMUC undergraduate education, and they are instilled through a broad foundation in general education and integrated into a strong and focused major area of study. Your mastery of these abilities is planned and assessed throughout your program of study.

General education coursework is not just the lens through which you learn about different academic disciplines and how they see the world; it is also how you experience practical applications of foundational skills and concepts and make connections among different approaches and applications. UMUC's minimum requirements for general education coursework conform to Maryland requirements and are broadly accommodating of your interests and transfer credit. However, The Undergraduate School recommends specific courses to fulfill general education requirements you have not already completed. Because technology affects our world and the ways in which we understand it at every level, we have developed recommended courses that revolve around the theme of technological transformations—the ability of innovative tools and processes to change the applica-

tion of knowledge. These courses are designed to help you acquire a grounding in the arts, humanities, and sciences by studying and applying the principles of these disciplines through concrete cases, examples, and topics centered around this theme.

For your core studies, you may choose one of 32 majors from a wide variety of academic fields, including business administration, cybersecurity management and policy, humanities, communication studies, biotechnology, social science, legal studies, environmental management, and information systems management. Academic minors are available in 40 different areas. All the majors and minors have been reviewed and revised in consultation with faculty, employers, professional and educational organizations, and other experts in the field. These academic programs prepare you for the modern workplace and also help those of you who are currently employed put your current knowledge into a broader context.

Recognizing the importance of lifelong learning, UMUC also offers several undergraduate certificates⁺ of value in the workplace for career advancement.

SERVING ADULT STUDENTS

UMUC welcomes and helps all students achieve their educational goals but has a special focus on the needs of adult students in the workforce. As of spring 2013, 74 percent of UMUC undergraduates worked full-time, and more than half were working parents. Currently, the median age for stateside undergraduate students is 31 years old.

⁺ More information about certificates, including gainful employment disclosures, is available at www.umuc.edu/ugcertificates.

In recognition of the diverse educational goals and aspirations of its students, the university uses a variety of strategies to make sure you have access to courses and make completing your degree easier. 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. 196–98) include Workplace Learning, which offers credit for new learning in the workplace, and Prior Learning, which offers credit for college-level learning acquired through previous work or life experience. UMUC also accepts credit from community college coursework and a variety of other sources, including military service and credit by examination (described on pp. 199–201).

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 RELATIONSHIPS

UMUC is dedicated to collaboration and cooperation with other Maryland educational institutions, both public and private, and actively seeks relationships with those institutions to benefit Maryland citizens. For more than 65 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, 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 a seamless transition between curricula through linked degree programs. Numerous locations in Maryland and the Washington, D.C., area and online courses enable alliance students to complete associate's and bachelor's degrees conveniently close to home. Special UMUC scholarships are also available for graduates of Maryland community colleges.

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

UMUC also works to develop strong strategic partnerships with local and national leaders in business and industry, government, and nonprofit

organizations and is an important partner in the region's economic development.

UMUC values employers' viewpoints. 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, Booz Allen Hamilton, GEICO, and ManTech International.

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 Federal University and Irkutsk State University in Russia.

UMUC has established alliance agreements with 90 community colleges across the United States, including all 16 Maryland community colleges (listed on p. 221), all of which are visited regularly by UMUC representatives. Visit www.umuc.edu/alliances for more information.

FOR MORE INFORMATION

For more information about UMUC and The Undergraduate School, contact us by phone at 800-888-UMUC or by e-mail at ugadvising@umuc.edu.

BACHELOR'S DEGREE REQUIREMENTS

At the undergraduate level, UMUC offers the Bachelor of Arts (BA), Bachelor of Science (BS), Bachelor of Science in Nursing (BSN), and Bachelor of Technical and Professional Studies (BTPS) degrees, as well as five certificates.⁺ The Associate of Arts degree, the BS in General Studies, and several other certificates⁺ are available only to active-duty military personnel and other special populations. The BSN program is available only to students with an active, unencumbered registered nurse license and an associate's degree in nursing from an approved community college. The BTPS 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 you from anywhere in the world. However, offerings sufficient to complete every program may not be available at every location or in every format. You should consult your advisor, current schedules, and site-specific materials to determine which programs you may normally expect to complete from your geographic location.

Requirements for degrees vary according to the major and minor. The requirements you must meet to complete your bachelor's degrees, regardless of your academic major, are summarized in the following sections.

EXPECTATIONS

Within your academic program major, UMUC's degree incorporates program-specific and core competencies. The following essential core competencies are emphasized across all programs:

- Effective writing and oral communication skills
- The use of information technology
- Information literacy skills
- Mathematical and quantitative reasoning skills
- 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 your learning in these areas as well as in specific disciplinary knowledge and skills.

Your academic major (and minor) allows you 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 you are expected to acquire in completing the major.

REQUIREMENTS

In general, the UMUC degree requirements that apply to you are those that were in effect when you began continuous enrollment in any public institution of higher education in Maryland (including UMUC). If you have not been continuously enrolled, the requirements that apply are those in effect at UMUC when you resumed continuous enrollment. To be considered continuously enrolled, you 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. Should you choose to change your degree program, you may be subject to all degree requirements in effect at the time of the change.

The following requirements for the BA, BS, BSN, and BTPS are applicable to students who enroll on or after August 1, 2015.

⁺ More information about certificates, including gainful employment disclosures, is available at www.umuc.edu/ugcertificates.

BACHELOR'S DEGREE REQUIREMENTS

GENERAL EDUCATION REQUIREMENTS

CREDITS

Recommendations for fulfilling general education requirements are provided for each major in the recommended sequence.

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 or WRTG 101S (3 credits)

Must be completed within the first 18 credits. Placement test required for WRTG 101. May not be earned through course-challenge examination.

Another writing course (3 credits)

All 3-credit WRTG courses (except WRTG 288, 388, 486A, or 486B), COMM 390 and 492, ENGL 102, 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 and 281; 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), ENGL (except ENGL 281 and 384), 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, and 461 only), ECON, GEOG, GERO (except GERO 342 and 351), 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. NUTR 100 may satisfy the requirement for a 3-credit science lecture course.

E. Mathematics 3

MATH 106, MATH 107, or a mathematics 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 a related requirement for the environmental management major, and MATH 140 and 141 are required within the computer science major.

F. Interdisciplinary or Emerging Issues 7

One course (LIBS 150) in introductory research (1 credit), which must be completed within the first 6 credits.

A total of 6 credits in computing courses as follows:

- IFSM 201 or CMST 301 (3 credits)
- An additional computing course appropriate to the academic major (3 credits)

Refer to your specific major for requirements or recommendations. Unless otherwise specified, upper- or lower-level courses designated CMIS, CMIT, CMSC, CMST, CSIA, IFSM, and SDEV and ACCT 326 apply. **Note:** IFSM 300 is required for majors in public safety administration 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.

You 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. You may not major in two

programs with excessive overlap of required coursework. Consult an advisor before selecting a double major.

B. Academic Minor **15–18**

Choosing a minor is strongly encouraged even though it is optional (unless you major in accounting). You 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 pp. 200–1. 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, the overall requirements listed below pertain to all bachelor's degrees.

1. You must complete a minimum of 120 credits.
2. You 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, or noncollegiate training does not count as graded coursework.

Total Degree Requirements **120 Credits**

Second Bachelor's Degree

If you have already received a bachelor's degree from UMUC or from another approved institution, you can broaden your education by earning a second bachelor's degree with a different major. However, you may not earn a second bachelor's degree with a double major. You may not earn a second degree in general studies and may not obtain an academic minor or a second associate's degree within the second bachelor's degree.

You must have received the first bachelor's degree to be eligible to begin a second. For a second bachelor's degree, you need 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, you must complete at least 45 new credits through UMUC with the requisite grade point average.

You 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, the applicable date is the date you 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.

You need to be aware of what is entailed in a second bachelor's degree. Before beginning work or considering nontraditional options toward a second degree, 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 CURRICULA

MAJORS AND MINORS

The academic major requires 30 to 38 credits, while the minor (optional) requires 15 to 18 credits. You 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. You 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. The major in nursing for registered nurses is available only for the Bachelor of Science in Nursing (BSN). All students with dual majors are awarded the BS degree, regardless of major.

Available for the BA

Communication Studies.....	18
East Asian Studies.....	31
English.....	34
Graphic Communication.....	43
History.....	46
Humanities.....	49

Available for the BS

Accounting.....	11
Business Administration.....	17
Computer Networks and Cybersecurity.....	20
Computer Science.....	22
Criminal Justice.....	25
Cybersecurity Management and Policy.....	27
Digital Media and Web Technology.....	29

Environmental Management.....	36
Finance.....	38
General Studies*.....	41
Gerontology and Aging Services.....	41
Health Services Management.....	45
Human Resource Management.....	50
Information Systems Management.....	52
Investigative Forensics.....	54
Legal Studies.....	58
Management Studies.....	59
Marketing.....	61
Political Science.....	66
Psychology.....	68
Public Safety Administration.....	70
Social Science.....	72
Software Development and Security.....	74

Available for the BSN†

Nursing for Registered Nurses.....	63
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Available for the BTPS or BS‡

Biotechnology.....	15
Laboratory Management.....	56

Minors

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

Accounting.....	13
African American Studies.....	13
Art.....	14
Art History.....	14
Biology.....	14
Business Administration.....	18
Communication Studies.....	20
Computer Science.....	24
Contract Management and Acquisition.....	24
Criminal Justice.....	26
Cybersecurity.....	26
Digital Media and Web Technology.....	30

* 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 with an active, unencumbered registered nurse license and an associate's degree in nursing from an approved community college.

‡ 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. Consult an advisor before selecting these majors.

Diversity Awareness	31
East Asian Studies.....	31
Economics.....	33
Emergency Management.....	34
English.....	36
Environmental Management	38
Finance	40
Fire Service Administration	40
Forensics.....	40
Gerontology and Aging Services.....	43
Health Services Management.....	46
History.....	48
Homeland Security.....	48
Human Resource Management.....	52
Information Systems Management.....	54
Law for Business.....	57
Marketing.....	62
Mathematical Sciences.....	63
Natural Science	63
Personal Financial Planning.....	65
Philosophy	65
Political Science.....	67
Psychology	69
Public Safety Administration	71
Small Business Management and Entrepreneurship.....	71
Sociology.....	74
Speech Communication.....	76
Terrorism and Critical Infrastructure	76
Women's Studies.....	77

DESCRIPTIONS OF MAJORS AND MINORS

Accounting

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

Major in Accounting

Versatility, stability, earning potential: Gain entrance to a variety of possibilities with a bachelor's degree in accounting.

If you have a way with numbers, you may want to consider earning your bachelor's degree in accounting. No matter what their mission or type of work is, all companies and agencies need accounting departments to keep their finances on track, so with an accounting degree, you'll have a wide range of directions to choose from.

This major combines theory and practice to help prepare you for analysis of and reporting on the economic activities of organizations. You'll develop skills in managerial accounting, budgeting, accounting systems, internal controls, financial analysis, financial reporting, internal and external auditing, taxation, and international accounting. This major will prepare you for accounting careers in corporations, as well as nonprofit and government organizations.

What You'll Learn

Through your coursework, you will learn how to

- Communicate with financial and nonfinancial audiences in a clear and concise manner and make appropriate financial decisions
- Research, prepare, analyze, and review financial and business data by applying accounting and business management principles to produce financial and business reports
- Use current technology and analytical tools to work collaboratively and facilitate decision making
- Employ analysis, critical thinking, and problem solving to identify, test, and validate processes, systems, and financial data
- Define, develop, and demonstrate ethical business practices and accountability by identifying and addressing current and emerging issues
- Conduct fraud detection and deterrence planning, analysis, and communication
- Perform a range of functions, including auditing and financial reporting, to manage finances for federal agencies
- Create reports and conduct disclosure analysis

BACHELOR'S DEGREE CURRICULA

Your Coursework in Accounting

The accounting curriculum, developed in close conjunction with employers and featuring real-world data sets, facilitates networking opportunities. Accounting employers often serve as guest speakers and contact UMUC to recruit our students. You'll take courses in statistics, economics, cost accounting, income taxation, business law, and auditing.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Relate accounting concepts to actual companies and agencies
- Analyze the U.S. Securities and Exchange Commission Form 10-K, which companies use to disclose information
- Review and analyze publicly traded companies and examine federal financial statements, operation reviews, RFPs, and reports related to fraud and ethics
- Review and analyze corporate governance and ethical issues to ensure understanding of and compliance with license and government regulations

INDUSTRY CERTIFICATION

This program can help prepare you for the following certification exams:

- Certified Public Accountant (CPA)
- Certified Internal Auditor (CIA)
- Certified Information Systems Auditor (CISA)
- Certified Fraud Examiner (CFE)
- Certified Government Financial Manager (CGFM)
- Certified Management Accountant/Certified Financial Manager (CMA/CFM)
- Certified Government Auditing Professional (CGAP)

Degree Requirements

A degree with a major in accounting requires the successful completion of 120 credits of coursework, including 36 credits for the major; 15 credits for the required minor in business administration; 41 credits in general education requirements; and 28 credits in electives and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (36 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

STAT 200	Introduction to Statistics (3)
ACCT 220	Principles of Accounting I (3)
ACCT 221	Principles of Accounting II (3)
ACCT 310	Intermediate Accounting I (3)
ACCT 311	Intermediate Accounting II (3)
ACCT 321	Cost Accounting (3)
ACCT 323	Federal Income Tax I (3)
ACCT 410	Accounting for Government and Not-for-Profit Organizations (3) <i>or any upper-level ACCT course</i>
ACCT 417	Federal Income Tax II (3)
ACCT 422	Auditing Theory and Practice (3)
ACCT 424	Advanced Accounting (3)
ACCT 425	International Accounting (3) <i>or any upper-level ACCT course</i>

COURSES IN THE BUSINESS ADMINISTRATION MINOR (15 CREDITS)

BMGT 364	Management and Organization Theory (3)
BMGT 380	Business Law I (3)
FINC 330	Business Finance (3)
MRKT 310	Marketing Principles (3)
ACCT 411	Ethics and Professionalism in Accounting (3) <i>or BMGT 496 Business Ethics</i>

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 394	Advanced Business Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 201	Principles of Macroeconomics (3) <i>(related requirement for major)</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level</i> <i>of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>or CMST 301 Digital Media and Society</i>
ACCT 326	Accounting Information Systems (3) <i>(related requirement for major)</i>

ELECTIVE COURSES (28 CREDITS)

ECON 203	Principles of Microeconomics (3) <i>(related requirement for major)</i>
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Total credits for BS in Accounting	120
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Minor in Accounting

The accounting minor complements the skills you gain in your 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.

Courses in the Minor (15 Credits)

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, refer to your major and pp. 8–9.

Careers in Accounting

- Compliance managers
- Budget analysts
- Fraud examiners, investigators, and analysts

African American Studies

You may seek an academic minor in African American Studies.

Minor in African American Studies

The African American studies minor complements the skills you gain in your major discipline by offering an interdisciplinary approach to study of the contemporary life, history, and culture of African Americans.

Courses in the Minor (15 Credits)

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

Any AASP courses

ENGL 363	African American Authors from the Colonial Era to 1900
ENGL 364	African American Authors from 1900 to the Present
HIST 461	African American History: 1865 to the Present
SOCY 423	Minorities in the United States

It is recommended that you take AASP 201 as the first course in the minor (if you 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, refer to your major and pp. 8–9.

BACHELOR'S DEGREE CURRICULA

Art

You may seek an academic minor in art.

Minor in Art

The art minor complements the skills you gain in your major discipline by offering an aesthetic and personal exploration of imagery, media, and composition through a balance of art theory and practice.

Courses in the Minor (15 Credits)

A minor in art requires the completion of the following courses:

ARTT 110	Introduction to Drawing (3)
ARTT 152	Basics of Photography (3)
ARTT 210	Intermediate Drawing (3)
ARTT 320	Painting I (3)
ARTT 428	Advanced Painting (3)

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, refer to your major and pp. 8–9.

Art History

You may seek an academic minor in art history.

Minor in Art History

The art history minor complements the skills you gain in your major discipline by helping to develop skills in historical and cultural interpretation and critical analysis of works of architecture, sculpture, painting, and the allied arts.

Courses in the Minor (15 Credits)

A minor in art history requires the completion of the following courses:

ARTH 204	Film and American Culture Studies (3)
ARTH 334	Understanding Movies (3)
ARTH 372	History of Western Art I (3)
ARTH 373	History of Western Art II (3)
ARTH 375	History of Graphic Art (3)

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, refer to your major and pp. 8–9.

Biology

You may seek an academic minor in biology.

Minor in Biology

The biology minor complements the skills you gain in your major discipline by helping to provide 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.

Courses in the Minor (15 Credits)

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, refer to your major and pp. 8–9.

Biotechnology

If you 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, you may seek an academic major in biotechnology. Consult an advisor before electing this major.

Major in Biotechnology

Help develop innovations in the agricultural, pharmaceutical, and biomedical fields by pursuing a bachelor's degree in biotechnology.

Professionals in biotechnology come up with answers to a host of humanity's problems—from Ebola to failing crops. With a bachelor's degree in biotechnology from UMUC, you can become a part of the solution.

For this program, you are required to have already gained technical and scientific knowledge of biotechnology through transferred coursework and direct experience in the field. Contact an advisor to confirm your eligibility.

The major combines laboratory skills and applied coursework with a biotechnology internship experience and upper-level study and helps prepare you to enter the pharmaceutical, agricultural, or biomedical research industries and organizations as a laboratory technician, quality control technician, assay analyst, chemical technician, or bioinformatician.

What You'll Learn

Through your coursework, you will learn how 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
- Offer technical support, customer assistance, and cost-benefit analyses regarding 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 collect validated and documented data
- Comply with and adhere to national, state, and local standards, policies, protocols, and regulations for laboratory and manufacturing activity

- Apply scientific knowledge and principles, quantitative methods, and technology to think critically and solve complex problems in biotechnology

Your Coursework in Biotechnology

In your courses, you'll study biological and chemical sciences, biotechniques, bioinstrumentation, bioinformatics, microbiology, molecular biology, and cell biology.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Design a manual to provide new lab members with rules and regulations for the lab
- Use scientific reasoning, quantitative reasoning, and knowledge of biological principles to interpret results, make inferences, and draw conclusions about research findings
- Explore vaccine development from historic, scientific, clinical, and practical perspectives
- Explore genome analysis, evolutionary relationships, structure-function identification, protein pattern recognition, protein-protein interaction, and algorithms

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (36 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

BIOL 325	Inquiries in Biological Science (3)
BIOL 350	Molecular and Cellular Biology (3)
BIOL 357	Bioinformatics (3)
NSCI 301	Laboratory Organization and Safety (3)
BIOL 486A/B	Workplace Learning in Biology (6)
BIOL 495	Current Trends and Applications in the Life Sciences (3)

BACHELOR'S DEGREE CURRICULA

The following lower-level courses in transfer (15):

- General microbiology with laboratory (4)
- General genetics with laboratory (4)
- Biotechnology applications and techniques with laboratory (7)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing and Communications Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing

WRTG 293 Introduction to Professional Writing (3)
or other writing course

COMM 202 Media and Society (3)
or other communication, writing, or speech course

WRTG 393 Advanced Technical Writing (3)
or other advanced upper-level writing course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course

HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social science course

BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

Lower-level coursework in biotechnology, biochemistry, cell biology, chemistry, genetics, immunology, microbiology, molecular biology, physics, and virology, completed as part of the associate's degree program (7)

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Courses

IFSM 201 Concepts and Applications of Information Technology (3)
or CMST 301 Digital Media and Society

CMIS 111 Social Networking and Cybersecurity Best Practices (3)
or another computing course appropriate to the academic major

MINOR AND ELECTIVE COURSES (43 CREDITS)

Additional lower-level coursework in biotechnology, biochemistry, cell biology, chemistry, genetics, immunology, microbiology, molecular biology, physics, and virology courses, completed as part of the associate's degree program (10)

Total credits for BS or BTPS in Biotechnology

120

Careers in Biotechnology

- Biological technicians
- Medical and clinical laboratory technologists
- Quality control systems managers
- Quality control analysts
- Laboratory animal caretakers
- Natural science managers
- Chemical technician
- Forensic science technician
- Food science technician

Business Administration

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

Major in Business Administration

In the business administration major, you'll gain a well-rounded education that provides foundational, workplace-relevant management skills, organizational theory, and operational knowledge.

UMUC's career-focused bachelor's degree program in business administration is designed to help you compete for the jobs of today and tomorrow by building a comprehensive base of knowledge. This major will help you prepare for a variety of positions in for-profit, nonprofit, and public-sector organizations. Plus, you'll have ample networking opportunities with faculty, employers, and other students.

What You'll Learn

Through your coursework, you will learn how to

- Plan and communicate a shared vision for the organization that will drive strategy, assist with decision making, and position the organization competitively
- Design and create management and leadership plans
- Evaluate qualitative and quantitative data
- Communicate effectively across all levels of an organization
- Develop, communicate, and implement policies and procedures to reduce cost and organizational risk and promote ethical practices
- Manage people, time, and resources by using 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

Your Coursework in Business Administration

In your business administration courses, you'll study accounting, business law, ethics and social responsibility, finance, human resource management and labor relations, strategic management, organizational behavior, marketing and sales, and statistical analysis.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Analyze a particular company or organization
- Create a business plan suitable for a banker or investor
- Participate in real-world job interviews

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (36 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

BMGT 110	Introduction to Business and Management (3) <i>(or prior business experience and an additional course chosen from ACCT, BMGT, ENMT, FINC, HMG, HRMN, or MRKT courses)</i>
ACCT 220	Principles of Accounting I (3)
STAT 200	Introduction to Statistics (3)
ACCT 221	Principles of Accounting II (3)
BMGT 364	Management and Organization Theory (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)
BMGT 495	Strategic Management (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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BACHELOR'S DEGREE CURRICULA

Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 394	Advanced Business Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 201	Principles of Macroeconomics (3) <i>(related requirement for major)</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>(prerequisite to later course)</i>
IFSM 300	Information Systems in Organizations (3) <i>(related requirement for the major)</i>

MINOR AND ELECTIVE COURSES (43 CREDITS)

ECON 203	Principles of Microeconomics (3) <i>(related requirement for major)</i>
MATH 140	Calculus I (4) <i>(recommended, especially if you plan to go to graduate school)</i>
COMM 390	Writing for Managers (3) <i>(recommended)</i>

Total credits for BS in Business Administration

120

Minor in Business Administration

The business administration minor complements the skills you gain in your major discipline by providing a study of principles and techniques used in organizing, planning, managing, and leading within various organizations.

Courses in the Minor (15 Credits)

A minor in business administration requires the completion of 15 credits of coursework in business administration. Any ACCT, BMGT, FINC, HMG, HRMN, and MRKT courses apply. It is recommended that you take BMGT 364 as the first course in the minor (if you 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, refer to your major and pp. 8–9.

Careers in Business Management

- Management analysts
- Market research analysts/marketing specialists
- Budget analysts

Communication Studies

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

Major in Communication Studies

Earn a bachelor's degree in communication studies—one of the degrees most sought after by employers—and prepare for a career in the ever-growing media landscape.

Whether you're interested in journalism, public relations, photography, business, or online communications, you can build a firm base of knowledge while you earn a bachelor's degree in communication studies at UMUC.

You'll learn to apply communication theories to both personal and professional situations, developing the "soft skills" that workplaces demand, along with communication techniques. In addition, you'll learn to work with individuals and groups professionally and manage communications within ethical, legal, and financial parameters.

What You'll Learn

Through your coursework, you will learn how to

- Apply analytical skills in interpreting, using, and delivering information, particularly through mass media
- Create professional and appropriate written, oral, and visual communications for specific purposes and diverse audiences
- Design, create, and select multimedia components and integrate them into print, broadcast, and online formats
- Work with individuals and groups in ways that reflect an understanding of both communication theory and professional expectations
- Understand diverse and intercultural perspectives as they affect communication
- Design and employ specific research methods and tools to gather information

Your Coursework in Communication Studies

Developed in conjunction with employers, the communication studies program offers a balance of theoretical knowledge and sophisticated communication skills. You'll have the opportunity to 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.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Write a speech for a hypothetical executive and organization
- Write news articles in various journalistic styles
- Write a comprehensive public relations plan and create messages targeting specific audiences
- Develop a portfolio of photo essays

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 17 credits in the major must be earned in upper-level courses (numbered 300 or above). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (33 CREDITS)

SPCH 100	Foundations of Oral Communication (3) <i>or any SPCH course</i>
COMM 207	Understanding Visual Communication (3) <i>or any COMM course</i>
JOUR 201	Introduction to News Writing (3)
COMM 300	Communication Theory (3)
COMM 302	Mass Communication and Media Studies (3)
SPCH 324	Communication and Gender (3)
JOUR 330	Public Relations Theory (3) <i>or any upper-level JOUR course</i>
COMM 400	Mass Media Law (3) <i>or any upper-level COMM course</i>
SPCH 470	Effective Listening (3) <i>or any upper-level SPCH course</i>
COMM 390	Writing for Managers (3) <i>or any upper-level COMM course</i>
COMM 495	Senior Seminar in Communication Studies (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 394	Advanced Business Writing (3) <i>or WRTG 393 Advanced Technical Writing</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course (discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social sciences course</i>
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BACHELOR'S DEGREE CURRICULA

BEHS 103 Technology in Contemporary Society (3)
*or other behavioral and social science course
(discipline must differ from first)*

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)

NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
*or other 3-credit MATH course at or above the level
of college algebra*

Computing Courses

IFSM 201 Concepts and Applications of Information
Technology (3)
or CMST 301 Digital Media and Society

CMIS 111 Social Networking and Cybersecurity
Best Practices (3)
*or another computing course appropriate to the
academic major*

MINOR AND ELECTIVE COURSES (46 CREDITS)

Total credits for BA in Communication Studies **120**

Minor in Communication Studies

The communication studies minor complements the skills you gain in your major discipline by helping you develop specialized skills in workplace communication, including written and oral communication skills and a greater understanding of human interaction.

Courses in the Minor (15 Credits)

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 you take COMM 300 early in the minor (if you 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, refer to your major and pp. 8–9.

Careers in Communications

- Market research analysts and marketing specialists
- Reporters and correspondents
- Public relations specialists
- Editors
- Technical writers

Computer Networks and Cybersecurity

You may seek an academic major in computer networks and cybersecurity.

Major in Computer Networks and Cybersecurity

Secure your future while protecting crucial digital assets with a bachelor's degree in computer networks and cybersecurity.

In UMUC's award-winning program in computer networks and cybersecurity, you'll learn the operational procedures and technologies to design, implement, administer, secure, and troubleshoot corporate networks.

Designed to combine the benefits of a traditional college education with hands-on training in state-of-the-art computer technology, the computer networks and cybersecurity curriculum integrates technical skill with communication skills and superior general education knowledge.

Whether you're new to the IT field or you're looking to move up to middle management, this major can help you prepare for a career as a network manager, systems administrator, or network security analyst.

UMUC was named a National Center of Academic Excellence in Information Assurance and Cyber Defense Education by the National Security Agency and the Department of Homeland Security. Our cybersecurity students frequently take first place in cyber competitions, and our graduates are often recruited by top firms and agencies whose personnel they've met through the program.

What You'll Learn

Through your coursework, you will learn how to

- Design, implement, and administer local-area and wide-area networks to satisfy organizational goals
- Resolve 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
- Communicate IT knowledge effectively using a wide range of presentation styles
- Meet organizational goals using effective workforce skills, best practices, and ethical principles

Your Coursework in Computer Networks and Cybersecurity

The major in computer networks and cybersecurity begins with courses designed to build your foundational IT skills. You'll then focus on the network security side of IT, learning Microsoft and Cisco technologies and examining other cybersecurity and digital forensics topics. Specifically, you'll write a proposal to design a network, including a plan to administer and maintain the network; learn how to install and configure advanced Windows server services; implement advanced server infrastructure; and troubleshoot IT problems.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Evaluate, install, configure, maintain, and troubleshoot computer hardware components and operating systems
- Configure and manage Cisco switches within multiprotocol internetworks, including VoIP (voice over Internet protocol), wireless network protocols, and routing protocols
- Manage and troubleshoot features of Windows Server operating systems, including Active Directory, DNS, Group Policy, Desktop Security, Remote Access, Windows Deployment, and User Accounts
- Design, develop, and write appropriate and effective technical documents

INDUSTRY CERTIFICATION

This program can help prepare you for the following certification exams:

- Certified Computer Examiner (CCE)
- Certified Ethical Hacker (CEH)
- Certified Information Systems Security Professional (CISSP)
- Cisco Certified Design Associate (CCDA)
- Cisco Certified Network Associate (CCNA)
- Cisco Certified Network Professional (CCNP)
- CompTIA A+
- CompTIA Linux+
- CompTIA Network+
- CompTIA Security+
- Computer Security Incident Handler (CSIH)

- Linux Server Professional (LPIC-1)
- Microsoft Certified IT Professional (MCITP)
- Microsoft Certified Solutions Expert (MCSE)
- Microsoft Certified Solutions Expert/Microsoft Certified Solutions Associate (MCSE/MCSA)
- Mobile Forensic Certified Examiner (MFCE)

Degree Requirements

A degree with a major in computer networks and 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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (33 CREDITS)

CMIT 202	Fundamentals of Computer Troubleshooting (3)
CMIT 265	Fundamentals of Networking (3)
CMIT 320	Network Security (3)
CMIT 350	Interconnecting Cisco Devices (3)
CMIT 369	Installing and Configuring Windows Server (3)
CMIT 391	Linux System Administration (3)
CMIT 495	Current Trends and Projects in Computer Networks and Security (3)

Any upper-level CMIT courses or CCJS 321 (12)—Focused study in Microsoft, Cisco, network security, or digital forensics recommended, as follows:

Microsoft

CMIT 370	Administering Windows Server
CMIT 371	Configuring Advanced Windows Server Services
CMIT 372	Designing and Implementing a Server Infrastructure
CMIT 373	Implementing an Advanced Server Infrastructure

Cisco

CMIT 450	Designing Cisco Networks
CMIT 451	Implementing Cisco IP Routing
CMIT 452	Implementing Cisco IP Switched Networks
CMIT 453	Troubleshooting and Maintaining Cisco IP Networks

Network Security

CMIT 321	Ethical Hacking
CMIT 370	Administering Windows Server
CMIT 451	Implementing Cisco IP Routing
CMIT 425	Advanced Information Systems Security

Digital Forensics

CCJS 321	Digital Forensics in the Criminal Justice System
CMIT 424	Digital Forensics Analysis and Application

BACHELOR'S DEGREE CURRICULA

CMIT 440	Mobile Forensics
CMIT 460	Network Forensics

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 393	Advanced Technical Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social sciences course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>(prerequisite to later course)</i>
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CMIS 111	Social Networking and Cybersecurity Best Practices (3) <i>or another computing course appropriate to the academic major</i>
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MINOR AND ELECTIVE COURSES (46 CREDITS)

IFSM 301	Foundations of Information Systems Management (3) <i>(recommended)</i>
MATH 140	Calculus I (4) <i>(recommended, especially if you plan to go to graduate school)</i>

Total credits for BS in Computer Networks and Cybersecurity	120
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Careers in Computer Networks and Cybersecurity

- Information security analysts
- Network and computer systems administrators
- Computer network architects
- Computer user support specialists
- Computer network support specialists

Computer Science

You may seek either an academic major or minor in computer science.

Major in Computer Science

Get in demand with a bachelor's degree in computer science.

The most requested major in IT job listings is computer science. With a BS in computer science, you'll be able to plan, design, and optimize computer software and hardware systems for commercial and government environments. This versatile major provides you with a foundation for a career as a software architect or engineer, application software designer, system analyst or programmer, or systems engineer.

What You'll Learn

Through your coursework, you will learn how to

- Identify and respond to emerging technology, models, methodologies, systems, and trends in human/computer interaction, including social networking, gaming, modeling, and simulation

- 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
- 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 solutions to problems

Your Coursework in Computer Science

In your computer science coursework, you'll learn programming; algorithm optimization and enhancement; and the theory, science, and math behind modern computing. Specifically, you learn about Java, C++, OpenGL, Octave, and MATLAB. Your courses will cover data structures and analysis, computer systems and architecture, image and signal processing, and more.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Design, implement, test, debug, and document Java programs using development tools
- Design and implement a "virtual" stringed musical instrument that includes data fields for notes and Boolean fields to determine whether the instrument is tuned or currently playing
- Build realistic graphical 3D worlds, animate characters, and add special effects to games using OpenGL and a programming environment
- Create a Java programming project that uses a concurrent, secure, multi-threaded application

INDUSTRY CERTIFICATION

This program can help prepare you for the following certification exams:

- Microsoft Certified Solutions Expert (MCSE)
- Oracle Certified Java Programmer

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (38 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

MATH 140	Calculus I (4)
CMSC 150	Discrete Structures (3)
MATH 141	Calculus II (4)
CMIS 141	Introductory Programming (3)
CMIS 242	Intermediate Programming (3)
CMIS 310	Computer Systems and Architecture (3)
CMSC 350	Data Structures and Analysis (3)
CMSC 330	Advanced Programming Languages (3)
CMSC 335	Object-Oriented and Concurrent Programming (3)
CMSC 451	Design and Analysis of Computer Algorithms (3)
CMSC 405	Computer Graphics (3)
CMSC 495	Current Trends and Projects in Computer Science (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 393	Advanced Technical Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
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BACHELOR'S DEGREE CURRICULA

HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social sciences course

BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)

NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 115 Pre-Calculus (4)
or both MATH 107 College Algebra and MATH 108 Trigonometry and Analytical Geometry
(prerequisite to later courses)

Computing Courses

IFSM 201 Concepts and Applications of Information Technology (3)
or CMST 301 Digital Media and Society

CMIS 102 Introduction to Problem Solving and Algorithm Design (3)
(related requirement; prerequisite to later course)

MINOR AND ELECTIVE COURSES (41 CREDITS)

Total credits for BS in Computer Science	120
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Minor in Computer Science

The computer science minor complements the skills you gain in your major discipline by providing the foundations for designing and programming computer applications in support of most occupations and developing a process for solving challenging problems.

Courses in the Minor (15 Credits)

A minor in computer science requires the completion of 15 credits in computer science coursework, including the following two-course sequence in programming:

CMIS 141 Introductory Programming (3)
CMIS 242 Intermediate Programming (3)

The remaining 9 credits may be chosen from any upper-level CMSC courses (i.e., courses numbered 300 or above).

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, refer to your major and pp. 8–9.

Careers in Computer Science

- Computer systems analysts
- Computer programmers
- Software developers, applications
- Computer systems engineers/architects
- Computer hardware engineers

Contract Management and Acquisition

You may seek an academic minor in contract management and acquisition.

Minor in Contract Management and Acquisition

The minor in contract management and acquisition complements the skills you gain in your major discipline by integrating concepts from various business disciplines to present the requirements and techniques used in federal contracting and the acquisition of goods and services. Focus is on the successful application of contract management principles and execution of all phases of the contract management process.

Courses in the Minor (15 Credits)

The minor in contract management and acquisition requires the completion of the following courses:

BMGT 339 Introduction to Federal Contracting (3)
BMGT 482 Advanced Contracting (3)
BMGT 372 Supply Chain Management (3)
BMGT 375 Purchasing Management (3)
ACCT 350 Federal Financial Management (3)

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, refer to your major and pp. 8–9.

Criminal Justice

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

Major in Criminal Justice

Protect, serve, and prepare to move into a key position in law enforcement or a federal agency with a bachelor's degree in criminal justice.

Located a stone's throw from the FBI, CIA, and NSA—and the major metropolitan areas of Washington, D.C., and Baltimore, Maryland—UMUC is home to industry leaders who protect cities and the nation from some of our greatest threats. Our criminal justice program can help provide you with an understanding of the nature of crime and the personnel, institutions, and processes that prevent and respond to crime.

What You'll Learn

Through your coursework, you will learn how to

- 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
- Use 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

Your Coursework in Criminal Justice

In your criminal justice coursework, you'll learn both the theory and practice of the criminal justice system, as well as the specifics of criminal behavior, law enforcement, courts, corrections, security, and investigation. Our courses are developed and taught by local law enforcement officials, so you'll benefit from their field-tested knowledge and experience.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Design a security plan for a public service in the community
- Compose a search and seizure application and supporting affidavit
- Critique an analytic report of criminal intelligence

Degree Requirements

A degree with a major in criminal justice 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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (33 CREDITS)

CCJS 100	Introduction to Criminal Justice (3) <i>or CCJS 105 Introduction to Criminology</i>
CCJS 340	Law Enforcement Administration (3)
CCJS 497	Correctional Administration (3)
CCJS 345	Introduction to Security Management (3)
CCJS 350	Juvenile Delinquency (3) <i>or any upper-level CCJS course</i>
CCJS 230	Criminal Law in Action (3)
CCJS 360	Victimology (3) <i>or any upper-level CCJS course</i>
CCJS 380	Ethical Behavior in Criminal Justice (3)
CCJS 341	Criminal Investigation (3)
CCJS 352	Drugs and Crime (3) <i>or any upper-level CCJS course</i>
CCJS 495	Issues in Criminal Justice (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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BACHELOR'S DEGREE CURRICULA

Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 391	Advanced Research Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social sciences course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>or CMST 301 Digital Media and Society</i>
CMIS 111	Social Networking and Cybersecurity Best Practices (3) <i>or another computing course appropriate to the academic major</i>

MINOR AND ELECTIVE COURSES (46 CREDITS)

Total credits for BS in Criminal Justice

120

Minor in Criminal Justice

The criminal justice minor complements the skills you gain in your major discipline by providing a study of crime, law enforcement, courts, corrections, security, and investigative forensics.

Courses in the Minor (15 Credits)

A minor in criminal justice requires the completion of 15 credits of coursework in criminal justice. Any CCJS courses apply. It is recommended that you take CCJS 100 or CCJS 105 as the first course in the minor (if you 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, refer to your major and pp. 8–9.

Careers in Criminal Justice

- Security managers
- Fraud examiners, investigators, and analysts
- Police identification and records officers
- Criminal investigators and special agents
- Intelligence analysts

Cybersecurity

You may seek an academic minor in cybersecurity.

Minor in Cybersecurity

The cybersecurity minor complements the skills you gain in your major discipline by providing a study of the principles, issues, and technologies pertinent to the field of cybersecurity.

Courses in the Minor (15 Credits)

A minor in cybersecurity requires the completion of 15 credits of coursework in cybersecurity. All CSIA and CMIT 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, refer to your major and pp. 8–9.

Cybersecurity Management and Policy

You may seek an academic major in cybersecurity management and policy.

Major in Cybersecurity Management and Policy

Develop the cybersecurity management, policy, governance, and technical skills required to prepare for rapid career growth with our nationally recognized program in cybersecurity management and policy.

In UMUC's bachelor's degree program in cybersecurity management and policy, you can prepare to become a leader in the protection of data. This innovative, world-class program uses a multidisciplinary approach—drawing from fields such as management, law, science, business, technology, and psychology—to provide you with the most current knowledge and skills for protecting critical cyber infrastructure and assets.

UMUC was named a National Center of Academic Excellence in Information Assurance and Cyber Defense Education by the National Security Agency and Department of Homeland Security. Our cybersecurity students frequently take first place in cyber competitions, and our graduates are often recruited by top firms and agencies whose personnel they've met through the program.

What You'll Learn

Through your coursework, you will learn how to

- Protect an organization's critical information and assets by ethically integrating cybersecurity best practices and risk management throughout an enterprise
- Integrate continuous monitoring and real-time security solutions with information collection, sharing, collaboration, and analysis capabilities to improve situational awareness and deployment of countermeasures in industry and government
- Evaluate and assess the use of technology to support cybersecurity goals and objectives
- 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

Your Coursework in Cybersecurity Management and Policy

We've developed our cybersecurity management and policy program in conjunction with top employers to be relevant to your career growth. Industry experts consult on emerging topics, our faculty lend their extensive field experience, and an advisory board of senior executives ensure that you'll train for the highest level of information assurance.

You'll learn the techniques, policies, operational procedures, and technologies that secure and defend information systems in local and more broadly based domains.

Courses include ethics in information technology, security policy analysis, network security, practical applications in cybersecurity management, and emerging technologies, taught by senior staff, managers, and executives in the cybersecurity field, so you'll benefit from their firsthand knowledge and experience.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Write various cybersecurity-related documents, including security policies, disaster recovery plans, and executive briefs
- Analyze standards, best practices, and regulations in the cybersecurity field
- Identify, investigate, and evaluate next-generation and newly emerging technologies that have the potential to support or improve cybersecurity and protect against threats

INDUSTRY CERTIFICATION

This program can help prepare you for the following certification exams:

- CompTIA Network+
- CompTIA Security+
- Systems Security Certified Practitioner (SSCP)

Degree Requirements

A degree with a major in cybersecurity management and policy 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). See p. 9 for information on overall degree requirements.

BACHELOR'S DEGREE CURRICULA

COURSES IN THE MAJOR (33 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

CMIT 265	Fundamentals of Networking (3)
CMIT 320	Network Security (3)
IFSM 304	Ethics in Information Technology (3)
CSIA 310	Cybersecurity Processes and Technologies (3)
CCJS 321	Digital Forensics in the Criminal Justice System (3)
CSIA 350	Cybersecurity in Business and Industry (3)
CSIA 360	Cybersecurity in Government Organizations (3)
CSIA 413	Cybersecurity Policy, Plans, and Programs (3)
CSIA 459	Evaluating Emerging Technologies (3)
CMIT 425	Advanced Information Systems Security (3)
CSIA 485	Practical Applications in Cybersecurity Management (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 393	Advanced Technical Writing (3) <i>(related requirement for major)</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social sciences course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>(related requirement; prerequisite to later course)</i>
CMIS 111	Social Networking and Cybersecurity Best Practices (3) <i>or another computing course appropriate to the academic major</i>

MINOR AND ELECTIVE COURSES (46 CREDITS)

Total credits for BS in Cybersecurity Management and Policy

120

Careers in Cybersecurity Management and Policy

- Computer and information systems managers
- Security management specialists
- Information security analysts
- Business continuity planners

Digital Media and Web Technology

You may seek either an academic major or minor in digital media and web technology.

Major in Digital Media and Web Technology

Unleash your creativity and enhance your technical skills with our digital media and web technology degree.

Follow your interests and prepare for a career in digital design with UMUC's bachelor's degree program in digital media and web technology, which allow you to explore web or digital design.

You'll gain hands-on experience in creating digital works using industry-standard software and incorporating design theory and efficient workflows. You'll be equipped to work in such areas as web design, electronic publishing, motion graphics, multimedia, animation, and graphic design.

What You'll Learn

Through your coursework, you will learn how 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 techniques for scripting and programming
- Apply relevant theories, practices, and principles effectively when designing and developing works in digital media

Your Coursework in Digital Media and Web Technology

In your digital media courses, you'll learn the theories, technologies, techniques, and best practices that govern the effective design of interactive, immersive, and engaging digital media across many different platforms. We'll lead you through the entire design process, from pre-planning to concept design to final publishing. You'll use industry-standard Adobe Creative Suite software, including InDesign, Photoshop, Illustrator, Flash, and After Effects, to create real-world design projects.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Design websites and web applications using HTML5, cascading style sheets, JavaScript, XML, PHP/MySQL, and ColdFusion
- Use Adobe InDesign to create publications for print, web, and mobile devices
- Create a business kit including company logo, letterhead, business card, and envelope for a client
- Create simple animation and motion graphics that featured animated text, digital video, flash animation, and more

Degree Requirements

A degree with a major in digital media and web technology 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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (30 CREDITS)

CMST 290	Introduction to Interactive Design (3)
CMST 295	Fundamentals of Digital Media (3)
CMST 495	Current Trends and Projects in Digital Media and Web Technology (3)

Any upper-level CMST courses (21)—Focused study in web or digital design recommended, as follows:

Web Design

CMST 385	Principles of Web Design and Technology I
CMST 386	Principles of Web Design and Technology II
CMST 325	Image Editing
CMST 320	Illustration Graphics
CMST 388	Fundamentals of JavaScript
CMST 450	Web Development Using XML
CMST 488	Web Application Development Using AJAX

Digital Design

CMST 310	Fundamentals of Electronic Publishing
CMST 311	Advanced Electronic Publishing
CMST 325	Image Editing
CMST 320	Illustration Graphics
CMST 425	Advanced Image Editing
CMST 341	Principles of Multimedia I
CMST 351	Motion Graphics I

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements.

BACHELOR'S DEGREE CURRICULA

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.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing and Communications Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing
WRTG 293 Introduction to Professional Writing (3)
or other writing course
COMM 202 Media and Society (3)
or other communication, writing, or speech course
WRTG 393 Advanced Technical Writing (3)
or other advanced upper-level writing course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course
HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social sciences course
BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)
NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Courses

CMST 301 Digital Media and Society (3)
or IFSM 201 Concepts and Applications of Information Technology

CMIS 111 Social Networking and Cybersecurity Best Practices (3)
or another computing course appropriate to the academic major

MINOR AND ELECTIVE COURSES (49 CREDITS)

Total credits for BS in Digital Media and Web Technology	120
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Minor in Digital Media and Web Technology

The digital media and web technology minor complements the skills you gain in your major discipline by providing a study of the principles, best practices, and technologies that govern the design of digital media.

Courses in the Minor (15 Credits)

A minor in digital media and web technology requires the completion of 15 credits of coursework in computer studies. You must complete either CMST 290 or CMST 295. The remaining credits may be chosen from any CMST courses.

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, refer to your major and pp. 8–9.

Careers in Digital Media and Web Technology

- Web developers
- Multimedia artists and animators
- Graphic designers
- Desktop publishers

Diversity Awareness

You may seek an academic minor in diversity awareness.

Minor in Diversity Awareness

The diversity awareness minor complements the skills you gain in your major discipline by providing an interdisciplinary perspective on diversity in contemporary society, conceptually grounded in social science, to promote and cultivate the inter-cultural awareness and effective communication skills that are necessary in today's professional and social settings.

Courses in the Minor (15 Credits)

A minor in diversity awareness requires the completion of 15 credits of coursework, chosen from the following courses:

ANTH 346	Anthropology of Language and Communication
BEHS 220	Diversity Awareness
BEHS 320	Disability Studies
GERO 311	Gender and Aging
GERO 427	Culture and Aging
PSYC 338	Psychology of Gender
PSYC 354	Cross-Cultural Psychology
PSYC 357	Adulthood and Aging
SOCY 325	The Sociology of Gender
SOCY 423	Race and Ethnicity: A Global Perspective
SOCY 426	Sociology of Religion
SPCH 324	Communication and Gender
SPCH 482	Intercultural Communication

It is recommended that you take BEHS 220 as the first course in the minor (if you 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, refer to your major and pp. 8–9.

East Asian Studies

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

Major in East Asian Studies

Hone your communication skills, cultural knowledge, and historic perspective in this unique degree program in East Asian studies.

One of the only programs of its kind to be offered online, UMUC's East Asian Studies major provides an overview of the history, economics, politics, culture, and languages of the East Asian region, including China, Korea, and Japan. In this program, you'll examine East Asia's rich past and continuing contributions to the global community.

This program is ideal for those who live or work in East Asia, know East Asian languages, or regularly interact with people from East Asian countries.

What You'll Learn

Through your coursework, you will learn how to

- Interpret, communicate, educate, and advise others based on your understanding, research, and analysis of the social, historical, and cultural contexts of East Asia
- Use your knowledge of East Asia to identify, create, facilitate, and promote opportunities for interaction and cooperation between Asia and the global community
- Apply your knowledge of East Asian diversity, values, and expectations to perform in a culturally appropriate way in personal and professional settings
- Write and speak an East Asian language, integrating interpersonal skills and cultural knowledge

Your Coursework in East Asian Studies

Through your courses, you'll gain an understanding of East Asia based on both expanded cultural awareness and scholarly analysis. You'll build a foundation of knowledge that enriches your appreciation of the area while helping you prepare for a range of careers—such as translator, teacher, reporter, analyst, or nonprofit field employee—that require a broad understanding of the culture and region.

BACHELOR'S DEGREE CURRICULA

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Create a presentation to raise awareness and educate others about various aspects of East Asian culture, history, and politics
- Create a presentation in Chinese, Japanese, or Korean that demonstrates an ability to speak, read, and write the language
- Write a research paper about a specific subject using primary source material

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (30 CREDITS)

ASTD 284	Foundations of East Asian Civilization (3)
ASTD 285	Introduction to Modern East Asia (3)
PHIL 348	Religions of the East (3)
ASTD 485	Issues in East Asian Studies (3)

East Asian Language courses (9)—Courses designated CHIN or JAPN and numbered 111, 112, 114, or higher

Upper-level East Asian content courses (9)—ASTD, CHIN, JAPN, KORN, Asian HIST, and Asian GVPT courses and ANTH 417 apply. Focused study in China or Japan recommended, as follows:

China

HIST 480	History of China
ASTD 370	Interpreting Contemporary China
ANTH 417	Peoples and Cultures of East Asia

Japan

HIST 482	History of Japan
JAPN 333	Japanese Society and Culture
ANTH 417	Peoples and Cultures of East Asia

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 391	Advanced Research Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social sciences course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>or CMST 301 Digital Media and Society</i>
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CMIS 111 Social Networking and Cybersecurity
Best Practices (3)
*or another computing course appropriate
to the academic major*

MINOR AND ELECTIVE COURSES (49 CREDITS)

Total credits for BA in East Asian Studies

120

Minor in East Asian Studies

The East Asian studies minor complements the skills you gain in your major discipline by providing an interdisciplinary study of the cultural, historical, political, and contemporary business reality of the Asian/Pacific world.

Courses in the Minor (15 Credits)

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, refer to your major and pp. 8–9.

Careers in East Asian Studies

- Political scientists
- Middle school teachers
- Broadcast news analysts
- Reporters and correspondents
- Interpreters and translators

Economics

You may seek an academic minor in economics.

Minor in Economics

The economics minor complements the skills you gain in your 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.

Courses in the Minor (15 Credits)

A minor in economics requires the completion of the following courses:

ECON 201	Principles of Macroeconomics (3)
ECON 203	Principles of Microeconomics (3)
ECON 305	Intermediate Macroeconomic Theory and Policy (3)
ECON 306	Intermediate Microeconomic Theory (3)
ECON 430	Money and Banking (3)

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, refer to your major and pp. 8–9.

BACHELOR'S DEGREE CURRICULA

Emergency Management

You may seek an academic minor in emergency management.

Minor in Emergency Management

The emergency management curriculum complements the skills you gain in your major discipline by providing knowledge of emergency management, including disaster planning and operations and allocation of limited resources.

Courses in the Minor (15 Credits)

A minor in emergency management requires the completion of the following courses:

EMGT 302	Concepts of Emergency Management (3)
EMGT 304	Emergency Response Preparedness and Planning (3)
EMGT 312	Social Dimensions of Disaster (3)
EMGT 308	Exercise and Evaluation Programs (3)
EMGT 310	Continuity of Operations Planning and Implementation (3)

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, refer to your major and pp. 8–9.

English

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

Major in English

Gain the analytical, critical, and communication skills to help you succeed in graduate study or an in-demand career by pursuing a bachelor's degree in English.

Like other liberal arts majors, a major in English at UMUC offers a solid base of critical thinking on which to build a career or further graduate study. Your degree program can prepare you for jobs in education, law, publishing, journalism, public relations, business, or management. If you are intrigued by the study of language and literature, the English major may be right for you.

What You'll Learn

Through your coursework, you will learn how to

- Interpret literature and apply language in a thoughtful and articulate way to reflect on the human condition in today's world
- Apply models from literature that reflect diversity and cultural competence to promote fair and inclusive interactions in the workplace and society
- Apply models from literature to ethical leadership and strategic management in for-profit and nonprofit organizations
- Access, research, and analyze information using technologies and library resources
- Create professional written and oral communications
- Provide feedback on grammatical and stylistic conventions

Your Coursework in English

In the English major, you'll study literature and writing, improving your cultural literacy and your ability to recognize and appreciate great works of literature. By following a critical approach to the study of literature, you'll learn to articulate ideas with clarity, conduct original research, and convey complex information in logical, accessible language.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Use critical thinking skills and primary texts to write letters, dialogue, presentations, and other assignments using examples and arguments from books and plays studied in class
- Create a Facebook page for an author like Shakespeare

- Create a digital narrative illustrating the differences between English language in Chaucer's time and the present
- Add a voiceover to a map of different regions of the United States, illustrating how pronunciation changes throughout the region

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (33 CREDITS)

ENGL 240	Introduction to Fiction, Poetry, and Drama (3)
ENGL 303	Critical Approaches to Literature (3)
ENGL 386	History of the English Language (3) <i>or any upper-level ENGL course</i>
ENGL 310	Renaissance Literature
ENGL 311	17th- and 18th-Century British Literature (3) <i>or any upper-level ENGL course</i>
ENGL 312	19th-Century British Literature (3) <i>or any upper-level ENGL course</i>
ENGL 430	American Literature: Discovery to 1914 (3)
ENGL 433	Modern American Literature: 1914–1945 (3)
ENGL 441	Postmodern American Literature: 1945 to 1999 (3) <i>or any upper-level ENGL course</i>
ENGL 406	Seminar in Shakespeare Studies (3)
ENGL 495	Advanced Seminar in English Language, Literature, and Writing (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 391	Advanced Research Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social sciences course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>or CMST 301 Digital Media and Society</i>
CMIS 111	Social Networking and Cybersecurity Best Practices (3) <i>or another computing course appropriate to the academic major</i>

MINOR AND ELECTIVE COURSES (46 CREDITS)

Total credits for BA in English

120

BACHELOR'S DEGREE CURRICULA

Minor in English

The English minor complements the skills you gain in your major discipline by providing exposure to literary analysis, critical thinking and reading, and the study of the relationship of literature to contemporary intellectual issues.

Courses in the Minor (15 Credits)

A minor in English requires the completion of the following courses:

ENGL 240	Introduction to Fiction, Poetry, and Drama (3)
ENGL 303	Critical Approaches to Literature (3)
ENGL 310	Renaissance Literature (3)
ENGL 433	Modern American Literature: 1914–1945 (3)
ENGL 406	Seminar in Shakespeare Studies (3)

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, refer to your major and pp. 8–9.

Careers in English

- Marketing managers
- Public relations and fundraising managers
- Secondary school teachers
- Reporters and correspondents
- Copywriters

Environmental Management

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

Major in Environmental Management

Tackle emergencies and manage resources to avert disaster by pursuing a bachelor's degree in environmental management.

Environmental issues like global warming, air quality, and water scarcity are central to the safety, health, and security of our nation and of its citizens. In UMUC's award-winning, hands-on environmental management program, you'll learn to plan, implement, and control all facets of environmental management, using professional models and techniques.

What You'll Learn

Through your coursework, you will learn how to

- Identify and evaluate current and future air, water, land, and energy resource needs to make recommendations for sustainable solutions and practices
- Ensure compliance with safety, health, and environmental regulations and policies in every activity and aspect of an environmental management plan, procedure, and operation
- Apply scientific knowledge and principles, quantitative methods, and technology to think critically and solve complex environmental management problems
- Communicate orally and in writing on environmental issues, principles, and practices in a clear, well-organized manner that effectively informs or persuades 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 environmental safety

Your Coursework in Environmental Management

In your environmental management courses, you'll learn how to mitigate environmental management issues, including air pollution, water pollution, solid waste, and hazardous waste. You'll also have the chance to use software tools and practice key technologies related to risk management, geographic information systems, and environmental economics.

The curriculum provides an interdisciplinary approach toward air, land, and water environmental management; pollution control; policies; regulations; and environmental health and safety.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Conduct risk assessments; collect, analyze, and interpret data; and characterize potential adverse effects of chemical, physical, and biological agents
- Evaluate environmental and health hazards to formulate strategies for controlling hazards
- Anticipate, recognize, and evaluate occupational hazards

Degree Requirements

A degree with a major in environmental 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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (33 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

STAT 200	Introduction to Statistics (3)
ENMT 301	Environment and Ecosystems Principles (3)
BIOL 301	Human Health and Disease (3)
ENMT 303	Environmental Regulations and Policy (3)
ENMT 321	Environmental Health (3)
ENMT 322	Occupational Health and Safety (3)
ENMT 340	Environmental Technology (3)
ENMT 495	Global Environmental Management Issues (3)

Upper-level ENMT courses (9)—Focused study in toxicology and hazard control or sustainability recommended, as follows:

Toxicology and Hazard Control

ENMT 310	Hazard Management in Emergency Response Operations
ENMT 380	Air Quality Management
ENMT 390	Risk Assessment and Principles of Toxicology

Sustainability

ENMT 360	Introduction to Urban Watersheds
ENMT 365	Individuals, Society, and Environmental Sustainability
ENMT 405	Pollution Prevention Strategies

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 394	Advanced Business Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social sciences course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
CHEM 297	Environmental Chemistry (3) <i>(related requirement for the major)</i>

Math Course

MATH 115	Pre-Calculus (3) <i>(related requirement for the major)</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>or CMST 301 Digital Media and Society</i>
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BACHELOR'S DEGREE CURRICULA

CMIS 111 Social Networking and Cybersecurity Best Practices (3)
or another computing course appropriate to the academic major

MINOR AND ELECTIVE COURSES (46 CREDITS)

Total credits for BS in Environmental Management	120
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Minor in Environmental Management

The environmental management minor complements the skills you gain in your major discipline by providing an interdisciplinary study of multimedia (air, water, land) environmental management and related issues on a fundamental practical and global level.

Courses in the Minor (15 Credits)

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 you take ENMT 301 as the first course in the minor (if you 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, refer to your major and pp. 8–9.

Careers in Environmental Management

- Chief sustainability officers
- Emergency management directors
- Environmental compliance inspectors
- Environmental scientists and specialists, including health
- Occupational health and safety specialists

Finance

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

Major in Finance

Attain the analytical skills and knowledge you need to enter a growing and lucrative field by pursuing a bachelor's degree in finance.

In UMUC's award-winning bachelor's degree program in finance, you'll develop the expertise to apply finance theory to real-world situations. Our program combines a foundation in the principles of business, economics, and accounting with an in-depth focus on the details of finance and financial management via intensive case studies.

A degree in finance can equip you for jobs in contract management, budgeting, corporate and government financial management, investments, portfolio analysis and management, financial analysis, financial planning, banking, risk management, and insurance.

What You'll Learn

Through your coursework, you will learn how to

- Prepare, analyze, and interpret financial information
- Apply financial and economic theories to make sound business decisions
- Apply the basic principles of security markets to 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
- 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

Your Coursework in Finance

In your finance courses, you'll study business finance, financial management, investments, security analysis, strategic risk management, and valuation. You'll complete an extensive case study based on real companies and apply financial theory to your personal finances by completing a financial plan with goals; investment strategies; and insurance, retirement, and estate planning.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Design and track an investment portfolio
- Create an investment policy statement
- Complete a case study of a company valuation process
- Complete case studies of individual financial planning scenarios
- Analyze real companies' financial statements, including cost of capital, liquidity, profitability, debt, and market ratios
- Create a pro forma financial, budget, and cash flow statement

INDUSTRY CERTIFICATION

This program can help prepare you for the following certification exams:

- Certified Management Accountant (CMA)
- Certified Financial Planner (CFP)

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (36 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

BMGT 364	Management and Organization Theory (3)
ACCT 220	Principles of Accounting I (3)
STAT 200	Introduction to Statistics (3)
ACCT 221	Principles of Accounting II (3)
FINC 330	Business Finance (3)
FINC 340	Investments (3)
FINC 351	Risk Management (3)
FINC 421	Financial Analysis (3)
FINC 430	Financial Management (3)
FINC 440	Security Analysis and Valuation (3)
ECON 430	Money and Banking (3)
FINC 495	Contemporary Issues in Finance Practice (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 394	Advanced Business Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 201	Principles of Macroeconomics (3) <i>(related requirement for major)</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>(prerequisite to later course)</i>
IFSM 300	Information Systems in Organizations (3) <i>(related requirement for major)</i>

MINOR AND ELECTIVE COURSES (43 CREDITS)

ECON 203	Principles of Macroeconomics (3) <i>(related requirement for major)</i>
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Total credits for BS in Finance

120

BACHELOR'S DEGREE CURRICULA

Minor in Finance

The finance minor complements the skills you gain in your major discipline by providing a study of the institutions, theory, and practice associated with the allocation of financial resources within the private sector.

Courses in the Minor (15 Credits)

A minor in finance requires the completion of 15 credits of coursework in finance. All FINC courses apply. It is recommended that you take FINC 330 and 340 as the first courses in the minor (if you 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, refer to your major and pp. 8–9.

Careers in Finance

- Personal financial advisors
- Financial examiners
- Insurance sales agents

Fire Service Administration

You may seek an academic minor in fire service administration.

Minor in Fire Service Administration

The fire service administration minor complements the skills you gain in your 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.

Courses in the Minor (15 Credits)

A minor in fire service administration requires the completion of the following courses:

FSCN 302	Fire and Emergency Services Administration (3)
FSCN 304	Personnel Management for Fire and Emergency Services (3)

FSCN 305	Fire Prevention Organization and Management (3)
FSCN 413	Community Risk Reduction for the Fire and Emergency Services (3)
FSCN 416	Emergency Services Training and Education (3)

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, refer to your major and pp. 8–9.

Forensics

You may seek an academic minor in forensics. A related academic major is available in investigative forensics (p. 54).

Minor in Forensics

The minor in forensics complements the skills you gain in your 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.

Courses in the Minor (15 Credits)

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 you take CCJS 101 and 234 as the first courses for the minor (if you 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, refer to your 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. If you are not studying in UMUC Europe or UMUC Asia, you should not select this major.

Major in General Studies

The general studies major allows you to draw from various disciplines that provide a body of knowledge appropriate to an area of interest that you identify (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.

What You'll Learn

Through your coursework, you will learn how 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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (30 CREDITS)

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, you 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. Consult an

advisor about your eligibility for pursuing the major and about the requirements and procedure for submitting a proposal.

Gerontology and Aging Services

You may seek either an academic major or minor in gerontology and aging services.

Major in Gerontology and Aging Services

Join the skyrocketing labor force needed to meet the health care challenge of an aging population by pursuing a degree in gerontology and aging services.

The aging baby boomer population is driving some of the fastest growth in health care jobs in the country. This group has enormous clout across many industries, including health, finance, marketing, policy, housing, transportation, and education. In fact, by 2030, when the last baby boomers turn 65, one in five Americans will be 65 or older.

In the gerontology and aging services program at UMUC, you'll gain a foundation in the physiological, social, and psychological aspects of aging, coupled with an understanding of programs, services, and policies related to aging and older adults, so that you can care for and serve this population.

Your degree can help prepare you for any number of careers related to gerontological services, such as program manager, program and policy analyst, services developer, housing and facilities manager, and more. This program is ideal for individuals who already have some health care experience or experience with the aging population. This is also a great degree for those looking to make a career change into a secure field.

What You'll Learn

Through your coursework, you will learn how to

- Access, interpret, and apply research findings related to biological, psychological, and social processes in the context of aging
- Analyze the impact of 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 knowledge to work with older adults in a chosen area of practice
- Practice within the legal and ethical standards of the aging services field

BACHELOR'S DEGREE CURRICULA

Your Coursework in Gerontology and Aging Services

In your gerontology courses, you'll develop the ability to investigate and discuss the psychosocial, health, and political aspects of aging in contemporary society; develop effective strategies for health promotion and service implementation for older adults; and learn to work in an ethically responsible and professional manner with older adults and aging services professionals.

You'll also complete a 3-credit internship during which you'll work in a community-based placement for 15 weeks, applying your knowledge from the classroom to real-world settings. UMUC has formed relationships with several internship sites; however, you may seek placements in any industry or organization that serves older adults.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Design a health promotion campaign to promote wellness among older adults
- Analyze case studies of aging services to identify key problems and propose reasonable solutions
- Consider how their own aging process will be affected by issues related to work and retirement, health care, public policy, caregiving, and ageism

Degree Requirements

A degree with a major in gerontology and aging services 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 15 credits in the major must be earned in upper-level courses (numbered 300 or above). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (36 CREDITS)

STAT 200	Introduction to Statistics (3)
GERO 100	Contemporary Issues in Aging (3)
GERO 301	Service/Program Management (3)
GERO 302	Health and Aging (3)
GERO 306	Programs, Services, and Policies (3)
GERO 311	Gender and Aging (3)
GERO 320	Psychosocial Aspects of Aging (3)
GERO 338	Health Promotion in Older Adults (3)
GERO 342	Long-Term Care Administration (3)
GERO 390	The Business of Aging (3)
GERO 427	Culture and Aging (3)
GERO 486A	Workplace Learning in Gerontology and Aging Services (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing and Communications Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing

WRTG 293 Introduction to Professional Writing (3)
or other writing course

COMM 202 Media and Society (3)
or other communication, writing, or speech course

WRTG 391 Advanced Research Writing (3)
or other advanced upper-level writing course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course

HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social science course

BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)

NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Courses

IFSM 201 Concepts and Applications of Information Technology (3)
or CMST 301 Digital Media and Society

CMIS 111 Social Networking and Cybersecurity
Best Practices (3)
*or another computing course appropriate to the
academic major*

MINOR AND ELECTIVE COURSES (43 CREDITS)

Total credits for BS in Gerontology and Aging Services 120

Minor in Gerontology and Aging Services

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

Courses in the Minor (15 Credits)

A minor in gerontology and aging services requires the completion of 15 credits of coursework in gerontology. BEHS 380 and all GERO courses apply. It is recommended that you take GERO 100 as the first course in the minor (if you 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, refer to your major and pp. 8–9.

Careers in Gerontology and Aging Services

- Recreational therapists
- Social science research assistants
- Health educators
- Real estate sales agents

Graphic Communication

You may seek an academic major in graphic communication.

Major in Graphic Communication

Make your mark in graphic communications with a major that allows you to get paid for your creativity.

UMUC's graphic communication major is a portfolio-intensive program that can help you master the skills and technology to compete in today's rapidly changing visual arts and communication environment. With a graphic design degree, along with an updated portfolio aimed toward your ideal clients, you can apply your creative streak toward a career in business, government, or industry as a graphic designer, manager, or communications specialist.

What You'll Learn

Through your coursework, you will learn how to

- Produce effective visual communications by applying principles of composition, layout, color theory, and context
- Plan, design, and create interactive solutions, such as user interfaces, motion graphics, mobile applications, and web designs
- Use professional, analytical, collaborative, and technical design skills to support team goals, roles, and responsibilities
- Define and direct creative strategy in a business environment by combining scope, messaging, and evaluation of success in an overarching design campaign

Your Coursework in Graphic Communication

In the graphic communication major, you'll receive training in graphic art and design, computer graphics, communication, business-oriented writing, and publication. You'll become well-versed in the language of design and adept at using the Adobe Suite of software, including Photoshop, Illustrator, InDesign, Premiere, After Effects, and Flash.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Create a portfolio to demonstrate work to potential employers
- Develop a business plan for a communication arts business

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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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (33 CREDITS)

GRCO 100	Introduction to Graphic Communication (3)
ARTT 110	Introduction to Drawing (3)
ARTT 120	Design I: Arrangement and Color (3)
ARTT 210	Intermediate Drawing (3)
GRCO 230	Typography and Layout (3)
GRCO 350	Intermediate Graphic Communication: Portfolio Development (3)
GRCO 354	Digital Media (3)
GRCO 355	Digital Media II: Time and Motion (3)
GRCO 450	Advanced Graphic Communication (3)
GRCO 479	Motion Graphics (3)
GRCO 495	Graphic Communication Portfolio (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 391	Advanced Research Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
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HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>
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Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social science course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>or CMST 301 Digital Media and Society</i>
CMIS 111	Social Networking and Cybersecurity Best Practices (3) <i>or another computing course appropriate to the academic major</i>

MINOR AND ELECTIVE COURSES (46 CREDITS)

Total credits for BA in Graphic Communication	120
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Careers in Graphic Communication

- Marketing managers
- Art directors
- Multimedia artists and animators
- Graphic designers

Health Services Management

You may seek either an academic major or minor in health services management.

Major in Health Services Management

Advance in one of the country's fastest-growing job sectors with a degree in health services management.

With the Affordable Care Act, the advent of electronic health records, and the aging baby boomer demographic, the health care sector is growing rapidly, and occupations related to health care are among the fastest-growing in the country. The robust growth of positions in health services management will generate substantial opportunities for individuals with the right leadership skills.

A major in health services management can provide you with grounding in the core knowledge and competencies for effective management in the dynamic health care environment, teaching you to think comprehensively and strategically about health care trends so you can lead innovation.

What You'll Learn

Through your coursework, you will learn how to

- Exercise sound business and financial management principles in health care settings through process mapping and strategic planning
- Apply technological advances and emerging trends in the U.S. health care system to achieve organizational goals and practices
- Identify, analyze, and evaluate quantitative and qualitative health care data and information for effective decision making in various health care settings
- Evaluate legal and ethical issues associated with the planning and delivery of health care services
- Analyze policies related to health care management

Your Coursework in Health Services Management

Through your health services management coursework, you'll examine all the various aspects of management—finance, economics, marketing, facilities management, and strategic planning—from a health care perspective. You'll also explore information systems, ethical issues, and data analysis.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Conduct a quantitative analysis project, which includes developing a hypothesis, conducting a literature review, developing a database description, and conducting data analysis, for a health care topic of the student's choice
- Participate in a group project in which students assume the roles of key members of a health care management team (chief financial officer, chief of medical services, marketing manager, etc.) to manage a problem
- Propose solutions to issues posed by case studies and present and defend these proposals in class
- Analyze failures in preventative measures that might lead to critical problems for a health care team
- Develop and write a research paper on such issues as mandatory reporting of child abuse or HIV or the proper treatment of environmental hazards

Degree Requirements

A degree with a major in health services management requires the 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 18 credits in the major must be earned in upper-level courses (numbered 300 or above). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (33 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

STAT 200	Introduction to Statistics (3)
HMGT 300	Introduction to the U.S. Health Care Sector (3)
HMGT 310	Health Care Policies (3)
HMGT 320	Management in Health Care Organizations (3)
HMGT 322	Health Care Financial Management (3)
HMGT 335	Health Care Marketing (3)
HMGT 372	Legal and Ethical Issues in Health Care (3)
HMGT 400	Research and Data Analysis in Health Care (3)
HMGT 420	Management of Health Care Facilities (3)
HMGT 435	Health Care Economics (3)
HMGT 495	Strategic Planning and Leadership in Health Care (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. Consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications,

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arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing and Communications Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing
WRTG 293 Introduction to Professional Writing (3)
or other writing course
COMM 202 Media and Society (3)
or other communication, writing, or speech course
WRTG 394 Advanced Business Writing (3)
or other advanced upper-level writing course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course
HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social science course
BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)
NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Courses

IFSM 201 Concepts and Applications of Information Technology (3)
(prerequisite to later course)
IFSM 305 Information Systems in Health Care Organizations (3)
(related requirement for major)

MINOR AND ELECTIVE COURSES (46 CREDITS)

Total credits for BS in Health Services Management

120

Minor in Health Services Management

The minor in health services management complements the skills you gain in your major discipline by enhancing the knowledge, skills, and competencies required by the changing health services environment. The minor covers a wide range of topics designed to help you deal with the challenges of management and leadership in this dynamic field.

Courses in the Minor (15 Credits)

A minor in health services management requires the completion of 15 credits of coursework in health services management, chosen from any HMGD courses and GERO 342. It is recommended that you take HMGD 300 as the first course in the minor (if you 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, refer to your major and pp. 8–9.

Careers in Health Services Management

- Administrative services managers
- Medical and health services managers
- Social and community service managers

History

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

Major in History

Strengthen your research and writing skills; learn to think critically; and prepare for a future in politics, law, journalism, or education by pursuing a bachelor's degree in history.

Like other liberal arts majors, a major in history offers a solid base of critical thinking on which to build a career or further graduate study. Your degree could prepare you for teaching history or social studies; taking entry-level positions in public history by working in archives, historic sites, museums, and galleries; or pursuing graduate-level study in history or law and public policy.

One of the very first schools to offer a degree program in history online, UMUC brings you nearly two decades of experience in teaching history in an online environment. Plus, if you're based in the Washington, D.C., area, you'll have myriad opportunities to find internships and part-time and full-time jobs in the field via public institutions and federal positions. Our alumni have gone on to work at such agencies as the National Archives and the National Park Service.

What You'll Learn

Through your coursework, you will learn how to

- Research, interpret, and present historical knowledge
- Write and speak clearly and appropriately about historical information for diverse audiences
- Engage in history as a moral and ethical practice, recognizing a wide range of backgrounds and perspectives
- Apply historical precedents to contemporary life and develop self-reflection
- Achieve a deep understanding of the different peoples, events, and cultures that have shaped human civilization

Your Coursework in History

In the history curriculum, you can study a range of historical eras and geographical areas, including China, Japan, wartime Europe, and the United States. You'll also dig into research and writing, learning how to lay the groundwork for and eventually complete a substantial original historical research project suitable for presentation or publication.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Interpret current events and ideas in a historic context
- Focus on the ways in which race, class, ethnicity, and gender have shaped the varied experiences of U.S. citizens
- Examine the art, religion, and literature of civilizations of various time periods and locations
- Study World War II and other major conflicts from a variety of perspectives
- Research, write about, and present the results of a project on a chosen topic

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (33 CREDITS)

HIST 115	World History I (3) <i>or HIST 141 Western Civilization I</i>
HIST 116	World History II (3) <i>or HIST 142 Western Civilization II</i>
HIST 156	U.S. History to 1865 (3)
HIST 157	U.S. History Since 1865 (3)
HIST 289	Historical Methods (3)
HIST 309	Historical Writing (3)
HIST 495	Senior Thesis in History (3)

Upper-level HIST courses (12 credits—Focused study in U.S. or world history recommended, as follows:

U.S. History

HIST 316L	American West
HIST 365	Recent America: 1945 to the Present
HIST 377	U.S. Women's History: 1870 to 2000
HIST 461	African American History: 1865 to the Present

World History

HIST 326	Roman Republic
HIST 337	Europe's Bloodiest Century
HIST 392	History of the Contemporary Middle East
HIST 480	History of China to 1912

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 391	Advanced Research Writing (3) <i>or other advanced upper-level writing course</i>

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Arts and Humanities Courses

- HIST 125 Technological Transformations (3)
or other historical perspective course
- HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

- ECON 103 Economics in the Information Age (3)
or other behavioral and social science course
- BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

- BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)
- NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

- MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Courses

- IFSM 201 Concepts and Applications of Information Technology (3)
or CMST 301 Digital Media and Society
- CMIS 111 Social Networking and Cybersecurity Best Practices (3)
or another computing course appropriate to the academic major

MINOR AND ELECTIVE COURSES (46 CREDITS)

Total credits for BA in History

120

Minor in History

The history minor complements the skills you gain in your major discipline by offering a historical perspective and by helping you to develop critical thinking and an appreciation of the major contributions of various events and individuals to human civilization.

Courses in the Minor (15 Credits)

A minor in history requires the completion of 15 credits of coursework in history, as follows:

- A 100-level HIST course
(Courses counted toward this requirement include HIST 115, 116, 141, 142, 156, and 157.)
- HIST 289 Historical Methods
- Any 9 credits in upper-level HIST courses

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, refer to your major and pp. 8–9.

Careers in History

- Public relations and fundraising managers
- Market research analysts and marketing specialists
- Middle school teachers
- Secondary school teachers
- Public relations specialists

Homeland Security

You may seek an academic minor in homeland security.

Minor in Homeland Security

The homeland security minor complements the skills you gain in your major discipline by providing knowledge of the concepts of domestic and international security.

Courses in the Minor (15 Credits)

A minor in homeland security requires the completion of the following courses:

- HMLS 302 Introduction to Homeland Security (3)
- HMLS 406 Legal and Political Issues of Homeland Security (3)
- HMLS 408 Infrastructure in Homeland Security (3)
- HMLS 414 Homeland Security and Intelligence (3)
- HMLS 416 Homeland Security and International Relations (3)

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, refer to your major and pp. 8–9.

Humanities

You may seek an academic major in humanities.

Major in Humanities

Broaden your horizons and gain a critical understanding of the world through a comparative study of the ideas and values of cultures by pursuing a humanities degree.

Like other liberal arts majors, a major in humanities offers a solid base of critical thinking on which to build a career or further study. This major will broaden your understanding of yourself and your interaction with the world and provide a perspective on cultural and intellectual heritage while offering tools to use that knowledge in the real world.

You'll explore how individuals and groups understand their existence, their place within their cultures, and their responsibility to others and the physical world. The skills and values you'll learn are applicable to careers in fields as varied as education, publishing, journalism, advertising, sales, law, management, human resources, and insurance, as well as in museums and other nonprofit organizations.

What You'll Learn

Through your coursework, you will learn how to

- Plan, communicate, and implement coherent and justifiable practices that improve human conditions
- Analyze ideas critically and defend recommendations for improving the conditions of society
- Act in a personally and socially responsible manner, recognizing the complexity and diversity of the human experience
- Identify and use technology to research, collect, analyze, and interpret data and effectively communicate information that educates and influences others

Your Coursework in Humanities

The major in humanities offers an interdisciplinary curriculum in which you'll develop the analysis and communication skills that employers value. You'll be immersed in a multidisciplinary study of global culture as you analyze art, philosophy, literature, religion, film, theater, music, and technology.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Choose a political, economic, or cultural issue or trend and study how it developed from the 1970s to the present; examples have included the legalization of marijuana, same-sex marriage, and the conservative movement
- Choose a specific Greek sculpture and write a script in first person in which the sculpted figure talks to a present-day audience about the sculpture's life, accomplishments, and experiences

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (33 CREDITS)

HUMN 100	Introduction to Humanities (3)
PHIL 100	Introduction to Philosophy (3)
PHIL 140	Contemporary Moral Issues (3)
HIST 115	World History I (3) or HIST 116 World History II or HIST 141 Western Civilization I or HIST 142 Western Civilization II
MUSC 210	Music as Cultural Expression (3) or any level MUSC course
ARTH 372	History of Western Art 1 (3) or any upper-level ARTH course
PHIL 304	Contemporary Social Justice Issues (3) or any upper-level PHIL course
HUMN 351	Myth in the World (3) or any upper-level HUMN course
PHIL 349	Religions of the West (3) or any upper-level PHIL course
ENGL 406	Seminar in Shakespeare Studies (3) or any upper-level ENGL course
HUMN 495	Humanities Seminar (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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, biologi-

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cal and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing and Communications Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing
WRTG 293 Introduction to Professional Writing (3)
or other writing course
COMM 202 Media and Society (3)
or other communication, writing, or speech course
WRTG 391 Advanced Research Writing (3)
or other advanced upper-level writing course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course
HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social science course
BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)
NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Courses

IFSM 201 Concepts and Applications of Information Technology (3)
or CMST 301 Digital Media and Society
CMIS 111 Social Networking and Cybersecurity Best Practices (3)
or another computing course appropriate to the academic major

MINOR AND ELECTIVE COURSES (46 CREDITS)

Total credits for BA in Humanities

120

Careers in Humanities

- Public relations and fundraising managers
- Human resources managers
- Human resources specialists
- Middle school teachers
- Public relations specialists

Human Resource Management

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

Major in Human Resource Management

Enhance your leadership capabilities, grow your people skills, and increase your company's bottom line by pursuing a bachelor's degree in human resource management.

With a degree in human resource management from UMUC, you'll find employment opportunities in nearly every industry. Our bachelor's degree program is perfect for those who have some experience in HR but don't have the degree, as well as those who want to transition into the HR profession.

You'll gain a comprehensive understanding of human resource functions—such as resource planning; recruitment, selection, placement, and orientation of employees; training and career development; labor relations; performance appraisal and rewards programs; and development of personnel policies and procedures—in private- and public-sector settings. Additionally, you'll explore the ways that human behavior, laws, labor relations, and diversity issues can intersect and affect a company's culture and ultimately its progress.

What You'll Learn

Through your coursework, you will learn how to

- Apply business knowledge, reflective practices, and ethical leadership skills that drive learning and self-improvement
- Apply knowledge of human behavior, labor relations, and current laws and regulations to produce a working environment that is safe, fair, and compliant with regulations
- Help create a culture in which all employees are motivated and valued
- Create, implement, and assess training, development, and rewards programs that foster employee and organizational learning and development

- Recognize the diversity of cultures and worldviews that inform human behavior and respond constructively to 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

Your Coursework in Human Resource Management

UMUC works closely with the federal government and the Society of Human Resource Management to align courses in the human resource management program with employers' expectations and required competencies, so the program will teach you the exact skills employers tell us they want.

You'll study management and organization theory, organizational behavior and development approaches, interpersonal skill development, and employment law.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Identify and diagnose problems within a real organization using case studies and propose management principles to improve the situation
- Develop and conduct a training needs assessment and an appropriate training program plan, including a budget and schedule, based on organizational need
- Design a rewards program to motivate employees, using benefits such as stock options and cash incentives
- Practice using skills such as negotiation, facilitation, mediation, and arbitration to manage conflicts

INDUSTRY CERTIFICATION

This program can help prepare you for the following certification exams:

- Professional in Human Resources (PHR)
- Senior Professional in Human Resources (SPHR)
- Global Professional in Human Resources (GPHR)

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (36 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

HRMN 300	Human Resource Management (3)
HRMN 302	Organizational Communication (3)
HRMN 362	Labor Relations (3)
HRMN 367	Organizational Culture (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)
BMGT 364	Management and Organization Theory (3)
FINC 331	Finance for the Nonfinancial Manager (3)
HRMN 408	Employment Law for Business (3)
HRMN 467	Global Human Resource Management (3)
HRMN 495	Contemporary Issues in Human Resource Management Practice (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 394	Advanced Business Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course (discipline must differ from first)</i>

BACHELOR'S DEGREE CURRICULA

Behavioral and Social Sciences Courses

- ECON 103 Economics in the Information Age (3)
or other behavioral and social science course
- BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

- BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)
- NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

- MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Courses

- IFSM 201 Concepts and Applications of Information Technology (3)
(prerequisite to later course)
- IFSM 300 Information Systems in Organizations (3)
(related requirement for the major)

MINOR AND ELECTIVE COURSES (43 CREDITS)

Total credits for BS in Human Resource Management 120

Minor in Human Resource Management

The human resource management minor complements the skills you gain in your 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.

Courses in the Minor (15 Credits)

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 you take HRMN 300 and 400 for the minor (if you have not already applied the courses 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, refer to your major and pp. 8–9.

Careers in Human Resource Management

- Human resources managers
- Training and development managers
- Equal opportunity representatives and officers
- Human resources specialists
- Training and development specialists

Information Systems Management

You may seek either an academic major or minor in information systems management.

Major in Information Systems Management

Secure a job managing systems and IT personnel with a bachelor's degree in information systems management.

Information systems management is a critical part of the strategic decision-making process in virtually all of today's public and private organizations. That means managers who can lead the teams that integrate information systems with general business processes are in high demand.

Developed by chief information officers and other high-level IT professionals, the bachelor's degree program in information systems management at UMUC is well suited for those looking to move into a management position and bridge the gap between an organization's functional users and technical developers.

This major will help prepare you to pursue a career as an information systems manager or supervisor, system analyst, functional lead or liaison, IT project manager, or information assurance manager.

What You'll Learn

Through your coursework, you will learn how to

- Evaluate, select, and apply analytical and measurement methods/tools and system development life-cycle methodologies to meet organizational needs
- Research, assess, recommend, select, and implement information technology that aligns with organizational needs, provides continuity, and meets business objectives
- Communicate effectively orally, visually, and in writing to determine stakeholders' business requirements, explain how the requirements will be met, and provide ongoing information

- Protect organizations' critical information and assets responsibly 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

Your Coursework in Information Systems Management

In the information systems management major, your coursework will teach you how to conceptualize, implement, and manage high-quality, secure information systems. The curriculum, which is kept updated, relevant, and accurate with input from IT employers, focuses on the methods, concepts, and practical applications of information systems in the workplace. You'll acquire an integrated skill set that includes a deep understanding of how technology fits within a company or organization.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Identify business processes that would benefit from implementation of an information technology solution
- Demonstrate how IT could improve the process, productivity, and competitive positioning of a given organization
- Build a full IT business case for an IT solution, including justifications and portfolio management
- Conduct a cost-benefit analysis to justify organizational expenditures for IT systems

INDUSTRY CERTIFICATION

This program can help prepare you for the following certification exams:

- Certified Associate in Project Management (CAPM)
- Project Management Professional (PMP)
- PMI Agile Certified Practitioner (PMI-ACP)

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (33 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

IFSM 300	Information Systems in Organizations (3)
IFSM 301	Foundations of Information Systems Management (3)
IFSM 304	Ethics in Information Technology (3)
IFSM 310	Software and Hardware Concepts (3)
CMIS 320	Relational Database Concepts and Applications (3)
IFSM 311	Enterprise Architecture (3)
IFSM 370	Telecommunications in Information Systems (3)
IFSM 438	Information Systems Project Management (3)
IFSM 461	Systems Analysis and Design (3)
IFSM 432	Business Continuity Planning (3)
IFSM 495	Trends and Practical Applications in Information Systems (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 393	Advanced Technical Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course (discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social science course</i>
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BACHELOR'S DEGREE CURRICULA

BEHS 103 Technology in Contemporary Society (3)
*or other behavioral and social science course
(discipline must differ from first)*

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)

NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
*or other 3-credit MATH course at or above the level
of college algebra*

Computing Courses

IFSM 201 Concepts and Applications of Information
Technology (3)
(prerequisite to later course)

CMIS 102 Introduction to Problem Solving and Design
*or other programming course
(related requirement for the major)*

MINOR AND ELECTIVE COURSES (46 CREDITS)

Total credits for BS in Information Systems Management **120**

Minor in Information Systems Management

The information systems management minor complements the skills you gain in your major discipline by helping you develop your abilities to conceptualize and manage the design and implementation of high-quality information systems.

Courses in the Minor (15 Credits)

A minor in information systems management requires the completion of 15 credits of coursework in information systems management. All IFSM 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, refer to your major and pp. 8–9.

Careers in Information Systems Management

- Chief executives
- Computer and information systems managers
- Security management specialists
- Computer systems analysts
- Computer systems engineers/architects

Investigative Forensics

You may seek an academic major in investigative forensics. A related minor is available in forensics (p. 40).

Major in Investigative Forensics

Become fluent in the language of crime scene investigation for a career in civil or criminal justice by pursuing a degree in investigative forensics.

A key element within the field of criminal investigation today is the work of forensics specialists—the people who gather, process, and report on evidence from crime scenes—in discovering the facts of a case. The role of investigative forensics is also expanding within the field of civil justice. UMUC's program in investigative forensics is based on national guidelines and designed to help you understand both the theory and practice of forensic disciplines and police work.

What You'll Learn

Through your coursework, you will learn how to

- Apply the scientific method to draw conclusions regarding forensic information
- Use ethical principles and an understanding of legal precedents to make decisions related to investigation, analysis, and testimony as a crime scene or forensic professional
- Access, interpret, and apply investigative, forensic, and criminal justice research
- Report and articulate information, analyses, or findings to relevant users
- Recognize and evaluate evidence to determine all of the appropriate analyses to gather all available forensic information
- Synthesize forensic, evidential, and investigatory information from multiple sources to generate theories about a crime
- Understand the capabilities, processes, and limitations of the crime laboratory to become an informed consumer or practitioner

Your Coursework in Investigative Forensics

In your core investigative forensics courses, you'll learn and practice evidence detection, collection, processing, and reporting, as well as criminal procedure and analysis of evidence. You'll also learn to write reports specific to the criminal justice field and gain an understanding of the abilities and limitations of the crime lab. Hands-on, practical experience is provided via online learning tools that allow you to virtually investigate a crime scene.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Examine evidence via virtual labs, take notes, and write reports based on the examinations
- Investigate a virtual crime scene, gather evidence, request lab testing, and use the results to write an official report and reconstruction
- Examine a virtual cold case to locate and interview suspects, re-examine evidence, determine the viability of the case, and write a report based on findings

INDUSTRY CERTIFICATION

This program can help prepare you for the following certification exams:

- Bloodstain Pattern Analyst Certification
- Crime Scene Certification
- Latent Print Certification

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (35 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

CCJS 101	Introduction to Investigative Forensics (3)
STAT 200	Introduction to Statistics (3)
CCJS 234	Criminal Procedure and Evidence (3)
CCJS 301	Criminalistics I (4)
CCJS 302	Criminalistics II (4)
CCJS 342	Crime Scene Investigation (3)
CCJS 390	Cyber Crime and Security (3)
CCJS 420	Medical and Legal Investigations of Death (3)
CCJS 421	Principals of Digital Analysis (3)
CCJS 440	Fingerprint Analysis (3)
CCJS 441	Firearms and Toolmarks Analysis (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 393	Advanced Technical Writing (3) <i>(related requirement for the major)</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

CCJS 461	Psychology of Criminal Behavior (3) <i>(related requirement for the major)</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>or CMST 301 Digital Media and Society</i>
CMIS 111	Social Networking and Cybersecurity Best Practices (3) <i>or another computing course appropriate to the academic major</i>

MINOR AND ELECTIVE COURSES (44 CREDITS)

Total credits for BS in Investigative Forensics

120

BACHELOR'S DEGREE CURRICULA

Careers in Investigative Forensics

- Fraud examiners, investigators, and analysts
- Forensic science technicians
- Fire investigators
- Police identification and records officers
- Criminal investigators and special agents

Laboratory Management

If you 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, you may seek an academic major in laboratory management. Consult an advisor before electing this major.

Major in Laboratory Management

In this one-of-a-kind laboratory management program, you'll prepare to coordinate and manage laboratories in rapidly growing biological and technical fields.

UMUC's program in laboratory management is unique in Maryland: no other university in the state offers a bachelor's degree program in laboratory management. Yet the need within the biotechnology industry for employees with both scientific and management skills is great.

The laboratory management major will help you prepare to coordinate the activities that contribute to a well-ordered laboratory by combining an in-depth study of scientific concepts and procedures with hands-on laboratory management practice. Coursework prepares you for a career as a biological or chemical technician, lab manager, or project manager.

What You'll Learn

Through your coursework, you will learn how to

- Create a healthy, safe, and productive workplace by appropriately hiring, training, supporting, and evaluating laboratory personnel
- Plan, organize, and direct the daily work activities of a laboratory setting by working independently and as a member of a team
- Communicate in a clear, well-organized manner that effectively persuades, informs, and clarifies ideas, information, and laboratory techniques/procedures to staff, the scientific community, and the public

- Practice ethical standards of integrity, honesty, and fairness as a laboratory manager
- 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

Your Coursework in Laboratory Management

In your courses, you'll build on the technical and scientific knowledge gained through prior study and direct experience in the field. The curriculum provides in-depth study of scientific concepts and procedures, as well as management skills related to inventory, budget, personnel, and operations.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Develop a workload tracking system for laboratory inventory, equipment, and personnel training
- Critique a case study involving violations of safe practices and breaches with regulatory compliance
- Compile a laboratory training manual to be used by all new lab employees

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (36 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

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 Management and Safety (3)
BIOL 486A/B	Workplace Learning in Biology (6) or any internship through Workplace Learning
BIOL 495	Current Trends and Applications in the Life Sciences (3)

Lower-level coursework in biology, biochemistry, biotechnology, chemistry, microbiology, or molecular biology, including 12 credits in lab science, brought in transfer from the associate's degree (15)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing and Communications Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing
WRTG 293 Introduction to Professional Writing (3)
or other writing course
COMM 202 Media and Society (3)
or other communication, writing, or speech course
WRTG 393 Advanced Technical Writing (3)
or other advanced upper-level writing course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course
HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social science course
BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

Lower-level coursework in biotechnology, biochemistry, cell biology, chemistry, genetics, immunology, microbiology, molecular biology, physics, and virology, completed as part of the associate's degree program (7)

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Courses

IFSM 201 Concepts and Applications of Information Technology (3)
or CMST 301 Digital Media and Society

CMIS 111 Social Networking and Cybersecurity Best Practices (3)
or another computing course appropriate to the academic major

MINOR AND ELECTIVE COURSES (43 CREDITS)

Additional lower-level coursework in science, completed as part of the associate's degree program (8)

Total credits for BS or BTPS in Laboratory Management **120**

Careers in Laboratory Management

- Quality control systems managers
- Quality control analysts
- Medical and clinical laboratory technologists
- Geological and petroleum technicians
- Laboratory animal caretakers
- Natural science managers
- Chemical technician
- Forensic science technician
- Food science technician

Law for Business

You may seek an academic minor in law for business.

Minor in Law for Business

The law for business minor complements the knowledge and skills you gain in your major discipline by providing opportunities to achieve substantive knowledge and practical skill competencies in selected areas of law relevant to business.

Courses in the Minor (15 Credits)

A minor in law for business requires the completion of 15 credits of coursework chosen from the following:

BMGT 380	Business Law I
BMGT 381	Business Law II
COMM 400	Mass Media Law
HRMN 408	Employment Law for Business
LGST 200	Techniques of Legal Research
LGST 201	Legal Writing
LGST 312	Torts
LGST 325	Litigation
LGST 340	Contract Law

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

BACHELOR'S DEGREE CURRICULA

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, refer to your major and pp. 8–9.

Legal Studies

You may seek an academic major in legal studies.

Major in Legal Studies

Gain the knowledge, skills, and ethical principles you need to research and produce legal information and documents or prepare for law school by pursuing a bachelor's degree in legal studies.

In the legal studies major, you'll acquire the tools you need to confidently and competently thrive in legal environments. In this program, you'll learn to produce and review legal forms and documents, apply statutes to legal cases, and assess fact patterns.

With your degree, you'll be equipped to conduct legal analysis, write and draft legal documents, and perform research in the legal environment.

What You'll Learn

Through your coursework, you will learn how to

- Conduct research using appropriate resources to identify relevant, current legal authority
- Draft documents that reflect critical thinking and legal reasoning to inform, evaluate, and advocate on legal issues
- Apply an understanding of legal concepts and procedures to efficiently and ethically support the resolution of legal disputes
- Synthesize relevant information and complete a wide variety of forms and documents used to meet client objectives

Your Coursework in Legal Studies

In your legal studies courses, you'll examine the organization, function, and processes of the lawmaking institutions in the U.S. legal system, as well as the role of the paralegal in the legal system and the governing rules of legal ethics.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Draft legal forms, such as petition for divorce, power of attorney, and identification and evaluation of estate property, for submission to court, using legal terms and nomenclature, as well as knowledge of a particular case
- Review the elements of a statute and assess its application to a set of facts
- Review a current case or statutory law and produce a legal theory, approach, or case study to support a hypothetical client's case

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (33 CREDITS)

LGST 101	Introduction to Law (3)
LGST 200	Techniques of Legal Research (3)
LGST 201	Legal Writing (3)
LGST 204	Legal Ethics (3)
LGST 301	Advanced Legal Writing (3)
LGST 312	Torts (3)
LGST 315	Domestic Relations (3)
LGST 320	Criminal Law and Procedures (3)
LGST 325	Litigation (3)
LGST 340	Contract Law (3)
LGST 495	Advanced Professional Practice (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) (to be taken in first 6 credits)
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 394	Advanced Business Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social science course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>or CMST 301 Digital Media and Society</i>
CMIS 111	Social Networking and Cybersecurity Best Practices (3) <i>or another computing course appropriate to the academic major</i>

MINOR AND ELECTIVE COURSES (46 CREDITS)

Total credits for BS in Legal Studies

120

Careers in Legal Studies

- Equal opportunity representatives and officers
- Regulatory affairs specialists
- Tax examiners and collectors/revenue agents
- Fraud examiners, investigators, and analysts
- Paralegals and legal assistants

Management Studies

You may seek an academic major in management studies.

Major in Management Studies

Gain management expertise through a broad and flexible course of study aimed at turning you into a leader.

Today, many business, government, public service, and technical environments require knowledge of management principles from multiple disciplines. UMUC's program in management studies can help you gain that expertise through a course of study focused on decision making, problem solving, and leadership. This approach is ideal if you are an experienced manager or midcareer professional looking to complement your experience with a bachelor's degree. It can also prepare you for an entry-level management position.

What You'll Learn

Through your coursework, you will learn how to

- Apply leadership skills to promote communication, ethical behavior, and quality performance
- Implement employment practices, encourage team building, and mentor junior staff members
- Communicate effectively with culturally diverse audiences using a variety of formats and technologies
- Assess and develop performance measures, feedback, and coaching that facilitates 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

Your Coursework in Management Studies

In your management studies courses, you'll focus on management principles and organizational dynamics for today's global, multicultural, and multinational organizations. You'll also benefit from a full spectrum of related business courses, including statistics, business writing, marketing, finance, and organizational behavior.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Create a management or a leadership plan
- Create decision matrices, balanced scorecards, and appraisal performance reviews for an organization
- Conduct a fishbone analysis and an internal and external environmental scan

BACHELOR'S DEGREE CURRICULA

INDUSTRY CERTIFICATION

This program can help prepare you for the Project Management Professional (PMP) certification exam.

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (36 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

BMGT 110	Introduction to Business and Management (3) <i>or prior business experience and an additional course chosen from ACCT, BMGT, FINC, HRMN, or MRKT courses</i>
STAT 200	Introduction to Statistics (3)
ACCT 220	Principles of Accounting I (3) <i>or ACCT 301 Accounting for Nonaccounting Managers</i>
BMGT 364	Management and Organization Theory (3)
BMGT 365	Organizational Leadership (3)
BMGT 464	Organizational Behavior (3) <i>or BMGT 465 Organizational Development and Transformation</i>
BMGT 317	Decision Making (3) <i>or any ACCT, BMGT, FINC, HRMN, or MRKT course</i>
BMGT 305	Knowledge Management (3) <i>or any ACCT, BMGT, FINC, HRMN, or MRKT course</i>
BMGT 392	Global Business (3) <i>or any ACCT, BMGT, FINC, HRMN, or MRKT course</i>
BMGT 496	Business Ethics (3)
BMGT 485	21st Century Leadership (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 394	Advanced Business Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 201	Principles of Macroeconomics (3) <i>or ECON 203 Principles of Microeconomics</i> <i>(related requirement for the major)</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>(prerequisite to later course)</i>
IFSM 300	Information Systems in Organizations (3) <i>(related requirement for the major)</i>

MINOR AND ELECTIVE COURSES (46 CREDITS)

Total credits for BS in Management Studies

120

Careers in Management Studies

- General and operations managers
- Administrative services managers
- Management analysts

Marketing

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

Major in Marketing

Attain the marketing skills and business acumen vital to today's ever-expanding global business environment by pursuing a bachelor's degree in marketing.

Fueled by increasing globalization and the developing role of the Internet in business, the field of marketing is constantly evolving. As global competition intensifies, organizations increasingly rely on skilled professionals to identify and develop profitable new products and markets.

With a bachelor's degree in marketing from UMUC, you'll be equipped to pursue a broad spectrum of positions, such as marketing manager, marketing research analyst, sales manager, and more in private and public corporations, marketing agencies, or entrepreneurial endeavors.

What You'll Learn

Through your coursework, you will learn how 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 effective marketing plans, and support decisions that meet the needs and desires of global customers
- Act with personal and professional integrity in the global marketplace of employers, peers, and customers
- Cultivate and maintain positive interpersonal relationships based on engagement and positive interaction with teams, managers, and customers

Your Coursework in Marketing

In your marketing courses, you'll study the strategic marketing processes for consumer and organizational markets, including environmental scanning and positioning; marketing research and analysis; segmentation, targeting, and positioning; product development and differentiation; valuation and pricing; channel and value-chain management; integrated marketing communications; and relationship building. You'll also examine

consumer behavior and consumer relationship management, global marketing, online marketing, and sales management.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Prepare an integrated marketing communications plan
- Submit a strategic marketing plan for an established business
- Select a target market for a specific product, apply consumer data to identify market segments, and develop a marketing mix strategy for those segments
- Analyze a real-world marketing situation as presented in a case study
- Defend and support marketing recommendations in a formal written document

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (36 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

ACCT 301	Accounting for Nonaccounting Managers (3)
STAT 200	Introduction to Statistics (3)
MRKT 310	Marketing Principles (3)
MRKT 354	Integrated Marketing Communication (3)
MRKT 395	Consumer Relationship Management (3)
MRKT 410	Consumer Behavior (3)
MRKT 412	Marketing Research (3)
MRKT 454	Global Marketing (3)
MRKT 457	Digital Marketing (3)
MRKT 475	Fundamentals of Sales Management (3)
MRKT 314	Nonprofit Marketing (3) <i>or any MRKT course</i>
MRKT 495	Marketing Policies and Strategies (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. Consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts

BACHELOR'S DEGREE CURRICULA

and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing and Communications Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing
WRTG 293 Introduction to Professional Writing (3)
or other writing course
COMM 202 Media and Society (3)
or other communication, writing, or speech course
WRTG 394 Advanced Business Writing (3)
or other advanced upper-level writing course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course
HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 201 Principles of Macroeconomics (3)
(related requirement for the major)
BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)
NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Courses

IFSM 201 Concepts and Applications of Information Technology (3)
(related requirement for the major)
IFSM 300 Information Systems in Organizations (3)
(related requirement for the major)

MINOR AND ELECTIVE COURSES (43 CREDITS)

ECON 203 Principles of Microeconomics (3)
(related requirement for the major)

Total credits for BS in Marketing

120

Minor in Marketing

The marketing minor complements the skills you gain in your major discipline by enhancing the knowledge and skills related to marketing situations and processes and the emerging global marketplace.

Courses in the Minor (15 Credits)

A minor in marketing requires the completion of 15 credits of coursework in marketing. All MRKT courses apply. It is recommended that you take MRKT 310 as the first course in the minor (if you 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, refer to your major and pp. 8–9.

Careers in Marketing

- Marketing managers
- Market research analysts and marketing specialists
- Public relations specialists
- Sales representatives for wholesale, manufacturing, technical, and scientific products

Mathematical Sciences

You may seek an academic minor in mathematical sciences.

Minor in Mathematical Sciences

The mathematical sciences minor complements the skills you gain in your 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.

Courses in the Minor (18 Credits)

A minor in mathematical sciences requires the completion of 18 credits of coursework in MATH courses numbered 140 or higher, including at least 3 credits at the 300 or 400 level.

Courses may be chosen from the following:

MATH 140	Calculus I
MATH 141	Calculus II
MATH 241	Calculus III
MATH 240	Linear Algebra
MATH 246	Differential Equations
MATH 301	Real Analysis

No more than two courses may satisfy requirements for both the major and the minor. Prerequisites apply for all courses.

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

Natural Science

You may seek an academic minor in natural science.

Minor in Natural Science

The natural science minor complements the skills you gain in your major by providing an underlying scientific basis on 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.

Courses in the Minor (17 Credits)

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, refer to your major and pp. 8–9.

Nursing for Registered Nurses

Students with an active unencumbered registered nurse license and an associate's degree in nursing may seek an academic major in nursing for registered nurses.

Major in Nursing for Registered Nurses

Go above and beyond: Advance to preferred positions in nursing management, research, and teaching with a bachelor's degree in nursing.

UMUC's bachelor's degree program in nursing for registered nurses provides a pathway for career advancement in clinical research or public health nursing, as well as preparation for graduate study. This program will provide access to management and leadership training and is an ideal fit if you are considering a supervisory position or are looking to eventually enter graduate study in nursing or a related field.

BACHELOR'S DEGREE CURRICULA

What You'll Learn

Through your coursework, you will learn how to

- Demonstrate clinical reasoning in selecting and applying health care approaches for individuals, families, and communities
- Evaluate and apply research to promote evidence-based nursing practice
- Apply management and leadership concepts in various settings to promote health
- Evaluate and communicate the effects of health policy and health care systems on the nursing profession and the delivery of care
- Demonstrate an understanding of the value of continuous personal and professional development as health care evolves

Your Coursework in Nursing for Registered Nurses

In your nursing courses, you'll build on your established clinical and practical experiences. The curriculum covers global health, community and family nursing, nursing leadership and management, nursing research, information technology, and business principles and includes nursing practice experience. The curriculum will help prepare you to assume leadership roles in diverse and challenging settings, take on responsibility for client care, and provide exceptional evidence-based nursing care to patients.

Degree Requirements

A degree with a major in nursing for registered nurses requires the successful completion of 120 credits of coursework, including 30 credits in coursework for the major, 30 credits for state licensure; 38 credits in general education requirements; and 22 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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (30 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

IFSM 305	Information Systems in Health Care Organizations (3)
NURS 360	Health Assessment (3)
NURS 350	Global Health Issues (3)
HMG1 372	Legal and Ethical Issues in Health Care (3)
NURS 300	Sciences and Research in Nursing (3)
NURS 420	Advocacy and Politics in Nursing (3)

NURS 410	Applying Evidence-Based Practice in Nursing (3)
NURS 460	Family and Community Health Nursing (3)
GERO 302	Health and Aging (3) <i>or NURS 486A Workplace Learning in a Clinical Setting</i>
NURS 495	Leadership and Management in Nursing (3)

LICENSURE (30 CREDITS)

Unencumbered Maryland or compact state Registered Nurse license (See <https://www.ncsbn.org/compacts.htm> to see if your state license qualifies.)

GENERAL EDUCATION COURSES (38 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 393	Advanced Technical Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course (discipline must differ from first)</i>

Behavioral and Social Sciences Courses

PSYC 100	Introduction to Psychology (3) <i>(related requirement for the major)</i>
SOCY 100	Introduction to Sociology (3) <i>(related requirement for the major)</i>

Biological and Physical Sciences Courses

Lower-level coursework including general microbiology with lab and human anatomy and physiology I with lab, completed as part of the associate's degree program (7)

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Courses

IFSM 201 Concepts and Applications of
Information Technology (3)
(prerequisite to later course)

CMIS 111 Social Networking and Cybersecurity
Best Practices (3)
(requirement may be fulfilled by IFSM 305 Information Systems in Health Care Organizations)

MINOR AND ELECTIVE COURSES (19–22 CREDITS)

Human anatomy and physiology II with lab, completed as part of the associate's degree program (4)

Total credits for BSN in Nursing For Registered Nurses **120**

Careers in Nursing

- Medical and health services managers
- Registered nurses

Personal Financial Planning

You may seek an academic minor in personal financial planning.

Minor in Personal Financial Planning

The personal financial planning minor complements the skills you gain in your major discipline by providing a study of financial management and planning designed to prepare you for the Certified Financial Planner (CFP) exam.

This minor is designed primarily for students majoring in finance. If you are majoring in another field, you may need to take several courses to fulfill prerequisites. Consult an advisor for more information.

Courses in the Minor (15 Credits)

A minor in personal financial planning requires the completion of the following courses:

FINC 321 Fundamentals of Building Wealth (3)
FINC 352 Insurance (3)
ACCT 323 Federal Income Tax I (3)

FINC 355 Retirement and Estate Planning (3)
FINC 490 Financial Plan Development (3)

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, refer to your major and pp. 8–9.

Philosophy

You may seek an academic minor in philosophy.

Minor in Philosophy

The philosophy minor complements the skills you gain in your major discipline by providing a study of the relationships between personal opinions and real-world issues faced by members of a pluralistic, open society.

Courses in the Minor (15 Credits)

A minor in philosophy requires the completion of the following courses:

PHIL 100 Introduction to Philosophy (3)
PHIL 110 Practical Reasoning (3)
PHIL 304 Contemporary Social Justice Issues (3)
PHIL 336 Ideas Shaping the 21st Century (3)
PHIL 348 Religions of the East (3)

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, refer to your major and pp. 8–9.

BACHELOR'S DEGREE CURRICULA

Political Science

You may seek either an academic major or minor in political science.

Major in Political Science

See the big picture: Learn to analyze complex political problems and find viable solutions in both public and private sectors with a political science degree.

With a major in political science, you'll develop a comprehensive understanding of U.S. government and global politics. By analyzing political structures, theory, and problems, you'll learn to interpret complex political problems in both the public and private sectors and propose potential solutions. You'll also have an opportunity to enhance your professionalism and fine-tune your communication and organizational skills.

Your degree could prepare you to assist government officials at the local, state, and federal level; help develop policy at think tanks; conduct research at an intelligence agency or the U.S. Department of Homeland Security; manage political campaigns; or conduct risk assessments as a policy or security research analyst.

What You'll Learn

Through your coursework, you will learn how to

- Analyze and participate in the creation of public policy at the local, state, federal, and international levels by building consensus and using effective lobbying techniques
- Participate in and influence government at all levels through an understanding of the establishment, structure, and interaction of 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

Your Coursework in Political Science

In your political science courses, you'll develop research and communication skills. Courses examine issues in policy development, global terrorism, foreign policy, defense policy and arms control, the intelligence community, and challenges in modern politics.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Complete an in-depth country analysis with particular stress on political-economic issues to produce a white paper to assist governments or corporations in assessing political or economic risks
- Develop a counterterrorism plan for a specific organization
- Choose a policy-oriented organization and research an issue to present

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (30 CREDITS)

STAT 200	Introduction to Statistics (3)
GVPT 100	Introduction to Political Science (3)
GVPT 101	Introduction to Political Theory (3)
GVPT 170	American Government (3) or GVPT 200 <i>International Political Relations</i>
GVPT 280	Comparative Politics and Governments (3)
GVPT 409	Terrorism, Antiterrorism, and Homeland Security (3) or any upper-level GVPT course
GVPT 403	Law, Morality, and War (3) or any upper-level GVPT course
GVPT 406	Global Terrorism (3)
GVPT 457	U.S. Foreign Relations (3) or any upper-level GVPT course
GVPT 495	Advanced Seminar in Political Science (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) (to be taken in first 6 credits)
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 391	Advanced Research Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social science course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>or CMST 301 Digital Media and Society</i>
CMIS 111	Social Networking and Cybersecurity Best Practices (3) <i>or another computing course appropriate to the academic major</i>

MINOR AND ELECTIVE COURSES (49 CREDITS)

Total credits for BS in Political Science

120

Minor in Political Science

The political science minor complements the skills you gain in your major discipline by providing a systematic study of politics and government. It exposes you to the basic concepts, theories, policies, and roles of government at local, state, and national levels in domestic and foreign settings.

Courses in the Minor (15 Credits)

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 you take GVPT 100, 101, or 170 as the first course in the minor (if you 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, refer to your major and pp. 8–9.

Careers in Political Science

- Public relations and fundraising managers
- Political scientists
- Social science research assistants
- City and regional planning aides
- Public relations specialists

BACHELOR'S DEGREE CURRICULA

Psychology

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

Major in Psychology

Explore the fascinating landscape of the human mind and prepare for a career in human services or further graduate study by pursuing a bachelor's degree in psychology.

A popular choice for retiring veterans and career changers, UMUC's bachelor's degree program in psychology will help prepare you for graduate study or a career as a mental health professional. While acquiring a knowledge base of theory, research, and practice in psychological sciences, you'll hone your quantitative skills, analytical and scientific reasoning, and ability to analyze human behavior.

Your degree could prepare you for a variety of roles in the mental health field, such as a researcher or direct service provider at a mental health or medical facility. Additionally, you can pursue a career in a related field, such as human resources.

What You'll Learn

Through your coursework, you will learn how to

- Apply major concepts, theoretical perspectives, empirical findings, and historical trends in psychology to prepare for graduate study or relevant careers
- 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, technology, and the scientific approach to solve problems related to current and emerging trends in psychology
- Value diversity and different perspectives, tolerate ambiguity, and act ethically to communicate appropriately with various populations

Your Coursework in Psychology

The curriculum for the bachelor's degree in psychology, which is aligned with American Psychological Association guidelines, is designed to provide you with a solid grounding in the major theoretical schools of psychology and the findings of research. The program covers the application of psychological concepts

and principles to individual cognitive and emotional functioning, the workplace, and interpersonal relationships. The program also emphasizes the application of biological, social, and professional principles and concepts in response to psychological needs.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Analyze a case study, providing an appropriate diagnosis, a rationale for that diagnosis, and suggestions for treatment
- Create a stress-management program and prepare a presentation
- Participate in a career review project in which students research potential jobs or graduate programs and submit a résumé or an application for graduate school

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. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (36 CREDITS)

PSYC 100	Introduction to Psychology (3)
STAT 200	Introduction to Statistics (3)
PSYC 300	Research Methods in Psychology (3)
PSYC 301	Biological Basis of Behavior (3)
PSYC 310	Sensation and Perception (3) <i>or any upper-level PSYC course</i>
PSYC 321	Social Psychology (3)
PSYC 335	Theories of Personality (3)
PSYC 341	Memory and Cognition (3) <i>or any upper-level PSYC course</i>
PSYC 351	Lifespan Development (3) <i>or any upper-level PSYC course</i>
PSYC 353	Abnormal Psychology (3)
PSYC 436	Introduction to Clinical Psychology (3)
PSYC 495	Senior Seminar in Psychology (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing and Communications Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing
WRTG 293 Introduction to Professional Writing (3)
or other writing course
COMM 202 Media and Society (3)
or other communication, writing, or speech course
WRTG 391 Advanced Research Writing (3)
or other advanced upper-level writing course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course
HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social science course
BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)
NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Courses

IFSM 201 Concepts and Applications of Information Technology (3)
or CMST 301 Digital Media and Society
CMIS 111 Social Networking and Cybersecurity Best Practices (3)
or another computing course appropriate to the academic major

MINOR AND ELECTIVE COURSES (43 CREDITS)

Total credits for BS in Psychology

120

Minor in Psychology

The psychology minor complements the skills you gain in your 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.

Courses in the Minor (15 Credits)

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

Choose one of the following foundation courses:

PSYC 100 Introduction to Psychology
PSYC 300 Research Methods in Psychology
STAT 200 Introduction to Statistics

Take one course from each of the following groupings:

Biological: PSYC 301, PSYC 310, PSYC 341
Social: PSYC 321, PSYC 351, PSYC 354
Professional: PSYC 335, PSYC 353, PSYC 436

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, refer to your major and pp. 8–9.

Careers in Psychology

- Training and development managers
- Human resources specialists
- Compensation, benefits, and job analysis specialists
- Social science research assistants

BACHELOR'S DEGREE CURRICULA

Public Safety Administration

You may seek either an academic major or minor in public safety administration.

Major in Public Safety Administration

Supervise and lead the organizations that manage emergencies and defend against threats to corporate or homeland security by pursuing a bachelor's degree in public safety administration.

A major in public safety administration from UMUC can help prepare you to join the first-responder organizations involved in corporate security, emergency management, fire service administration, and homeland security.

This major builds a strong foundation of knowledge about emergency management systems at federal, state, and local levels to foster the cross-agency collaboration. This program is ideal for those who have already worked in the public safety field in some capacity and want to further develop their critical thinking and leadership skills to solve current and future public safety issues in both public and private sectors.

What You'll Learn

Through your coursework, you will learn how to

- Facilitate and support leadership in public safety administration to manage successful programs, including intergovernmental, interagency, and interdisciplinary outreach
- Use informed decision making, goal orientation, teamwork, ethical behavior, enhanced technology, and communications to ensure effective leadership in public safety administration
- Use clear and effective communication strategies and strong interpersonal, technological, and social media skills to help build collaborative partnerships
- Identify risks and design responses, plans, training, and exercises that coordinate public and private resources to effectively meet public safety goals
- Develop concise policy, plans, and procedures to support public safety administration

Your Coursework in Public Safety Administration

Developed by government employees who work in public safety, the courses in the public safety administration degree program can provide you with a global outlook, interpersonal skills, leadership abilities, an awareness of current issues, and management competencies, including strategic planning, risk

management, public policy program development and implementation, ethics, decision making, and supervision. You'll use actual public safety information, taken straight from governmental sources, in your assignments.

COURSEWORK EXAMPLE

In past projects, students have had the opportunity to identify a public safety issue, analyze how the issue should be addressed, and present possible solutions, including implementation steps and recommendations.

Degree Requirements

A degree with a major in public safety administration requires the 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 17 credits in the major must be earned in upper-level courses (numbered 300 or above). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (30 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

PSAD 302	Introduction to Public Safety Administration (3)
PSAD 304	Contemporary Public Safety Practices (3)
PSAD 306	Public Safety Planning (3)
PSAD 408	Public Safety Legal Issues and Public Policy (3)
PSAD 410	Public Safety Research and Technology (3)
PSAD 414	Public Safety Administration Ethics (3)
PSAD 416	Public Safety Leadership (3)
FINC 331	Finance for the Nonfinancial Manager (3)
BMGT 317	Decision Making (3)
PSAD 495	Public Safety Issues and Challenges (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) (to be taken in first 6 credits)
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 394	Advanced Business Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social science course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>(prerequisite to later course)</i>
IFSM 300	Information Systems in Organizations (3) <i>(related requirement for the major)</i>

MINOR AND ELECTIVE COURSES (49 CREDITS)

Total credits for BS in Public Safety Administration	120
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Minor in Public Safety Administration

The public safety administration minor complements the skills you gain in your major discipline by providing a background in the field. The minor exposes you to the principles of strategic planning, risk management, public policy, and ethics as related to public safety administration.

Courses in the Minor (15 Credits)

A minor in public safety administration requires the completion of 15 credits of coursework in public safety administration. All PSAD courses apply. You should take PSAD 302 as your first course in the minor (if you 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, refer to your major and pp. 8–9.

Careers in Public Safety Administration

- Emergency management directors
- Security managers
- Public relations specialists
- First-line supervisors of police and detectives
- Municipal fire fighting and prevention supervisors

Small Business Management and Entrepreneurship

You may seek an academic minor in small business management and entrepreneurship.

Minor in Small Business Management and Entrepreneurship

The small business management and entrepreneurship minor complements the skills you gain in your major discipline by helping you develop your ability to start and operate a successful small business and look for opportunities to create patterns of innovation within your organization. If you are planning to start or manage a small business, such as a family-owned business, a franchise, a virtual business, or a home enterprise, you'll find this minor helpful.

BACHELOR'S DEGREE CURRICULA

Courses in the Minor (15 Credits)

A minor in small business management and entrepreneurship requires the completion of the following courses:

BMGT 302	Franchising (3)
BMGT 330	Entrepreneurship and New Venture Planning (3)
BMGT 335	Small Business Management (3)
BMGT 364	Management and Organization Theory (3)
FINC 328	Small Business Finance (3)

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, refer to your major and pp. 8–9.

Social Science

You may seek an academic major in social science.

Major in Social Science

Gain insight on pressing social issues by studying how groups, cultures, organizations, and institutions function by pursuing a bachelor's degree in social science.

In UMUC's award-winning bachelor's degree program in social science, you'll gain a breadth of knowledge through interdisciplinary study that encompasses perspectives from the fields of anthropology, behavioral sciences, gerontology, psychology, and sociology. You'll also have the opportunity to drill down and focus closely on one of these fields.

With your degree, you can pursue a variety of careers, such as program/policy analyst, research assistant, or program developer and manager, in fields that serve the public, including business administration, elder care, government, health services, law enforcement, human resources, and community service.

What You'll Learn

Through your coursework, you will learn how to

- Integrate theoretical perspectives and research findings in the social sciences by using quantitative and qualitative data and applying social science research methods
- Communicate effectively to a variety of audiences
- Explain how micro- and macro-level factors are linked in the social lives of individuals, communities, and societies

- Analyze complex social problems and work toward realistic solutions using awareness, acceptance, and appreciation of diversity, social factors, and global multicultural perspectives
- Recognize the ethical principles and standards for professional conduct that guide the work of social scientists
- Apply critical and creative thinking, information literacy, technology, and interdisciplinary perspectives to solve practical problems in the social sciences

Your Coursework in Social Science

Your social science coursework will help you learn to address social issues from an interdisciplinary perspective, communicate with a diverse audience, develop strong critical thinking skills, articulate the range of research methods used in the social sciences, and recognize good evidence. In addition, you'll learn to identify the implications of social science on various issues to develop policies and programs that enhance human welfare.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Prepare a professional research poster that could be presented at a professional conference
- Learn about the methodologies commonly employed across different social science disciplines
- Develop a personal plan in which goals are established for putting diversity skills into action

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). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (30 CREDITS)

BEHS 210	Introduction to Social Sciences (3)
BEHS 220	Diversity Awareness (3)
STAT 200	Introduction to Statistics (3)
BEHS 300	Research Methods in Social Sciences (3)
BEHS 495	Advanced Seminar in Social Sciences (3)
ANTH 102	Introduction to Cultural Anthropology (3) or GERO 100 Contemporary Issues in Aging or PSYC 100 Introduction to Psychology or SOCY 100 Introduction to Sociology

Upper-level ANTH, BEHS, GERO, PSYC, and SOCY courses (12 credits)—Focused study in anthropology, gerontology, psychology, or sociology recommended, as follows:

Anthropology

ANTH 345	World Prehistory and Archaeology
ANTH 346	Anthropology of Language and Communication
ANTH 350	Health, Illness, and Healing
ANTH 351	Anthropology in Forensic Investigations

Gerontology

GERO 302	Health and Aging
GERO 311	Gender and Aging
GERO 427	Culture and Aging
GERO 320	Psychosocial Aspects of Aging

Psychology

PSYC 321	Social Psychology
PSYC 338	Psychology of Gender
PSYC 351	Lifespan Development
PSYC 354	Cross-Cultural Psychology

Sociology

SOCY 313	The Individual and Society
SOCY 325	Sociology of Gender
SOCY 423	Race and Ethnicity: A Global Perspective
SOCY 350	Contemporary Social Problems

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 391	Advanced Research Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
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HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>
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Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social science course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>or CMST 301 Digital Media and Society</i>
CMIS 111	Social Networking and Cybersecurity Best Practices (3) <i>or another computing course appropriate to the academic major</i>

MINOR AND ELECTIVE COURSES (49 CREDITS)

Total credits for BS in Social Science

120

Careers in Social Science

- Training and development managers
- Human resources specialists
- Compensation, benefits, and job analysis specialists
- Market research analysts and marketing specialists
- Social science research assistants

BACHELOR'S DEGREE CURRICULA

Sociology

You may seek an academic minor in sociology.

Minor in Sociology

The sociology minor complements the skills you gain in your 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.

Courses in the Minor (15 Credits)

A minor in sociology requires the completion of 15 credits of coursework in sociology. All SOCY courses apply. You should take SOCY 100 as the first course in the minor (if you 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, refer to your major and pp. 8–9.

Software Development and Security

You may seek an academic major in software development and security.

Major in Software Development and Security

Enhance your programming skill set by pursuing a bachelor's degree in software development and security.

The major in software development and security at UMUC is designed to teach you programming languages and best practices in software development that are in demand today in the workplace.

Your degree can prepare you to pursue technical and leadership roles in diverse and challenging application development and security settings, including high-demand positions such as software development and security analyst, software development and security manager, application and software architect,

information security officer, intrusion analyst, penetration tester, programmer, software engineer, security and code auditor, or system architect.

What You'll Learn

Through your coursework, you will learn how to

- Work individually or in a team to design, develop, implement, and test secure software using leading industry practices and standards to meet user requirements
- Plan, manage, document, and communicate all phases of a secure software development project as part of a software development team
- Use appropriate tools to assess and analyze existing applications for weaknesses and vulnerabilities and implement techniques for mitigating security threats and risks
- Identify and respond to threats and attacks to minimize risk and protect privacy

Your Coursework in Software Development and Security

Your software development and security courses will focus on developing your skills using multiple programming languages and relational databases while maintaining component security using industry and government best practices. You'll learn to design, develop, and test secure software applications, conduct software penetration testing, and provide recommendations for reducing computer security risks.

COURSEWORK EXAMPLES

In past projects, students have had the opportunity to

- Design and implement a program for a virtual stringed musical instrument that includes data fields for notes; Boolean fields to determine whether the instrument is tuned or currently playing; and methods to stop, start, and tune the instrument
- Analyze web applications by using static code tools to detect and mitigate software vulnerabilities
- Conduct penetration testing and develop a plan to report and mitigate software security issues using an existing software design and code

Degree Requirements

A degree with a major in software development 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 15 credits in the major must be earned in upper-level courses (numbered 300 or above). See p. 9 for information on overall degree requirements.

COURSES IN THE MAJOR (33 CREDITS)

Note: Related requirements for the major are listed under general education and/or elective courses.

CMIS 141	Introductory Programming (3)
CMIS 242	Intermediate Programming (3)
CMIS 320	Relational Database Concepts and Applications (3)
SDEV 300	Building Secure Web Applications (3)
SDEV 325	Detecting Software Vulnerabilities (3)
SDEV 350	Database Security (3)
SDEV 360	Secure Software Engineering (3)
SDEV 400	Secure Programming in the Cloud (3)
SDEV 425	Mitigating Software Vulnerabilities (3)
SDEV 460	Penetration Testing (3)
CMSC 495	Current Trends and Projects in Computer Science (3)

GENERAL EDUCATION COURSES (41 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing and Communications Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>
WRTG 393	Advanced Technical Writing (3) <i>or other advanced upper-level writing course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social science course</i>
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BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>
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Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Courses

IFSM 201	Concepts and Applications of Information Technology (3) <i>or CMST 301 Digital Media and Society</i>
CMIS 102	Introduction to Problem Solving and Algorithm Design (3) <i>(prerequisite to later course)</i>

MINOR AND ELECTIVE COURSES (46 CREDITS)

Total credits for BS in Software Development and Security	120
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Careers in Software Development and Security

- Information security analysts
- Computer programmers
- Software developers, applications
- Web developers
- Database administrators

BACHELOR'S DEGREE CURRICULA

Speech Communication

You may seek an academic minor in speech communication.

Minor in Speech Communication

The minor in speech communication complements the skills you gain in your 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.

Courses in the Minor (15 Credits)

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 you take COMM 300 and SPCH 100 as the first courses for the minor (if you 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, refer to your major and pp. 8–9.

Terrorism and Critical Infrastructure

You may seek an academic minor in terrorism and critical infrastructure.

Minor in Terrorism and Critical Infrastructure

The terrorism and critical infrastructure minor complements the knowledge and skills you develop in your major discipline by offering you an understanding of the principle components of protecting both public and private critical infrastructure from acts of terrorism.

Courses in the Minor (15 Credits)

A minor in terrorism and critical infrastructure requires the completion of 15 credits of coursework focusing on terrorism and critical infrastructure, chosen from the following courses:

CCJS 341	Criminal Investigation
CCJS 390	Cyber Crime and Security
GVPT 406	Global Terrorism
GVPT 407	State Terrorism
GVPT 408	Counterterrorism
GVPT 409	Terrorism, Antiterrorism, and Homeland Security
HIST 392	History of the Contemporary Middle East
HMLS 302	Introduction to Homeland Security
HMLS 406	Legal and Political Issues of Homeland Security
HMLS 408	Infrastructure in Homeland Security

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, refer to your major and pp. 8–9.

Women's Studies

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

Minor in Women's Studies

The women's studies minor complements the skills you gain in your major discipline by providing an interdisciplinary study of the history, status, and experiences of women.

Courses in the Minor (15 Credits)

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

Any WMST courses

BEHS 220	Diversity Awareness
BEHS 343	Parenting Today
BEHS 453	Domestic Violence
ENGL 358	British Women Writers Since 1900
GERO 311	Gender and Aging
HIST 377	U.S. Women's History: 1870 to 2000
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

It is recommended that you take WMST 200 as the first course for the minor (if you 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, refer to your 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 (AA) degree 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 you select.

A grade point average of 2.0 or higher in all courses taken through UMUC is required. You 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, you must take 25 credits of coursework related to your educational goals. You may choose a general curriculum (described at right) or a specialized curriculum with its own particular requirements (detailed on the following pages). You 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. If you anticipate seeking a bachelor's degree, you should select courses that will advance that goal.

What You'll Learn

Through your coursework, you will learn how to

- Communicate orally and in writing in a clear, well-organized manner
- Conduct academic research
- Think critically

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

In the general curriculum, you may choose related courses from several disciplines, explore several interests at once, or choose a variety of courses from UMUC's offerings. The responsibility for developing a curriculum that meets your intended learning outcomes is yours. You are encouraged to seek assistance from academic advisors in arranging your curriculum as appropriate to your personal interests and future educational plans.

COURSES IN THE GENERAL CURRICULUM (25 CREDITS)

Curriculum courses (12)

Elective courses (13)

GENERAL EDUCATION COURSES (35 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing
WRTG 293 Introduction to Professional Writing (3)
or other writing course
COMM 202 Media and Society (3)
or other communication, writing, or speech course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course
HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social science course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course (discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Course

IFSM 201	Concepts and Applications of Information Technology (3) <i>or CMST 301 Digital Media and Society</i>
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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. You should take careful note of course prerequisites and recommended course sequences. Curricula may be available only in limited geographic areas.

Accounting Curriculum

Within the overall outcomes of the AA degree in General Studies (listed on p. 78), the specialized curriculum in accounting will help you demonstrate competencies in fundamental accounting practices to transition toward a bachelor's degree in accounting and related fields.

COURSES IN THE ACCOUNTING CURRICULUM (25 CREDITS)

ACCT 220	Principles of Accounting I (3)
ACCT 221	Principles of Accounting II (3)
Any ACCT or FINC courses (9)	

Accounting or business courses (9) chosen from the following:

BMGT 110	Introduction to Business and Management <i>(recommended if you have no prior business experience)</i>
BMGT 380	Business Law I
BMGT 381	Business Law II
BMGT 496	Business Ethics
CMIS 102	Introduction to Problem Solving and Algorithm Design
ECON 201	Principles of Macroeconomics
ECON 203	Principles of Microeconomics
IFSM 300	Information Systems in Organizations
MRKT 310	Marketing Principles
STAT 200	Introduction to Statistics
Any ACCT or FINC courses	

Elective course (1)

GENERAL EDUCATION COURSES (35 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course (discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social science course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course (discipline must differ from first)</i>

ASSOCIATE OF ARTS DEGREE

Biological and Physical Sciences Courses

- BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)
- NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

- MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Courses

- IFSM 201 Concepts and Applications of Information Technology
(related requirement for the major)

Total credits for AA in General Studies with accounting curriculum 60

Business and Management Curriculum

Within the overall outcomes of the AA degree in General Studies (listed on p. 78), the specialized curriculum in business and management will help students utilize core business concepts and principles to pursue related professional goals.

COURSES IN THE BUSINESS AND MANAGEMENT CURRICULUM (25 CREDITS)

Business courses (15) chosen from the following:

- BMGT 110 Introduction to Business and Management
- ACCT 220 Principles of Accounting I
- ACCT 221 Principles of Accounting II
- ECON 201 Principles of Macroeconomics
- ECON 203 Principles of Microeconomics
- STAT 200 Introduction to Statistics

Business courses (6) chosen from the following:

- Any ACCT, BMGT, CMIS, ECON, FINC, HMG, HRMN, IFSM, or MRKT classes
- Any 3-credit CMST classes
- PSYC 321 Social Psychology
- PSYC 361 Industrial and Organizational Psychology

Elective courses (4)—Courses that may be applicable to the BS in Business Administration are recommended.

GENERAL EDUCATION COURSES (35 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

- LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing Courses

- WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing
- WRTG 293 Introduction to Professional Writing (3)
or other writing course
- COMM 202 Media and Society (3)
or other communication, writing, or speech course

Arts and Humanities Courses

- HIST 125 Technological Transformations (3)
or other historical perspective course
- HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

- ECON 103 Economics in the Information Age (3)
or other behavioral and social science course
- BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

- BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)
- NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

- MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Course

- IFSM 201 Concepts and Applications of Information Technology (3)
(related requirement for BS in Business Administration)

Total credits for AA in General Studies with business and management curriculum 60

Computer Studies Curriculum

Within the overall outcomes of the AA degree in General Studies (listed on p. 78), the specialized curriculum in computer studies will help you apply a selected range of fundamental computer-based skills to advance your professional and career goals.

COURSES IN THE COMPUTER STUDIES CURRICULUM (25 CREDITS)

CMIS 102 Introduction to Problem Solving and Algorithm Design (3)
or a programming language course

Computer studies-related courses (12)—Chosen from any CMIS, CMIT, CMSC, CMST, CSIA, IFSM, or SDEV courses

Elective courses (10)—Courses that may be applicable to a BS in a computing field are recommended.

GENERAL EDUCATION COURSES (35 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing
WRTG 293 Introduction to Professional Writing (3)
or other writing course
COMM 202 Media and Society (3)
or other communication, writing, or speech course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course
HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social science course
BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)
NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Course

IFSM 201 Concepts and Applications of Information Technology (3)
or CMST 301 Digital Media and Society

**Total credits for AA in General Studies
with computer studies curriculum**

60

Criminal Justice Curriculum

Within the overall outcomes of the AA degree in General Studies (listed on p. 78), the specialized curriculum in criminal justice will help you apply knowledge of the criminal justice system to advance your professional and educational goals.

COURSES IN THE CRIMINAL JUSTICE CURRICULUM (25 CREDITS)

Any CCJS courses (12)

Elective courses (13)—Courses that may be applicable to the BS in Criminal Justice are recommended.

GENERAL EDUCATION COURSES (35 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing
WRTG 293 Introduction to Professional Writing (3)
or other writing course

ASSOCIATE OF ARTS DEGREE

COMM 202 Media and Society (3)
or other communication, writing, or speech course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course

HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social science course

BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)

NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Course

IFSM 201 Concepts and Applications of Information Technology (3)
or CMST 301 Digital Media and Society

**Total credits for AA in General Studies
with criminal justice curriculum**

60

Foreign Language Area Studies Curriculum

Within the overall outcomes of the AA degree in General Studies (listed on p. 78), the specialized curriculum in foreign language area studies will help you develop intermediate foreign language skills and related cultural knowledge in a variety of personal and professional settings.

COURSES IN THE FOREIGN LANGUAGE AREA STUDIES CURRICULUM (25 CREDITS)

Language core courses (12)—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 course (1)

GENERAL EDUCATION COURSES (35 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing

WRTG 293 Introduction to Professional Writing (3)
or other writing course

COMM 202 Media and Society (3)
or other communication, writing, or speech course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course

HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social science course

BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)

NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level of college algebra

Computing Courses

IFSM 201 Concepts and Applications of Information Technology (3)
or CMST 301 Digital Media and Society

Total credits for AA in General Studies

with foreign language area studies curriculum

60

Legal Studies Curriculum

Within the overall outcomes of the AA degree in General Studies (listed on p. 78), the specialized curriculum in legal studies will help you acquire knowledge of legal systems to advance your professional and educational goals.

COURSES FOR THE LEGAL STUDIES CURRICULUM (25 CREDITS)

LGST 101	Introduction to Law (3)
LGST 200	Techniques of Legal Research (3)
LGST 201	Legal Writing (3)
LGST 204	Legal Ethics (3)

Any LGST courses (6)

Elective courses (7)—*Courses that may be applicable to the BS in Legal Studies are recommended.*

GENERAL EDUCATION COURSES (35 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150	Introduction to Research (1) <i>(to be taken in first 6 credits)</i>
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Writing Courses

WRTG 101	Introduction to Writing (3) <i>or WRTG 101S Introduction to Writing</i>
WRTG 293	Introduction to Professional Writing (3) <i>or other writing course</i>
COMM 202	Media and Society (3) <i>or other communication, writing, or speech course</i>

Arts and Humanities Courses

HIST 125	Technological Transformations (3) <i>or other historical perspective course</i>
HUMN 100	Introduction to Humanities (3) <i>or other arts and humanities course</i> <i>(discipline must differ from first)</i>

Behavioral and Social Sciences Courses

ECON 103	Economics in the Information Age (3) <i>or other behavioral and social science course</i>
BEHS 103	Technology in Contemporary Society (3) <i>or other behavioral and social science course</i> <i>(discipline must differ from first)</i>

Biological and Physical Sciences Courses

BIOL 103	Introduction to Biology (4) <i>or other science lecture and laboratory course(s)</i>
NSCI 100	Introduction to Physical Science (3) <i>or other science lecture course</i>

Math Course

MATH 106	Finite Mathematics (3) <i>or other 3-credit MATH course at or above the level of college algebra</i>
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Computing Course

IFSM 201	Concepts and Applications of Information Technology (3) <i>or CMST 301 Digital Media and Society</i>
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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. 78), the specialized curriculum in management studies will help you apply knowledge from management-related disciplines to advance your professional and educational goals.

COURSES IN THE MANAGEMENT STUDIES CURRICULUM (25 CREDITS)

Management-related courses (15), chosen from the following:

Any ACCT, BMGT, CMIS, CMST, ECON, FINC, HMG, HRMN, IFSM, and MRKT courses	
PSYC 321	Social Psychology
PSYC 361	Lifespan Development
STAT 200	Introduction to Statistics
COMM 390	Writing for Managers

Elective courses (10)—*Courses that may be applicable to the BS in Management Studies are recommended.*

GENERAL EDUCATION COURSES (35 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

ASSOCIATE OF ARTS DEGREE

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing
WRTG 293 Introduction to Professional Writing (3)
or other writing course
COMM 202 Media and Society (3)
or other communication, writing, or speech course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course
HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social science course
BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)
NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level
of college algebra

Computing Course

IFSM 201 Concepts and Applications of Information
Technology (3)
(prerequisite to related requirement for BS in
Management Studies)

**Total credits for AA in General Studies
with management studies curriculum**

60

Mathematics Curriculum

Within the overall outcomes of the AA degree in General Studies (listed on p. 78), the specialized curriculum in mathematics will help you employ appropriate mathematical methods and technologies to accomplish quantitative tasks in your professional and educational contexts.

COURSES IN THE MATHEMATICS CURRICULUM (25 CREDITS)

Mathematics core courses (18–20), chosen from the following:

MATH 130 Calculus A,
MATH 131 Calculus B, and
MATH 132 Calculus C
or MATH 140 Calculus I and MATH 141 Calculus II
MATH 240 Introduction to Linear Algebra
or MATH 246 Differential Equations
MATH 241 Calculus III
STAT 200 Introduction to Statistics

Mathematics-related course (3), chosen from the following:

Any ACCT or FINC course
CHEM 103 General Chemistry I
CHEM 113 General Chemistry II
CMIS 102 Introduction to Problem Solving and Algorithm
Design
CMIS 170 Introduction to XML
or CMSC 150 Introduction to Discrete Structures
CMIS 242 Intermediate Programming
ECON 201 Principles of Macroeconomics
ECON 203 Principles of Microeconomics
ECON 430 Money and Banking
ECON 440 International Economics
Any MATH course numbered 108 or higher
Any math-based physics course

Elective courses (2–4)

GENERAL EDUCATION COURSES (35 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing
WRTG 293 Introduction to Professional Writing (3)
or other writing course
COMM 202 Media and Society (3)
or other communication, writing, or speech course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course

HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social science course

BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)

NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level
of college algebra

Computing Course

IFSM 201 Concepts and Applications of Information
Technology (3)
or CMST 301 Digital Media and Society

Total credits for AA in General Studies with mathematics curriculum 60

Women's Studies Curriculum

Within the overall outcomes of the AA degree in General Studies (listed on p. 78), the specialized curriculum in women's studies will help you develop knowledge of the history, status, and experience of women in your professional, personal, and educational contexts.

COURSEWORK FOR THE WOMEN'S STUDIES CURRICULUM (18 CREDITS)

WMST 200 Introduction to Women's Studies (3)

Women's studies-related courses (15), chosen
from the following:

BEHS 200 Diversity Awareness

BEHS 343 Parenting Today

BEHS 453 Domestic Violence

ENGL 358 British Women Writers Since 1900

GERO 311 Gender and Aging

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

Elective courses (10)

GENERAL EDUCATION COURSES (35 CREDITS)

Since some recommended courses fulfill more than one requirement, substituting courses for those listed may require you to take additional courses to meet degree requirements. 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.

Research Course

LIBS 150 Introduction to Research (1)
(to be taken in first 6 credits)

Writing Courses

WRTG 101 Introduction to Writing (3)
or WRTG 101S Introduction to Writing

WRTG 293 Introduction to Professional Writing (3)
or other writing course

COMM 202 Media and Society (3)
or other communication, writing, or speech course

Arts and Humanities Courses

HIST 125 Technological Transformations (3)
or other historical perspective course

HUMN 100 Introduction to Humanities (3)
or other arts and humanities course
(discipline must differ from first)

Behavioral and Social Sciences Courses

ECON 103 Economics in the Information Age (3)
or other behavioral and social science course

BEHS 103 Technology in Contemporary Society (3)
or other behavioral and social science course
(discipline must differ from first)

Biological and Physical Sciences Courses

BIOL 103 Introduction to Biology (4)
or other science lecture and laboratory course(s)

NSCI 100 Introduction to Physical Science (3)
or other science lecture course

Math Course

MATH 106 Finite Mathematics (3)
or other 3-credit MATH course at or above the level
of college algebra

Computing Course

IFSM 201 Concepts and Applications of Information
Technology (3)
or CMST 301 Digital Media and Society

**Total credits for AA in General Studies
with women's studies curriculum**

60

CERTIFICATE PROGRAMS

To help you meet your educational goals, UMUC offers 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. All are available online.

The undergraduate certificate programs generally require 16 to 18 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.

- Computer Networking
- Human Resource Management
- Management Foundations
- Project Management
- Spanish for Business and the Professions

REQUIREMENTS

- You must be admitted as a UMUC student.
- You must complete all certificate coursework within two years of enrolling in your first certificate course.
- You are responsible for notifying UMUC of your intention to complete certificate work before you complete your last course. (The application is available at <https://my.umuc.edu>.)
- You may pursue a degree and certificate simultaneously or pursue a degree after completing the certificate, but you must apply for a certificate before you are awarded the bachelor's degree.
- You may not use the same course toward completion of more than one certificate. In cases where the same course is required for two certificates, you 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/Workplace Learning credit, or transfer credit from other schools.
- Certificates consisting primarily of upper-level coursework may assume prior study in that area. You should check pre-requisites 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.
- You 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, 2015. However, should certificate requirements change, you 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/ugcertificates.

CERTIFICATE DESCRIPTIONS

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

Computer Networking

A certificate in computer networking can supplement a bachelor's degree or help you build knowledge and experience in this in-demand field.

Perfect for those who want to work as network administrators for business, government, or nonprofit organizations, the undergraduate certificate program in computer networking at UMUC can provide you with hands-on training in state-of-the-art computer technology.

Through the computer networking certificate program, you'll learn about the fundamental aspects of computer troubleshooting, networking, network security, interconnected Cisco devices, and Windows server installation and configuration. Plus, you'll get a chance to choose from upper-level courses so you can tailor your degree to your career goals.

Overall certificate requirements are listed on p. 86.

Computer Networking

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

Five required courses:

CMIT	202	Fundamentals of Computer Troubleshooting	3
CMIT	265	Fundamentals of Networking	3
CMIT	320	Network Security	3
CMIT	350	Interconnecting Cisco Devices	3
CMIT	369	Windows Server Installation and Configuration	3

A supporting elective chosen from any upper-level CMIT courses	3
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Total credits for certificate in Computer Networking	18
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Human Resource Management

Develop your leadership capabilities, grow your people skills, and add value to your career by pursuing a certificate in human resource management.

Time for an upgrade! The human resource management certificate program from UMUC can help you prepare for supervisory and midlevel management positions in human resource management by providing the theoretical and practical knowledge you need to advance.

In your HR management certificate program, you'll learn how to resolve problems in the workplace via conflict management, approach the workplace and employees with a sensitivity to cultural diversity, develop programs for rewarding employees, and help employees reach their full potential.

Overall certificate requirements are listed on p. 86.

Human Resource Management

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

Four required courses:

BMGT	364	Management and Organization Theory	3
HRMN	300	Human Resource Management	3
HRMN	362	Labor Relations	3
HRMN	400	Human Resource Management: Issues and Problems	3

Two supporting electives chosen from the following:	6
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BMGT	365	Organizational Leadership	
BMGT	391	Supervision	
BMGT	464	Organizational Behavior	
BMGT	465	Organization Development and Transformation	
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	

Total credits for certificate in Human Resource Management	18
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CERTIFICATE PROGRAMS

Management Foundations

Become a leader by gaining management expertise through a broad and flexible course of study in the management foundations certificate program.

Today, many workplaces require knowledge of management principles from multiple disciplines. The undergraduate certificate program in management foundations at UMUC can help you gain that expertise through a flexible course of study focused on decision making, problem solving, and leadership. By learning these skills, you'll be poised to move up into supervisory or midlevel management positions.

In your certificate courses, you'll focus on management principles and organizational dynamics for today's global, multicultural, and multinational organizations. You'll also benefit from a full spectrum of related business courses, covering statistics, business writing, marketing, finance, and organizational behavior.

Overall certificate requirements are listed on p. 86.

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.

Three required courses:

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:

FINC	330	Business Finance	3
FINC	331	Finance for the Nonfinancial Manager	3

Two supporting electives chosen from the following:

BMGT	317	Decision Making	3
BMGT	335	Small Business Management	3
BMGT	365	Organizational Leadership	3
BMGT	380	Business Law I	3
BMGT	464	Organizational Behavior	3
BMGT	465	Organizational Development and Transformation	3
BMGT	484	Managing Teams in Organizations	3
BMGT	496	Business Ethics	3
HRMN	302	Organizational Communication	3
HRMN	367	Organizational Culture	3
IFSM	300	Information Systems in Organizations	3

Total credits for certificate in Management Foundations 18

Project Management

All systems go: Learn how to make teams run smoothly and productively by pursuing an undergraduate certificate in project management.

The project management certificate program at UMUC can help prepare you for supervisory and midlevel management positions involving project management and team management. If you're a project manager, project team member, or otherwise assigned to project teams within a private- or public-sector organization, this certificate program can help you upgrade your skills with theoretical and practical knowledge to advance to a higher level.

In your certificate courses, you'll learn to bring a project full cycle from development to completion. You'll also work with a variety of tools designed specifically for project management and work hands-on with federal contracts to become familiar with processes and issues.

Overall certificate requirements are listed on p. 86.

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.

Four required courses:

BMGT	487	Project Management I	3
BMGT	488	Project Management II	3
IFSM	438	Information Systems Project Management	3
IFSM	441	Agile Project Management	3

Two supporting electives chosen from the following:

BMGT	317	Decision Making	3
BMGT	339	Introduction to Federal Contracting	3
BMGT	365	Organizational Leadership	3
BMGT	484	Managing Teams in Organizations	3
IFSM	300	Information Systems in Organizations	3
COMM	492	Grant and Proposal Writing	3

Total credits for certificate in Project Management 18

Spanish for Business and the Professions

Improve your communication skills for job markets both inside and beyond the United States by pursuing a certificate in Spanish for business.

Through the certificate program in Spanish for Business and the Professions at UMUC, you'll benefit from a combination of language and professional study that will build a foundation to enhance your résumé and prepare you to work and communicate in a variety of Spanish-speaking environments.

You'll be equipped to work with unique client populations, and you'll have the opportunity to network with clients and representatives from real companies during your courses. This program is ideal for military servicemembers, as well as those who are in a professional or social setting where Spanish is often spoken.

In your online Spanish classes, you'll not only learn the language but also explore contexts and practices specific to the Spanish-speaking world. You'll use your knowledge of diverse business cultures to communicate and interact effectively in a business environment.

Note: This certificate is not intended for students who already have native or near-native ability in Spanish. Students with prior experience in the Spanish language should contact the department at languages@umuc.edu about a placement test.

Overall certificate requirements are listed on p. 86.

Spanish for Business and the Professions

Certificate Requirements

Credits

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

Four courses in intermediate or upper-level Spanish chosen from the following: 12

SPAN 211 Intermediate Spanish I

SPAN 212 Intermediate Spanish II

Any 300- or 400-level SPAN course taught in Spanish

One of the following 4-credit courses in Spanish 4

SPAN 418 Business Spanish I

SPAN 419 Business Spanish II

Total credits for certificate in Spanish

for Business and the Professions

16

More information about certificates, including gainful employment disclosures, is available at www.umuc.edu/ugcertificates.

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 you are expected to have before enrolling in a given course. You may be barred from enrolling in or may be removed from courses for which you 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 your 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 you did not take the prerequisite course recently, you should consult an advisor or the academic department about whether you are 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 Assessment (described on p. 196. Advisors can explain the procedures for seeking this credit. Some courses are not eligible for challenge examination or Portfolio Assessment, and you may not take course-challenge examinations or seek Portfolio Assessment credit for lower-level courses that are prerequisite to courses for which you have already received credit.

WRTG 101 (or WRTG 101S) 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 you have 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. If you have prior experience in a foreign language, you should take a placement test to assess appropriate level. For information on language placement tests, consult the department or visit www.umuc.edu/language/testing.

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	Course Number	Title	Number of Credits
JAPN	333	Japanese Society and Culture	(3)

(Formerly ASTD 333. Fulfills the general education requirement in the arts and humanities. Conducted in English.) A study of the origin and historical background of contemporary Japanese society and culture. Students may receive credit for only one of the following courses: ASTD 333 or JAPN 333.

1. Explanatory material, if needed, may
 - Explain course sequence, purpose, or audience.
 - Identify courses fulfilling general education requirements (listed on p. 8).
 - Identify courses requiring a special fee, equipment, or materials.
2. Prerequisites represent the level of knowledge a student should have acquired before enrolling in this course. A prerequisite is usually stated as a specific numbered course; sometimes the prerequisite calls for a specific course “or equivalent experience.”
3. The course description describes the focus and level of the course.
4. Statements beginning “Students may receive credit for only one of the following courses” are designed to avoid course duplication and, therefore, loss of credit. The courses listed are courses that duplicate or significantly overlap content. If a course in the list is not described elsewhere in the catalog, that means that the course has changed designator or number over the years or that the course is not offered at all UMUC locations.

INDEX TO COURSE DESCRIPTIONS

The courses summarized in the following pages are listed alphabetically by discipline or subject, as follows. The discipline designators that precede the course numbers are listed in parentheses.

You should check the course descriptions carefully to avoid duplicating previous coursework. UMUC will not award credit for courses that repeat material you have already been credited with learning.

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		Spanish (SPAN)*	178
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* Only a limited number of courses are available each session in this discipline.

INFORMATION ON COURSES

UNDERGRADUATE COURSES

The following entries describe courses offered through University of Maryland University College. Requirements pertain only to degrees conferred at UMUC. To determine how these courses may transfer and be applied toward degrees offered by other institutions, you should consult those institutions. Transferability is determined by the receiving institution. In transferring to UMUC—particularly from a community college—you should be careful not to enroll in courses that duplicate your 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, management studies, or marketing
- a minor in accounting, business administration, or contract management and acquisition
- 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 objective 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 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.

INFORMATION ON COURSES

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 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 452 Federal Auditing (3)

Prerequisite: ACCT 221. Recommended: ACCT 422 or 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 Workplace Learning in Accounting (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Accounting (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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
- 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 East Asian studies or social science
- a minor in diversity awareness or East Asian studies
- 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.

INFORMATION ON COURSES

ANTH 345 World Prehistory and Archaeology (3)

An intermediate-level exploration of world prehistory and archaeology. The goal is to analyze the cultural and subsistence patterns of prehistoric humans in order to relate these patterns to contemporary human societies and populations. Discussion includes archaeological theories and methods, subsistence strategies, and the application of archaeology to address community, regional, and global issues and concerns.

ANTH 346 Anthropology of Language and Communication (3)

An intermediate-level, anthropological study of language, communication, and culture. The aim is assess how the concepts, approaches, and methods of linguistic anthropology explain communication in changing cultural environments, recognizing how language both shapes and is shaped by culture. Topics include the evolution and history of human language, structural elements of verbal and nonverbal language, language as social action, speech communities, and linguistic diversity in the contemporary world.

ANTH 350 Health, Illness, and Healing (3)

Recommended: ANTH 102. 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 417 Peoples and Cultures of East Asia (3)

An advanced anthropological study of the peoples and cultures of East Asia, focusing on China, Japan, and Korea. The aim is to apply anthropological theories and methods to the interpretation of contemporary East Asian cultures, relate family structure to individual choices and social interactions in East Asian cultures, and analyze how ethnic and national identities and regional differences affect regional and global interactions. Topics include urbanization, social values, social change, and the role of East Asia in the modern world.

ANTH 486A Workplace Learning in Anthropology (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Anthropology (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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
- 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. Ample 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.

ARAB 333 Middle Eastern Cultures (3)

(Conducted in English.) A project-driven and discussion-based study of Middle Eastern cultures. The objective is to demonstrate cultural competence by explaining and analyzing Middle Eastern cultures from a variety of perspectives. Topics include religion, cultural practices, history, geography, and societies of the Middle East. Students may receive credit for only one of the following courses: ARAB 333 or ARAB 334.

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
- electives

ARTT 110 Introduction to Drawing (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 Design I: Arrangement and Color (3)

Prerequisite: GRCO 100. A project-driven study of the design elements of a composition as they relate to its overall expression. The aim is to apply elements and principles of design, including color theory, to create a variety of compositions that effectively communicate ideas and emotions.

ARTT 152 Basics of Photography (3)

(Access to a digital camera required.) An introduction to basic photographic procedures. Emphasis is on composing, taking, and editing photographs. Discussion covers the historical development of photography. Students may receive credit for only one of the following courses: ARTT 152 or PHOT 198.

ARTT 210 Intermediate 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.

INFORMATION ON COURSES

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, or 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. The goal is to paint in a variety of styles and techniques, work with more complex forms (including drapery, transparency and reflections), and work in landscape and/or figure in space painting. Emphasis is on the development of personal directions. May be repeated to a maximum of 12 credits..

ARTT 486A Workplace Learning in Art (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Art (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 humanities
- a minor in art history
- 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)

Recommended: ARTT 204. 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 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 as well as an evaluation of how gender affected their art and their careers.

ARTH 486A Workplace Learning in Art History (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Art History (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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
- electives

ASTD 135 Introduction to Japanese Language and Culture (3)

(Not open to students with substantial prior experience with Japanese language or culture; assumes no prior knowledge of Japanese. Students with prior experience with the Japanese language should take a placement test to assess appropriate level.) A hands-on, project-based introduction to Japanese language and culture. The goal is to develop cultural competency and familiarity with the history, geography, and culture of Japan and to use basic language skills to function effectively and appropriately in everyday life in Japan. Students may receive credit for only one of the following courses: ASTD 135 or JAPN 105.

ASTD 155 Introduction to Korean Language and Culture (3)

(Formerly KORN 105. Not open to students whose native language is Korean. Fulfills the general education requirement in the arts and humanities. Conducted in English.) An introduction to Korean language and culture. Emphasis is on practical application. Students may receive credit for only one of the following courses: ASTD 155 or KORN 105.

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.

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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 370 Interpreting Contemporary China (3)

Prerequisite: Any writing class. Recommended: ASTD 285. A thematic study of contemporary China from political, economic, social, and foreign policy perspectives. The objective is to identify decision-making authorities, interpret major influences on the Chinese economy, appraise the impact of grass-roots social movements, and distinguish factors that drive China's foreign policy. Focus is on developing engagement strategies for various professional applications. Assignments require research, analysis, and a written policy or strategy recommendation (e.g., a policy paper or business strategy plan).

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 Issues in East 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 that integrates knowledge gained through previous coursework and experience and builds 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 Workplace Learning in East Asian Studies (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in East Asian Studies (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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
- 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. Topics include the solar system, stars and stellar evolution, and galaxies. Current topics in astronomy are also discussed. The objective is to use scientific and quantitative reasoning to make informed decisions about topics related to space science. Students may receive credit for only one of the following courses: ASTR 100, ASTR 101, ASTR 120, or GNSC 125.

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 diversity awareness or women's studies
- electives

BEHS 103 Technology in Contemporary Society (3)

An interdisciplinary introduction to the role of technology in contemporary society. The aim is to apply principles and concepts from a variety of social science disciplines (e.g., anthropology, sociology, psychology, and gerontology) to explore the influence of technology on society, and the consequences of technological change on our social lives, including how technology influences interpersonal relationships, work, culture, and society. Topics include how technology changes relationships, the cumulative advantages and disadvantages associated with technology, digital natives versus digital immigrants, the pace of technological change, changes to the nature of how people learn and think, and the meaning of technology in society.

BEHS 210 Introduction to Social Sciences (3)

Recommended: WRTG 101 or WRTG 101S. 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 200. 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.

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BEHS 364 Alcohol in U.S. Society (3)

An interdisciplinary examination of the use and abuse of the drug alcohol from the perspectives of psychology, physiology, sociology, medicine, counseling, law, and public health. The aim is to examine current research and trends in the treatment of alcohol abuse and dependence (including prevention, assessment, and intervention) and to explore the history, etiology, effects, and current treatment practices. The effects of alcohol throughout the lifespan are explored in relation to gender, families, race, age, the workplace, and public safety.

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 Workplace Learning in Behavioral and Social Sciences (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Behavioral and Social Sciences (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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, environmental management, or laboratory management
- a minor in biology, forensics, microbiology, or natural science
- 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 and technology 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 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 and technology on human societies. Laboratory activities emphasize the scientific method. Students may receive credit for only one of the following: BIOL 101–102, 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 164 Introduction to Human Anatomy and Physiology (3)

Prerequisite: BIOL 101, BIOL 105, BIOL 160, or BSCI 105. An introduction to the anatomy and physiology of the human organism. Topics include basic concepts of physics and chemistry that are necessary for understanding biological functions and the structure and function of cells, tissues, and the major organ systems in the body. Students may receive credit for only one of the following courses: BIOL 164 or GNSC 161.

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 220 Human Genetics (3)

An introduction to the role of genes in inheritance of traits and genetic diseases and disorders. The goal is to understand how genes affect physical appearance and behavior. Topics include Mendelian and non-Mendelian inheritance of human genetic diseases, human genetic variation, and mechanisms underlying human diseases. Students may receive credit for only one of the following courses: BIOL 220, BIOL 222, or BSCI 222.

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.

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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 goal is to apply knowledge of cancer biology to adopt appropriate lifestyle strategies and evaluate current treatments. The causes, 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 307 The Biology of Aging (3)

(For students majoring in both science and nonscience disciplines.) An overview of the biological basis of aging. The goal is to apply knowledge of the aging process to influence personal lifestyle choices, public health policy, and economic decisions. Topics include typical changes that occur in cells, molecules, metabolism, and structure during the aging process. The development and progression of several diseases associated with aging (including cancer, neurodegenerative diseases such as Alzheimer's and Parkinson's diseases, 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 principles and current trends in biological science. The goal is to apply knowledge of core biological principles, critically analyze current research, and use scientific reasoning to make evaluative 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 (or WRTG 101S) 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 350 Molecular and Cellular Biology (3)

(For students majoring or minoring in a science.) Prerequisite: BIOL 325. 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 357 Bioinformatics (3)

(For students majoring or minoring in a science.) Prerequisite: BIOL 325 or another upper-level biology course. Recommended: IFSM 201 and MATH 106 (or higher). An introduction to the use of computers in the analysis of nucleic acid and protein sequences and a study of the significance of these analyses. The goal is to develop an understanding of the software used in bioinformatics and learn how to address specific questions in biotechnology and research. Topics include genome analysis, evolutionary relationships, structure-function identification, protein pattern recognition, protein-protein interaction, and algorithms.

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 398 Special Topics in Biology (3)

A study of topics in biology of special interest to students and faculty. May be repeated to a maximum of 6 credits when topics differ.

BIOL 422 Epidemiology of Communicable Diseases (3)

Prerequisite: BIOL 230, BIOL 301, 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 486A Workplace Learning in Biology (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Biology (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 495 Current Trends and Applications in the Life Sciences (3)

(For students majoring or minoring in a science.) Prerequisite: BIOL 325. Recommended: A statistics course. An examination of current topics, trends, and applications in the life sciences. The aim is to be familiar with life science laboratory and industry environments, communicate scientific principles effectively, practice professional ethics, and demonstrate knowledge of safe laboratory operations. Topics include current research, ways to recognize future trends, strategies to solve current challenges, and creative solutions for developing products and services in the life sciences. Students may receive credit for only one of the following courses: BIOL 400 or BIOL 495.

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, finance, human resource management, laboratory management, management studies, or public safety administration
- a minor in business administration, contract management and acquisition, diversity awareness, small business management and entrepreneurship, or women's studies
- a certificate in Human Resource Management, Management Foundations, or Project Management
- 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 302 Franchising (3)

Recommended: BMGT 335. A thorough review of franchising in a global business environment. The objective is to explain how a franchise works and fits in the global business economy, differentiate the key roles in franchising, and evaluate small business concepts for franchise potential. Topics include the history of franchising, the legal and regulatory environment, business life cycle, franchise relations, social franchising, and the future of the franchise model.

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.

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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 impact 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 330 Entrepreneurship and New Venture Planning (3)

(Formerly FINC 310.) 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.

BMGT 335 Small Business Management (3)

A comprehensive review of the management principles underlying organizational development and growth and business life cycle segments of emerging enterprises. The goal is to demonstrate an understanding of small business management in a global context, differentiate between micro- and macro-organizational structures, and identify the critical elements of business sustainability. Topics include entrepreneurship, financing/capitalization, innovation, and human resource and strategic planning. Core components of small business management are explored and evaluated through a multifaceted approach.

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 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 364 Management and Organization Theory (3)

Prerequisites: 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 environments 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 prepare a presentation plan and use the plan to create 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 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 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 411 Process Improvement (3)

A hands-on, project-based introduction to process improvement. The objective is to assess the root cause of a problem, gain buy-in for the improvement, map the process, establish internal controls, and apply a variety of metrics to improve processes, test improvement solutions, and implement the process improvement. Emphasis is on process improvements that are cost-effective and add value to organizational missions. Topics include meeting customer expectations, flowcharting, selecting approaches to change management, acquiring resources, and sustaining improvements. Students may receive credit for only one of the following courses: BMGT 411 or TMGT 411.

INFORMATION ON COURSES

BMGT 456 Managing Across Cultures and Borders (3)

Prerequisite: BMGT 110 or two years of management experience. An examination and analysis of international management across cultures and borders. The aim is to apply critical thinking and analytical skills in global management settings. Focus is on the roles 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, policies, 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 (OD)—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 Public Management (3)

Prerequisite: BMGT 110 or two years of management experience. A comprehensive study of public management. The aim is to analyze, design and evaluate solutions to public-sector problems, both domestic and global, based on an understanding of public-sector management concepts and the different types of organizations involved. Topics include development and implementation of public-sector projects and the finance, human resources, and marketing activities that support them. Discussion also covers public management in diverse regions of the world, as well as the purpose and management of intergovernmental organizations (IGOs) and nongovernmental organizations. 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. The goal is to develop the skills necessary to achieve individual and organizational excellence. 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.

BMGT 486A Workplace Learning in Business and Management (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Business and Management (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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)

Recommended: FINC 330. An introduction to project management principles, concepts, and software applications. The goal is to manage a project 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 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 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 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, HMG 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 and Academic Planning

Courses in career and academic 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.

INFORMATION ON COURSES

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 minor in natural science
- 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 105, CHEM 107, CHEM 121, CHEM 297, or GNSC 140.

CHEM 297 Environmental Chemistry (3)

Prerequisite: MATH 115 (or MATH 107–108). An examination of the chemistry of environmental systems. The aim is to identify and evaluate fundamental principles of chemistry in relation to environmental systems. Discussion covers the nature of atoms, types of bonding, functional groups, chemical reactivity, and chemical interactions. Topics also include migration of chemicals through the environment, the role of basic chemistry in biogeochemical cycles, and human impact on biogeochemical cycles through the use of technology. Students may receive credit for only one of the following courses: CHEM 102, CHEM 103, CHEM 104, CHEM 105, CHEM 107, CHEM 121, CHEM 297, 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
- 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 Chinese pronunciation, tones, 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
- a minor in communication studies, journalism, or speech communication
- electives

COMM 200 Military Communication and Writing (3)

(Fulfills the general education requirement in communications.) A study of business communication management in a military context. The objective is to develop appropriate and effective communication products for military audiences and within military environments through the application of accepted business communication practices. Topics include communication theories; research methods; organization of information; formats; writing and editing strategies; and techniques for guiding subordinate communication, conducting interviews, and managing meetings. Assignments may include making speech presentations; instructing a class; conducting interviews; managing meetings; and writing and editing reports, letters, e-mails, proposals, and personnel evaluations.

COMM 202 Media and Society (3)

(Fulfills the general education requirement in communications but is not a writing course.) Prerequisite: WRTG 101 or WRTG 101S. An overview of today's media designed to identify complex components and relationships. The goal is to understand the technical, political, economic, cultural, and organizational influences on mediated messages. Topics include visual rhetoric, legal and ethical issues, social media, transactional models, advertising, and security and privacy concerns.

COMM 207 Understanding Visual Communication (3)

A study of the creation and interpretation of visual language. The aim is to understand how images are used to effectively communicate ideas in a variety of channels, including news, advertising, and public relations. Topics include aesthetics, principles of composition, color systems, content awareness, and historical and cultural perspectives. Emphasis is on critical thinking and analysis of images from both theoretical and practical perspectives.

COMM 300 Communication Theory (3)

(Fulfills the general education requirement in communications but is not a writing course.) Prerequisite: WRTG 101 or WRTG 101S. 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 WRTG 101S. 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 302 or COMM 379A.

COMM 390 Writing for Managers (3)

(Formerly WRTG 490. Fulfills the general education requirement in communications.) Prerequisite: WRTG 101 or ENGL 101. A practicum in the kinds of communication skills that managers need for the workplace. The goal is to develop persuasive managerial communication for organizational decision making and action. Students may receive credit for only one of the following courses: COMM 390, HUMN 390, WRTG 390, or WRTG 490.

INFORMATION ON COURSES

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.) Prerequisite: WRTG 101 or WRTG 101S. 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 459 Special Topics in Communication (1–3)

An exploration of special topics in communication. The objective is to attain specialized knowledge and skills in a particular area of communication, journalism, speech, or professional writing. Focus is on demonstrating new knowledge through an extended applied project. May be repeated to a maximum of 6 credits when topics differ.

COMM 480 Research Methods in Communication Studies (3)

Prerequisites: COMM 300 and 302 and an upper-level writing course. A review of qualitative and quantitative research methods in communication studies. The objective is to define and explain research methods, concepts, and tools; apply research design, data collection, analysis, and reporting skills; and critically evaluate research in terms of rigor, relevance, and explanatory value. Practice is provided in finding, consuming, and analyzing research studies. Discussion covers the steps of the research process: articulating a question, developing a methodology, conducting a study, and reporting on findings.

COMM 486A Workplace Learning in Communication Studies (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Communication Studies (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 492 Grant and Proposal Writing (3)

(Formerly WRTG 494. Fulfills the general education requirement in communications.) Prerequisite: WRTG 393, WRTG 394, COMM 393, 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.

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)

Prerequisites: COMM 300 and 480 and either WRTG 391, WRTG 393, or WRTG 394. A project-based capstone study of communication. 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. 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 science, information systems management, or software development and security
- a minor in computer science
- 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.

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 pseudo code 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. Projects include creating and maintaining accounts on selected social networking sites.

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 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 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) architecture, standard conditional and iterative structures, and functions. Students may receive credit for only one of the following courses: CMIS 240 or CMIS 315.

INFORMATION ON COURSES

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 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 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 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 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. The goal is to apply Unified Modeling Language (UML) to the system architectural design using established patterns and create a design document based on software requirements and organizational constraints. 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 398B, CMIS 485, or CMIS 498B.

CMIS 486A Workplace Learning in Computer and Information Science (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Computer and Information Science (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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. A seminar on topics in computer and information science. May be repeated to a maximum of 6 credits when topics differ.

Computer Information Technology

Courses in computer information technology (designated CMIT) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing
- a major in computer networks and cybersecurity or cybersecurity management and policy
- a minor in cybersecurity
- a certificate in Computer Networking
- 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: IFSM 201. 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 interconnection) 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.

INFORMATION ON COURSES

CMIT 321 Ethical Hacking (3)

(Formerly CMIT 398E. Designed to help prepare for the EC-Council Certified Ethical Hacker certifications.) Prerequisite: CMIT 320. Development of a structured knowledge base that enables network security professionals to discover vulnerabilities and recommend solutions for tightening network security and protecting data from potential attackers. Focus is on penetration-testing tools and techniques that security testers and ethical hackers use to protect computer networks. Students may receive credit for only one of the following courses: CMIT 321 or CMIT 398E.

CMIT 350 Interconnecting Cisco Devices (3)

(Designed to help prepare for the Cisco Certified Network Associate examination 200-120.) Prerequisite: CMIT 265. A hands-on introduction to Cisco internetworking devices. The goal is to configure and manage Cisco switches within multiprotocol internetworks. Topics include VoIP (voice over Internet protocol), wireless network protocols, and routing protocols. Students may receive credit for only one of the following courses: CAPP 498E, CMIT 350, or CMIT 499D.

CMIT 369 Installing and Configuring Windows Server (3)

(Designed to help prepare for the Installing and Configuring Windows Server exam, part of MCSE Server Infrastructure Certification.) Prerequisite: CMIT 265. An overview of the installation and configuration of Windows Server operating systems. The objective is to install, configure, and troubleshoot Windows Server operating systems, including domain and network services.

CMIT 370 Administering Window Server (3)

(Designed to help prepare for the Administering Windows Server exam, part of MCSE Server Infrastructure Certification.) Prerequisite: CMIT 369. An overview of the management and administration of Windows Server operating systems. The goal is to manage and troubleshoot features of Windows Server operating systems, including Active Directory, DNS, Group Policy, Desktop Security, Remote Access, Windows Deployment, and User Accounts.

CMIT 371 Configuring Advanced Windows Server Services (3)

(Designed to help prepare for the Configuring Advanced Windows Server Services exam, part of MCSE Server Infrastructure Certification.) Prerequisite: CMIT 370. An advanced review of the configuration and management of Windows Server infrastructure. The aim is to configure, manage, and troubleshoot Windows Server services, including Network Load Balancing, clustering, Dynamic Access Control, advanced network services, and advanced Active Directory roles.

CMIT 372 Designing and Implementing a Server Infrastructure (3)

(Designed to help prepare for the Designing and Implementing a Server Infrastructure exam, part of MCSE Server Infrastructure Certification.) Prerequisite: CMIT 371. A comprehensive study of the knowledge and skills necessary to plan, design, and deploy the physical and logical Windows Server infrastructure. The objective is to design Active Directory, Network Infrastructure Services, and Network Access Services.

CMIT 373 Implementing an Advanced Server Infrastructure (3)

(Designed to help prepare for the Implementing an Advanced Server Infrastructure exam, part of MCSE Server Infrastructure Certification.) Prerequisite: CMIT 372. A comprehensive study of the knowledge and skills necessary to plan and implement the advanced features of a Windows Server infrastructure. The goal is to plan and implement highly available enterprise infrastructure and server virtualization infrastructure and identity and access solutions.

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, CMIS 398U, or CMIT 391.

CMIT 424 Digital Forensics Analysis and Application (3)

(Designed to help prepare for the Certified Computer Examiner [CCE] certification exam.) Prerequisites: Either CMIT 202 (or CompTIA A+ certification) and CCJS 421 or CMIT 202, CMIT 320 (or CompTIA Security+ certification), and CCJS 321. 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 Systems Security (3)

(Formerly CMIT 499S. Designed to help prepare for the (ISC)² Certified Information System Security Professional [CISSP] certification exam.) Prerequisite: CMIT 320 or CompTIA Network+ and Security+ certifications. 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 425 or CMIT 499S.

CMIT 440 Mobile Forensics (3)

(Designed to help prepare for the Mobile Forensics Certified Examiner [MFCE] certification exam.) Prerequisite: CMIT 424. A project-driven study of mobile devices from a forensic perspective. The aim is to implement various techniques to collect and analyze information from mobile devices used in forensic investigations.

CMIT 450 Designing Cisco Networks (3)

(Designed to help prepare for the Cisco Certified Design Associate Examination 640-863.) Prerequisite: CMIT 350. An advanced study of network design using Cisco Systems technologies. The objective is 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. Topics include switched and routed LAN and WAN designs. Students may receive credit for only one of the following courses: CAPP 398C, CMIT 450, or CMIT 499C.

CMIT 451 Implementing Cisco IP Routing (3)

(Designed to help prepare for the Cisco 642-902 ROUTE [Implementing Cisco IP Routing] Exams.) Prerequisite: CMIT 350. A comprehensive study of the implementation of a routed network using Cisco Systems technologies. The goal is to use advanced IP routing and scalability solutions to increase the number of routers and sites without redesigning the LAN or WAN. Topics include configuration of secure routing solutions, configuration and troubleshooting of various routed environments (access, distributed, and core), and management of access and control. Students may receive credit for only one of the following courses: CMIT 451 or CMIT 499E.

CMIT 452 Implementing Cisco IP Switched Networks (3)

(Designed to help prepare for the Cisco 642-813 SWITCH [Implementing Cisco IP Switched Networks] Exams.) Prerequisite: CMIT 350. A comprehensive study of switched IP networks using Cisco Systems technologies. The aim is 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. Students may receive credit for only one of the following courses: CMIT 452 or CMIT 499F.

CMIT 453 Troubleshooting and Maintaining Cisco IP Networks (3)

(Formerly CMIT 499G. Designed to help prepare for the Cisco 642-832 TSHOOT [Troubleshooting and Maintaining Cisco IP Switched Networks] Exams.) Prerequisites: CMIT 451 and 452. A comprehensive study of methods for troubleshooting and managing switched IP networks using Cisco Systems technologies. The objective is to plan and perform regular network maintenance and diagnose and resolve complex network problems quickly and effectively. Discussion covers technology-based practices and a systematic ITIL (information technology infrastructure library)-compliant approach to perform network troubleshooting and maintenance. Students may receive credit for only one of the following courses: CMIT 453 or CMIT 499G.

CMIT 460 Network Forensics (3)

(Designed to help prepare for the Computer Security Incident Handler [CSIH] certification.) Prerequisites: CMIT 320, CMIT 350, CMIT 369, and CMIT 424. A project-driven study of networks from a forensics perspective. The goal is to implement various techniques that are used in forensic investigations in response to network intrusions to collect and analyze information from computer networks.

CMIT 486A Workplace Learning in Computer and Information Science (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Computer Information Technology (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

INFORMATION ON COURSES

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 369 (or 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 Networks and Security (1–5)

An inquiry into special topics in computer networks and security that reflect the changing field. May be repeated when topics differ.

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 or software development and security
- a minor in computer science
- 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 CMIS 242. 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 405 Computer Graphics (3)

Prerequisite: CMSC 325 or CMSC 350. A hands-on, project-based introduction to computer graphics. The goal is to develop projects that render graphic images and animate three-dimensional objects. Topics include programming in OpenGL and transforming, viewing, and modeling 2-D and 3-D objects.

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 451 Design and Analysis of Computer Algorithms (3)

Prerequisites: CMSC 150 and 350 (or CMSC 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 Workplace Learning in Computer Science (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Computer Science (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.) Prerequisite(s): Either CMSC 330 and 335, CMIS 320 and 330, or SDEV 425. An overview of computer technologies with an emphasis on integration of concepts, practical application, and critical thinking. The goal is to research, plan, conduct, and complete collaborative computer-related projects in compliance with schedule deadlines. Analysis covers innovative and emerging issues in computer science. 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. A seminar on topics in computer science. May be repeated to a maximum of 6 credits when topics differ.

Computer Studies

Courses in computer studies (designated CMST) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing
- a major or minor in digital media and web technology
- 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 introduction to 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 301 Digital Media and Society (3)

A survey of the technological advancements in the field of digital media and their impact. The objective is to explain how digital media has transformed the communication of ideas in society and to make responsible choices in the creation and consumption of digital media based on awareness of global, social, ethical, and legal contexts. Topics include social media, the visual display of information, ethics and privacy, participatory media, and the impact of digital media on culture.

INFORMATION ON COURSES

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 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 versus 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 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 website. Topics include Internet protocols; usability; accessibility; and social, ethical, and legal issues related to website 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 website promotion strategy, with search engine optimization, and produce a professional website that incorporates multimedia and scripting. Topics include website marketing, web analytics, performance, privacy, and security issues related to website 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 webpages. The goal is to use client-side JavaScript to create interactive, cross-browser-compatible webpages 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 388 or CMST 398J.

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 to 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 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 486A Workplace Learning in Computer Studies (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Computer Studies (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

INFORMATION ON COURSES

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 100, 105, 350, 360, and 461 apply)
- a major in criminal justice, computer networks and cybersecurity, cybersecurity management and policy, or investigative forensics
- a minor in African American studies, corporate security, criminal justice, cybersecurity, forensics, fraud investigation, terrorism and critical infrastructure
- certain UMUC graduate degree programs where recognized as equivalent coursework (specific equivalences are detailed in the UMUC graduate catalog)
- 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 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, CCJS 101, 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 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 criminalist to 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 311 Intelligence-Led Policing (3)

Prerequisite: CCJS 340. An examination of intelligence-related processes as they apply to domestic law enforcement. The aim is to identify, collect, and assess data and process that information into intelligence that can support strategic and tactical planning. Intelligence reports are reviewed and assessed. Discussion covers the legal and ethical licenses and constraints that provide a framework for intelligence development.

CCJS 321 Digital Forensics in the Criminal Justice System (3)

(For students not majoring in criminal justice; not open to students who have completed CCJS 421; does not satisfy prerequisites for other criminal justice courses.) An overview of the criminal justice system and the application of digital forensic evidence in criminal justice cases. The objective is to apply Constitutional and case law to the search and seizure of digital evidence, determine the most effective and appropriate forensic response strategies to digital evidence, and provide effective courtroom testimony in a case involving digital evidence. Topics include crime scene procedures and the collection of digital evidence, procedures performed in a digital forensics lab, and the preparation of courtroom testimony by the digital forensic investigator.

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.

INFORMATION ON COURSES

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 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 390 Cyber Crime and Security (3)

(Formerly CCJS 496.) Prerequisite: CCJS 100, CCJS 101, CCJS 105, or CSIA 310. Recommended: CCJS 234. 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 416 Analytical Strategies for Law Enforcement (3)

Prerequisite: CCJS 311. The application of intelligence-related products to domestic law enforcement. The objective is to assess intelligence reports and channel them to appropriate internal and external stakeholders to solve public safety-related problems. Discussion covers the components of a viable intelligence report and how such reports can be used for strategic and tactical planning.

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. The objective is to perform investigative functions at a death scene, determine and apply forensic testing, and analyze and effectively communicate investigative information. 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 Principles of Digital Analysis (3)

(Computer access with administrator privileges required.) Prerequisite: CCJS 100, CCJS 101, or CCJS 105. A study of the technical and legal issues facing computer crime investigators and digital forensic examiners. The objective is to determine the most effective and appropriate forensic response strategies to support computer crime investigative efforts involving various digital technologies; apply forensic best practices to both the collection and handling and the analysis of digital evidence; and appropriately communicate complex technical and investigative information in an accurate, ethical, and comprehensive manner. Focus is on acquiring the skills to identify and collect potential digital evidence at a crime scene, analyze that evidence using forensically sound methods, and report forensic findings, both verbally and in writing.

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 fingerprint professional, including assessing surfaces for viable 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 461 Psychology of Criminal Behavior (3)

Prerequisite: CCJS 100, CCJS 101, or CCJS 105. An overview of the biological, environmental, and psychological factors that underlie criminal behavior. The goal is to analyze psychological disorders and explain their relationship to and legal impact on 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 486A Workplace Learning in Criminal Justice (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Criminal Justice (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 494 Leadership in Criminal Justice (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 345, 340, and 497. A comprehensive study of leadership as an essential component within a functional and effective criminal justice agency. Case studies and exercises are used to examine how major theories of leadership are applied to the various components of the criminal justice system. Emphasis is on leadership approaches to solving practical problems in a criminal justice environment. Self-assessment of leadership readiness and reflection on areas for growth are used as strategies to improve leadership ability.

CCJS 495 Issues in Criminal Justice (3)

Prerequisites: 15 upper-level credits in CCJS. An integrative study of the various components of the American criminal justice system. The goal is to apply principles of interagency cooperation, critical thinking, and systems approaches to solve practical problems in a criminal justice environment. Topics include problem solving, case study analysis, strategic planning, teamwork, and professional writing.

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. The objective is to apply organizational concepts, leadership, and effective administrative approaches to the management of correctional structures and offender populations. Emphasis is on organization and management in the field of corrections. Discussion covers 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.

INFORMATION ON COURSES

Cybersecurity

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

- a major in cybersecurity management and policy
- a minor in cybersecurity
- electives

CSIA 310 Cybersecurity Processes and Technologies (3)

(Formerly CSIA 301.) Prerequisite(s): CMIT 320 and WRTG 101. A study of the processes and technologies used to implement and manage enterprise IT security operations. The goal is to apply and integrate cybersecurity concepts and best practices with the principles of IT operations and management. Students may receive credit for only one of the following courses: CSIA 301 or CSIA 310.

CSIA 350 Cybersecurity in Business and Industry (3)

(Formerly CSIA 303.) Prerequisite(s): CSIA 310 or CSIA 301 and WRTG 101. A study of the integration and application of cybersecurity principles, frameworks, standards, and best practices to the management, governance, and policy development processes for businesses. Discussion covers the organization, management, and governance of cybersecurity for enterprise IT in business settings; risk and risk management practices; and development and implementation of industry-wide cybersecurity initiatives and programs. Students may receive credit for only one of the following courses: CSIA 303, CSIA 350, IFSM 430, or IFSM 498N.

CSIA 360 Cybersecurity in Government Organizations (3)

(Formerly CSIA 412.) Prerequisites: CSIA 350 (or CSIA 303) and WRTG 393. A study of cybersecurity management and governance in the context of the missions, functions, and operations of federal, state, and municipal government agencies, departments, and programs. Discussion covers the policy life cycle and the mechanisms used by governments to formulate and implement laws, policies, regulations, and treaties to protect and defend government operations and society as a whole against cyber attacks and crimes, both foreign and domestic. Students may receive credit for only one of the following courses: CSIA 360 or CSIA 412.

CSIA 413 Cybersecurity Policy, Plans, and Programs (3)

Prerequisite(s): CSIA 360 and WRTG 393. A study of the application of cybersecurity principles, frameworks, standards, and best practices to organization-level strategies, policies, programs, plans, procedures, and processes. Projects include writing security policies and plans, developing metrics and measures for information security programs, planning audits of compliance practices and processes, and developing organization-level security policies for enterprise IT governance.

CSIA 459 Evaluating Emerging Technologies (3)

(Formerly IFSM 459.) Prerequisites: CMIT 320 and CSIA 350. 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 CSIA 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. Students may receive credit for only one of the following courses: CSIA 485 or IFSM 485.

CSIA 486A Workplace Learning in Cybersecurity (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Cybersecurity (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

CSEC 620 Human Aspects in Cybersecurity: Ethics, Legal Issues, and Psychology (6)

(For cybersecurity majors only.) Prerequisites: 18 credits of coursework in the major, including CSIA 485, and a minimum GPA of 3.0 in the major at UMUC. 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.

CSEC 630 Prevention and Protection Strategies in Cybersecurity (6)

(For cybersecurity majors only.) Prerequisites: 24 credits of coursework in the major, including CSEC 620 (or 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.

CSEC 635 National Cybersecurity Policy and Law (6)

(For cybersecurity majors only.) Prerequisites: 24 credits of coursework in the major, including CSEC 620 (or 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
- a minor in economics
- related requirements for most business-related majors and minors
- electives

ECON 103 Economics in the Information Age (3)

A survey of basic concepts and principles in micro and macro economics and how the economy has been affected by technology. The aim is to define and explain the key terms and concepts in economics and determine how technology has affected consumers, producers, and markets, as well as economic growth and policy. Topics include how innovation affects labor markets, the value of information, and the role of technological change in the economy.

ECON 201 Principles of Macroeconomics (3)

An introductory study of the macroeconomy. The objective is to apply select macroeconomic theories to real-world situations. Discussion covers economic growth, technological innovation, 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, technological innovation, the advantages and disadvantages of different market structures, and income distribution and poverty.

INFORMATION ON COURSES

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 their 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 their 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: BEHS 440, ECON 440, or ECON 441.

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 103 does not fulfill the general education requirement in communications; it 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 103 Fundamentals of Writing and Grammar (3)

(Does not fulfill the general education requirement in communications. Recommended as preparation for WRTG 101, WRTG 101S, or upper-level writing courses.) A review of basic writing skills. The objective is to 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, ENGL 100, or WRTG 100.

Emergency Management

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

- a minor in emergency management
- electives

EMGT 302 Concepts of Emergency Management (3)

Prerequisite: WRTG 101 or WRTG 101S. 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. A study of the planning process, 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 308 Exercise and Evaluation Programs (3)

Prerequisites: EMGT 304. 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 are employed to support continuous improvement.

EMGT 310 Continuity of Operations Planning and Implementation (3)

Prerequisites: EMGT 304. 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. 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 of 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 486A Workplace Learning in Emergency Management (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Emergency Management (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

INFORMATION ON COURSES

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, or women's studies
- electives

ENGL 102 Composition and Literature (3)

(Fulfills the general education requirements in communications or arts and humanities.) Prerequisite: WRTG 101 or WRTG 101S. Further practice in writing using readings in literature. Focus is on academic writing forms, especially critical analysis of literature through a variety of modes such as comparison and contrast, classification, and causal analysis. Students may receive credit for only one of the following courses: ENGL 102 or ENGL 292.

ENGL 103 Introduction to Mythology (3)

(Formerly HUMN 103.) A foundation in ancient mythology, focusing on Greek and Roman myths. Discussion may also cover Norse, Irish, Chinese, Arabic, and Hindu myths, among others. Emphasis is on examining various classical myths as expressed through plays, poems, and stories. The objective is to demonstrate an understanding of the differences between myths, legends, and other similar genres and show how classical world mythology still influences contemporary society. Students may receive credit for only one of the following courses: ENGL 103 or HUMN 103.

ENGL 240 Introduction to Fiction, Poetry, and Drama (3)

Prerequisite: WRTG 101 or WRTG 101S. An introduction to fiction, poetry, and drama, with an emphasis on developing critical reading and writing skills. The objective is to identify and define elements of literature and literary genres, analyze literary texts using principles of close reading, and demonstrate skill in academic writing. Students may receive credit for only one of the following courses: ENGL 240 or ENGL 340.

ENGL 281 Standard English Grammar (3)

(Formerly WRTG 288. Fulfills the general education requirement in communications but is not a writing course.) Prerequisite: WRTG 101. An overview of standard edited English, a standard central to academic and professional communications. The aim is to write clear, effective prose consistent with the writer's goals. Topics include 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)

Prerequisite: WRTG 101 or WRTG 101S. 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)

(Designed as a foundation for other upper-level literature courses.) Prerequisite: WRTG 101 or WRTG 101S. 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 310 Renaissance Literature (3)

Prerequisite: WRTG 101 or WRTG 101S. 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.

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

Prerequisite: WRTG 101 or WRTG 101S. 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.

ENGL 312 19th-Century British Literature (3)

Prerequisite: WRTG 101 or WRTG 101S. A study of representative authors and works in British literature from 1800 to 1900. 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 William Blake, Jane Austen, Charles Dickens, Thomas Hardy, Oscar Wilde) are explored.

ENGL 354 American Women Writers Since 1900 (3)

Prerequisite: WRTG 101 or WRTG 101S. An examination of the contributions of major American women writers since 1900. The aim is to identify the impact of 20th- and 21st-century American women's literature and to consider its significance for American culture, the literary canon, and the changing roles of women in American life.

ENGL 358 British Women Writers Since 1900 (3)

Prerequisite: WRTG 101 or WRTG 101S. Recommended: ENGL 240 and 303. A study of major 20th-century British women writers, with an emphasis on their contributions to the novel, drama, poetry, and/or short story. The goal is to locate and critically evaluate appropriate sources; create professional written communications; and gain a historical and cultural perspective by analyzing feminist and other critical and social issues. Authors may include Woolf, Bowen, Winterson, Lessing, and Churchill.

ENGL 363 African American Authors from the Colonial Era to 1900 (3)

Prerequisite: WRTG 101 or WRTG 101S. 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 WRTG 101S. 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 372 Introduction to Novel Writing (3)

Prerequisite: WRTG 101 or WRTG 101S. Recommended: ENGL 294. A foundation in writing the novel. The goal is to develop the basic skills needed to write a novel. Topics include developing and mapping a central story idea; creating characters, motivations, and conflicts; writing scenes connected in a logical order; creating setting, mood, and atmosphere; writing narration, scene, and summary; writing dialogue and exposition; controlling time and point of view; and choosing a story structure. Classic and contemporary novels are examined to illustrate the topics. Assignments include writing the first 50 pages of a literary novel, detailed biographical character sketches, and a scene-by-scene chapter outline of a complete novel. Students may receive credit for only one of the following courses: ENGL 372 or ENGL 381P.

ENGL 381 Special Topics in Creative Writing (3)

Prerequisite: WRTG 101 or WRTG 101S. Recommended: ENGL 294 or other creative writing course. A study of special creative writing topics. 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 WRTG 101S. Recommended: ENGL 294 or other creative writing course. A hands-on, project-based introduction to screen and stage writing. The goal is to write, critique, analyze, and revise original plays for stage or screen. Assignments include a treatment or outline and at least a sample section. Discussion covers industry-standard principles developed by such experts as Robert McKee, Blake Snyder, David Mamet, Stuart Spencer, and Aristotle, among others. Topics include professional aspects of writing, such as query letters, script formatting, ethical and legal concerns, and marketing.

ENGL 386 History of the English Language (3)

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

INFORMATION ON COURSES

ENGL 389 Special Topics in English Literature (1–3)

An in-depth introduction to literary works written by a specific author or authors, representative of a literary movement or produced in a specific time or place. Assignments include advanced reading and research. Students may receive credit for a given topic in either ENGL 289 or ENGL 389 only once.

ENGL 406 Seminar in Shakespeare Studies (3)

Prerequisite: WRTG 101 or WRTG 101S. 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 WRTG 101S. A comprehensive and intensive study of one or two British writers from the period before 1800. The aim is to apply critical reading and thinking skills to analyze and interpret major British works before 1800 from various perspectives (social, historical, political, intellectual, and biographical). Authors studied may include Chaucer, Spenser, Marlowe, Jonson, Milton, Defoe, Richardson, Fielding, Pope, Swift, or Johnson. May be repeated to a maximum of 6 credits when topics differ.

ENGL 419 Major British Writers After 1800 (3)

Prerequisite: WRTG 101 or WRTG 101S. Recommended ENGL 240 and 303. A comprehensive and intensive study of one or two British authors from the 19th, 20th, and 21st centuries. The aim is perform research and understand the importance of biographical, historical, and cultural influences on the writer and the legacy of the writer. May be repeated to a maximum of 6 credits when topics differ.

ENGL 430 American Literature: Discovery to 1914 (3)

Prerequisite: WRTG 101 or WRTG 101S. 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 WRTG 101S. A study of the uniqueness of modern American fiction, poetry, nonfiction, and drama. The goal is to interpret and analyze literature by applying critical theory. Focus is on the major social and historical changes that occurred between World War I and World War II and their effect on literature. Major authors may include Ernest Hemingway, William Faulkner, F. Scott Fitzgerald, Langston Hughes, and Hilda Doolittle (H. D.). Students may receive credit for only one of the following courses: ENGL 281, ENGL 281X, or WRTG 288.

ENGL 439 Major American Writers (1–3)

Prerequisite: WRTG 101 or WRTG 101S. A study of works by selected American authors from the colonial period to the present. The goal is to understand the place these authors and their works hold in the canon of American literature. 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 WRTG 101S. A comprehensive study of literature in America from 1945 till 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 481 Seminar in Creative Writing: Fiction and Creative Nonfiction (3)

Prerequisite: WRTG 101 or WRTG 105. An overview of advanced techniques of narration. The objective is to write, critique, and revise intermediate- to advanced-level original short fiction and creative nonfiction and demonstrate mastery of specific aesthetic, stylistic, and formal literary elements. Students may receive credit for only one of the following courses: ENGL 479E or ENGL 481.

ENGL 485 Seminar in Creative Writing: Poetry (3)

Prerequisite: WRTG 101 or WRTG 105. An overview of advanced techniques of poetry. The objective is to write, critique, and revise intermediate- to advanced-level original poetry and demonstrate mastery of specific aesthetic, stylistic, and formal literary elements. Students may receive credit for only one of the following courses: ENGL 485 or ENGL 498P.

ENGL 486A Workplace Learning in English (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in English (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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, 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.

Environmental Management

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

- a major or minor in environmental management
- 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 Principles (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 management 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.

INFORMATION ON COURSES

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 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 Hazard Management in Emergency Response Operations (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 multi-media (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 or WRTG 101S. An interdisciplinary study of the role of individual human behavior and social institutions in environmental sustainability, stewardship, and conservation. The objective is to evaluate and develop strategies to promote personal and public behaviors that support environmental sustainability. 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. 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 Risk Assessment and Principles of Toxicology (3)

Prerequisite: ENMT 321. Recommended: WRTG 101 (or WRTG 101S) and a statistics 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 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 Workplace Learning in Environmental Management (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Environmental Management (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 303, 321, 322 and 340. Recommended: MATH 115 (or MATH 107 and 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.

INFORMATION ON COURSES

Experiential Learning

The Portfolio Assessment 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
- electives

Information about this program is given on p. 196. Details are also available online at www.umuc.edu/priorlearning.

EXCL X001 Supplement to Learning Analysis and Planning (0)

(Students should visit www.umuc.edu/priorlearning or contact priorlearning@umuc.edu for complete requirements.) Prerequisite: EXCL 301. An opportunity to submit additional portfolios for courses not previously targeted. 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; a total of 30 credits may be awarded through Portfolio Assessment.

EXCL 301 Learning Analysis and Planning (3)

(Students should visit www.umuc.edu/priorlearning or contact priorlearning@umuc.edu for complete requirements.) Prerequisite: Formal admission to the program. 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, human resource management, laboratory management, or public safety administration
- a minor in finance, business administration, or small business management and entrepreneurship
- a certificate in Management Foundations
- electives

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 328 Small Business Finance (3)

A project-driven study of small business and entrepreneurial finance that emphasizes the financial knowledge and tools needed to develop a successful venture from start-up through growth and maturity. The goal is to identify, assess, and explain the key decision-making processes required of a small business entrepreneur or financial manager. Topics include financial statement analysis, capital acquisition, legal and regulatory compliance, budgeting, forecasting, and client and vendor relationships. Projects include creation of a financial plan and completion of a loan application. Discussion also covers contemporary issues related to finance.

FINC 330 Business Finance (3)

(Formerly BMGT 340.) Prerequisites: ACCT 221 and STAT 200. 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)

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)

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 355 Retirement and Estate Planning (3)

A comprehensive study of retirement and estate planning techniques for individuals, families, and businesses. The aim is to evaluate retirement plans, analyze regulatory considerations of retirement planning, and apply estate planning techniques for individuals and families. Topics include retirement planning and estate planning, as well as regulations relevant to the financial services industry. Discussion covers the processes of retirement planning (retirement need, investments, taxes, Social Security, Medicare, qualified versus nonqualified plans, and tax-advantage plans) and estate planning (wills, trusts, asset protection, and life insurance).

FINC 421 Financial Analysis (3)

(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. The aim is to analyze and interpret financial information, directly apply financial information to valuation models, and evaluate growth strategies to maximize company value. 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.

INFORMATION ON COURSES

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)

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 450 Commercial Bank Management (3)

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 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 Workplace Learning in Finance (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Finance (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 490 Financial Plan Development (3)

(Content aligned with the Certified Financial Planner [CFP] curriculum.) Prerequisites: ACCT 323 and FINC 321, 352, and 355. A thorough review of financial planning principles and applications, based on case studies. The objective is to gather and analyze data, evaluate the impact of governmental regulations and economic changes, and effectively communicate a comprehensive financial plan to clients. Topics include taxes, estates, asset protection, debt, credit, investments, insurance, economic theories, the financial planning process, ethics, and risk.

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. The objective is to apply financial theories and contemporary financial practices to business issues. 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 minor in fire service administration
- 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 or WRTG 101S. 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 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; and 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 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, design and develop a community risk reduction plan, and implement that plan. A framework for understanding these issues and a methodology for developing a comprehensive community risk reduction plan are provided.

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 Workplace Learning in Fire Science (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Fire Science (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

INFORMATION ON COURSES

French

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

- the general education requirements in the arts and humanities
- electives

If you have prior experience in the French language—through study or living abroad, informal learning from friends or family, or high school or other coursework that did not transfer to UMUC, you should take a placement exam before enrolling. You should also take the placement test if you have oral proficiency in French and wish instruction in written French.

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

FREN 111 Elementary French I (3)

(Not open to native speakers of French; assumes no prior knowledge of French. Students with prior experience with the French language should take a placement test to assess appropriate level.) An introduction to the French language. The objective is to listen to, speak, read, and write elementary French in concrete, real-life situations and in culturally appropriate ways. Practice in pronunciation is provided. The diverse language and culture of the French-speaking world is also explored. Students may receive credit for only one of the following courses: FREN 101 or FREN 111.

FREN 112 Elementary French II (3)

(Not open to native speakers of French; assumes some prior knowledge of French. Students with prior experience with the French language but without transfer credits or FREN 111 should take a placement test to assess appropriate level.) Prerequisite: FREN 111 or appropriate score on placement test. A continued introduction to the French language. The objective is to listen to, speak, read, and write French in concrete, real-life situations related to oneself and others in culturally appropriate ways. Practice in speaking and listening is provided. The diverse language and culture of the French-speaking world is explored. Students may receive credit for only one of the following courses: FREN 102 or FREN 112.

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
- electives

UMUC offers only a limited number of courses each session in this discipline.

GEOG 100 Introduction to Geography (3)

An introduction to the broad field of geography. Emphasis is on concepts relevant to understanding global, regional, and local issues.

Geology

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

- the general education requirement in the biological and physical sciences
- a minor in natural science
- electives

UMUC offers only a limited number of courses each session in this discipline.

GEOL 100 Physical Geology (3)

An introductory study of geology, encompassing the Earth, the materials that constitute its makeup, the structure of those materials, and the processes acting on them. The goal is to understand geological principles and how humans impact geological processes. Topics include the rocks and minerals composing Earth, the movement within Earth, and its surface features and the agents that form them and our environment. Discussion also covers energy and mineral resources. 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
- electives

If you have prior experience in the German language—through study or living abroad, informal learning from friends or family, or high school or other coursework that did not transfer to UMUC, you should take a placement exam before enrolling. You should also take the placement test if you have oral proficiency in German and wish instruction in written German.

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.

GERM 311 Advanced German I (3)

Prerequisite: GERM 212 or appropriate score on placement test. An in-depth review and expansion of German language communication skills. The aim is to express opinions and use narration and description in a variety of personal and professional contexts. Focus is on improving linguistic proficiency while increasing cultural awareness. Students may receive credit for only one of the following courses: GERM 301 or GERM 311.

GERM 312 Advanced German II (3)

Prerequisite: GERM 311 or appropriate score on placement test. Continued in-depth review and expansion of communication skills in German. The goal is to deliver detailed reports and discuss current topics in a variety of personal and professional contexts. Focus is on improving linguistic proficiency while increasing cultural awareness. Students may receive credit for only one of the following courses: GERM 302 or GERM 312.

GERM 314 Modern Germany (3)

Prerequisite: GERM 212 or appropriate score on placement test. An overview of contemporary life and culture in the German-speaking world, taught entirely in German. The objective is to demonstrate intercultural communication skills, recognize aspects of German-speaking cultures and their significance to global society, and employ strategies to enhance language development and cultural awareness. Discussion covers the social, historical, and political experience of German-speaking people.

INFORMATION ON COURSES

Gerontology

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

- the general education requirement in the behavioral and social sciences (except GERO 342)
- a major in gerontology and aging services or social science
- a minor in diversity awareness, gerontology and aging services, health services management, or women's studies
- electives

GERO 100 Contemporary Issues in Aging (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 301 Service/Program Management (3)

(Fulfills the general education requirement in behavioral and social sciences.) Recommended: GERO 100. An exploration and analysis of the managerial aspects of providing health and human services in the field of gerontology through an integrated delivery system. The aim is to integrate 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)

Recommended: 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)

Recommended: GERO 100 and 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 311 Gender and Aging (3)

(Fulfills the general education requirement in behavioral and social sciences.) Recommended: GERO 100. An analysis and discussion of issues related to gender and the aging process. The goal is to evaluate and challenge negative, socially constructed assumptions associated with gender and aging, as well as examine gender-relevant issues in health and well-being after midlife. Discussion covers life transitions, socioeconomic status, culture, family and social relationships, ageism, and sexuality and health as each relates to gender. The impact of public policy and services on gender and aging is also addressed. Students may receive credit for only one of the following courses: GERO 311 or GERO 497E.

GERO 320 Psychosocial Aspects of Aging (3)

(Fulfills the general education requirement in behavioral and social sciences.) Recommended: GERO 100. An advanced multidisciplinary examination of the psychosocial forces that affect the aging process. Aspects of aging are analyzed from a number of theoretical perspectives found in psychology, sociology, and social gerontology. The goal is to articulate the impact of biological, sociocultural, and life-cycle forces on psychological and social well-being in post-midlife. Topics include normative and atypical psychological and social functioning in post-midlife; the social construction of aging; and the impact of aging, ageism, and longevity on social structures such as the family, work, retirement, and health care. Students may receive credit for only one of the following courses: GERO 220, GERO 320, or PSYC 357.

GERO 338 Health Promotion in Older Adults (3)

Recommended: 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 342 Long-Term Care Administration (3)

Recommended: GERO 100. An overview of the administrative and operational issues of long-term care facilities. The aim is to identify common forms of long-term care and articulate the responsibilities of a long-term care administrator. Relationships with personnel and administrative structure are examined. Topics include policy, procedures, insurance, and financing. Discussion also covers the ethical and legal concerns of long-term care.

GERO 427 Culture and Aging (3)

(Fulfills the general education requirement in behavioral and social sciences.) Recommended: GERO 100. An interdisciplinary examination of how different cultures interpret and deal with aging and the life cycle. Focus is on the increasingly heterogeneous aging population in the United States. The goal is to raise critical awareness of how aging is experienced across cultures. Topics include cross-cultural theory and research on aging; 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; ethical caregiving; end-of-life issues; social services; and social policy. Health disparities among older adults of certain ethnicities within the United States are also addressed. Students may receive credit for only one of the following courses: GERO 327, GERO 410, or GERO 427.

GERO 486A Workplace Learning in Gerontology (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Gerontology (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 496 Special Topics in Social and Family Relations (1–3)

Specialized study in gerontology and related topics focusing on social and family relations. May be repeated to a maximum of 6 credits when topics differ.

GERO 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.

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 political science
- a minor in political science or terrorism and critical infrastructure
- 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 systems of political economy 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.

GVPT 101 Introduction to Political Theory (3)

An overview of the main schools of political theory, including democracy, authoritarianism, and alternative theories. The aim is to demonstrate familiarity with important thinkers and major works in the history of political theory; use theoretical language to analyze and critique political behavior and events; identify the strengths and weaknesses of different forms of government; and demonstrate knowledge of crucial concepts (justice, power, authority, the state, social contract, etc.) and their history. Topics include the philosophical foundations of liberalism, socialism, and conservatism and the core political concepts of justice, power, and authority.

INFORMATION ON COURSES

GVPT 125 Understanding 21st-Century Global Challenges (3)

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 recognize and explain trends in international affairs, apply theoretical frameworks in international relations, and analyze world events to explain and evaluate global developments. 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 technology, migration, disease, economic development, and terrorism. Students may receive credit for only one of the following courses: GVPT 125 or GVPT 401.

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. An examination of the principles and practices governing human rights from ancient times to contemporary international conventions and U.N. declarations. The aim is to analyze, evaluate, and discuss present national/international pushes for human rights and emancipation. Students may receive credit for only one of the following courses: GVPT 308 or GVPT 399Y.

GVPT 403 Law, Morality, and War (3)

Prerequisite: WRTG 101 or WRTG 101S. 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 406 Global Terrorism (3)

Prerequisite: WRTG 101 or WRTG 101S. 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)

(Formerly GVPT 401B and GVPT 401C. Not open to students who have completed GVPT 401B or GVPT 401C.) 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 courses: GVPT 399H or GVPT 408.

GVPT 409 Terrorism, Antiterrorism, and Homeland Security (3)

An advanced examination of the impact of terrorism on the homeland security of the United States since the attacks of September 11, 2001. The objective is to more fully understand the concepts of homeland security within a federal system. Topics include the National Strategy for Homeland Security and the Patriot Act, their effect on civil liberties and civil rights, the changing face of terrorism in the United States, intelligence systems, 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 or WRTG 101S. 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 or WRTG 101S. 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 or WRTG 101S. 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 Workplace Learning in Government and Politics (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Government and Politics (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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. The objective is to understand their common history and how each emerged from independence movements to develop in different directions. 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 (or WRTG 101S) and 9 upper-level credits in GVPT coursework. 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. May be repeated to a maximum of 6 credits when topics differ.

INFORMATION ON COURSES

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
- electives

GRCO 100 Introduction to Graphic Communication (3)

(Access to Adobe Photoshop and Illustrator required.) An introduction to graphic communication and the various roles and responsibilities of the profession. The aim is to demonstrate the skills and knowledge necessary for graphic communication professionals. Design theories and content are explored through hands-on projects. Topics include industry standards, portfolios, and research and assessment practices.

GRCO 230 Typography and Layout (3)

Prerequisites: GRCO 100 and ARTT 120. An introduction to typography and layout as compositional tools to construct graphic communications. The goal is to analyze and determine appropriate typefaces and apply typographical skills to layout design. Emphasis is on the individual aspects of the letterform and the interrelationship of letters on the page. Discussion covers the process of design, from research to comprehensive mock-up, to produce portfolio-quality designs.

GRCO 350 Intermediate Graphic Communication: Portfolio Development (3)

Prerequisite: GRCO 230. The development of a professional graphic communications portfolio. The goal is to assemble a select body of work for web presentation that demonstrates knowledge of color, typography, composition, and design. Projects are designed to synthesize and refine basic design skills. Emphasis is on gathering the elements of a cohesive portfolio and presenting a personal body of work. 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 355 Digital Media II: Time and Motion (3)

Prerequisite: GRCO 354. A further examination of concepts in art and design focusing on the use of time-based formats. The goal is to use current technologies to develop a time-based narrative from concept to production, including creating and animating imagery to depict the narrative and integrating text and audio into time-based media for platforms (such as the web, television, DVD, and mobile devices). Discussion covers strategies for developing work for a variety of output applications. Focus is on production of portfolio-caliber projects.

GRCO 450 Advanced Graphic Communication: Professional Branding (3)

Prerequisites: GRCO 350 and 355. A review of professional branding and development of a portfolio and personal branding package. The objective is to synthesize, refine, and expand an existing portfolio to reflect personal branding. Focus is on refining a portfolio through peer review, critique, and assessment. Projects include creating a personal mission statement, identity package, and video component.

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 486A Workplace Learning in Graphic Communication (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

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.) Prerequisite: GRCO 450, GRCO 458, or GRCO 479. A portfolio-driven study of business and professional practices in the field of graphic communication. The goal is to be prepared for a career in graphic communication. Activities include review of existing work, creation of portfolio projects, and production of a professional portfolio (including a résumé). 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.

Health Services Management

Courses in health services management (designated HMGT) may be applied as appropriate (according to individual program requirements) toward

- a major in health services management or nursing for registered nurses
- a minor in business administration or health services management
- electives

HMGT 300 Introduction to the U.S. Health Care Sector (3)

(Formerly BMGT 361.) An overview of health care organizations in the United States and current and emerging concepts, trends, policies, and issues in health care. The aim is to explain the structure of the U.S. health care sector, understand the role of health care managers in meeting industry standards of care, and apply knowledge of health care workforce issues to solve management challenges. Students may receive credit for only one of the following courses: BMGT 361, HMGT 100, or HMGT 300.

HMGT 310 Health Care Policies (3)

An overview and analysis of public policies that govern the organization, delivery, and financing of health services in the United States. The aim is to evaluate national, state, and local policies to determine their impact on the delivery of health care services.

HMGT 320 Management in Health Care Organizations (3)

Prerequisite: HMGT 300 or BMGT 361. An introduction to management in the health care services field. The aim is to explain key management concepts and apply them to the management of health services organizations. Discussion covers the management skills and capabilities that are essential for effective supervision and leadership. An overview of the unique requirements of health care organizations and their management is provided. Focus is on the application of essential management and leadership skills in a health care environment. Students may receive credit for only one of the following courses: BMGT 367 or HMGT 320.

HMGT 322 Health Care Financial Management (3)

Prerequisite: HMGT 300 or BMGT 361. An overview of the acquisition, allocation, and management of the financial resources of health care organizations. Economic and accounting practices are discussed in terms of budget administration, cost analysis, financial strategies, and internal controls. The goal is to examine financial information and regulatory requirements and policies, identify issues and solve problems, and make sound financial decisions in the health care field. Students may receive credit for only one of the following courses: HMGT 322 or HMGT 440.

HMGT 335 Health Care Marketing (3)

An examination of the makeup of the health care market, the role of marketing in the delivery of health care, and relevant consumer behavior. Topics include basic principles and key concepts related to the design and implementation of marketing efforts in health services organizations. The goal is to develop and evaluate health care marketing plans. Discussion covers the marketing process and the development and analysis of strategic health care marketing plans.

INFORMATION ON COURSES

HMG 372 Legal and Ethical Issues in Health Care (3)

An examination of legal and ethical issues encountered in health care management and the ramifications of those issues on the delivery of health services and patient care. The aim is to apply ethical principles and practice within legal and ethical standards of health care.

HMG 400 Research and Data Analysis in Health Care (3)

Prerequisites: HMG 320 and STAT 200. An introduction to research methods and the process of data identification and analysis in the health care field. The objective is to inform health care decision making and formulate research hypotheses. Emphasis is on the analytic process, especially in the presentation and interpretation of results. Topics include the use of health care databases, the analysis of problems and issues, and evaluation of research in health care settings. Students may receive credit for only one of the following courses: HMG 398C or HMG 400.

HMG 420 Health Care Facilities Management (3)

Prerequisite: HMG 320. An examination of the organization and operation of hospitals and freestanding ambulatory care centers, with a focus on the manager's role in internal operations and external relations. The objective is to understand the key issues driving health care facilities management and apply sound management principles to ensure successful operations. Discussion covers managed care programs and their impact on health care facilities management.

HMG 435 Health Care Economics (3)

Prerequisites: ECON 103 and HMG 322. A comprehensive and analytical study of basic economics and its relationship to the delivery of health care. The aim is to apply the principles of economics to health care management and to anticipate the impact of economics on the outcomes of health care management decisions. Topics include the microeconomic aspects of the organization and delivery of health care, financing and other major components of the health care system, and economic factors that influence the delivery of health care.

HMG 486A Workplace Learning in Health Care Services Management (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

HMG 486B Workplace Learning in Health Care Services Management (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

HMG 495 Strategic Planning and Leadership in Health Care (3)

(Intended as a final capstone course to be taken in a student's last 15 credits.) Prerequisites: HMG 310 and 320. A study of strategic planning and leadership within health care organizations. The aim is to integrate knowledge and experience gained from previous study and build on that conceptual framework through analysis, practical application, and critical thinking. Discussion also covers leadership qualities and skills.

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, terrorism and critical infrastructure, or women's studies
- electives

HIST 115 World History I (3)

Recommended: WRTG 101 or WRTG 101S. 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.

HIST 116 World History II (3)

Recommended: WRTG 101 or WRTG 101S. 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 125 Technological Transformations (3)

A focused survey of the intersection of technology and history and the evolutionary process that marks what we call progress. The objective is to apply historical precedent to everyday responsibilities and relationships in order to advance the goals and ideals of contemporary society; compare and contrast historical eras; and describe how events influence our sense of time, space, and technology.

HIST 141 Western Civilization I (3)

Recommended: WRTG 101 or WRTG 101S. 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 or WRTG 101S. 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 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.

INFORMATION ON COURSES

HIST 326 The Roman Republic (3)

Prerequisite: Any writing course. A study of ancient Rome during the period 753 to 44 BC, from its founding to the assassination of Julius Caesar. The goal is to use primary and secondary historical resources to explore Roman thought, demonstrate its influence in the modern Western world, and apply it to modern contexts. 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 316L The American West (3)

An examination of the exploration, settlement, development, and mythology of the American West from 1490 to 1990. The role of the West is examined as a key factor in the formation of national identity. Assignments include advanced reading and research.

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 365 Recent America: 1945 to the Present (3)

Prerequisite: A writing course. Recommended: WRTG 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 377 U.S. 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 focus on 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 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 the 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 392 History of the Contemporary Middle East (3)

Prerequisite: A writing course. Recommended: WRTG 291. A survey of the history of the Middle East from the late 19th century to the present. The aim is to identify the important events of the last century in the Middle East; understand the sources of contention in that area; and examine the ideology, politics, and culture of the area and how they impact U.S.-Middle East relations. Focus is on major political, economic, social, and cultural trends that inform current events in the region. Topics include the late Ottoman Empire, European colonialism, the rise of nationalism and nation-states, the Arab-Israeli conflict, political Islam, the role of the United States in the region, and contemporary approaches to modernity in the Middle East.

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 464 World War I (3)

Prerequisite: Any writing course. An intensive study of the First World War. Topics include the development of nationalism and socialism in late 19th-century Europe, the causes of the First World War, trench warfare on the western front, war in the Balkans, total war on the home fronts, the Russian Revolution of 1917, the collapse of the Central Powers, the 1918 settlements, the postwar conflicts that continued to haunt Europe until 1923, and the concept of the Lost Generation.

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 war-time 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 480 History of China to 1912 (3)

A study of the history of China from Confucius (around 500 BC) to the demise of the Qing Dynasty in 1912. The objectives are 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 peoples.

HIST 482 History of Japan to 1800 (3)

Prerequisite: A writing course. Recommended: WRTG 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 1800 (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 Workplace Learning in History (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in History (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 courses, 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.

INFORMATION ON COURSES

Homeland Security

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

- a minor in homeland security or terrorism and critical infrastructure
- electives

HMLS 302 Introduction to Homeland Security (3)

Prerequisite: WRTG 101 or WRTG 101S. An introduction to the theory and practice of homeland security in both the public and private sector at national, regional, state, and local levels. 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 policies that support U.S. homeland security objectives.

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 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 406. A study of the role of intelligence in homeland security. The objective is to interpret the concepts of information; analyze the production of intelligence; and recognize the U.S. intelligence and law enforcement communities, as well as other agencies and organizations that have a part in the nation's homeland security intelligence activities. Topics include the various steps of 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 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 Workplace Learning in Homeland Security (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Homeland Security (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 EMGT, FSCN, HMLS, or PSAD courses (numbered 300 or 400). 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 successful contemporary 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 in humanities
- 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 analyze how societies express themselves through literature, art, music, philosophy, and technology. Focus is on developing the conceptual tools to understand cultural phenomena critically.

HUMN 344 Technology and Culture (3)

Recommended: HUMN 100. An overview of the impact of technology on culture. The goal is to interpret, evaluate, and respond to the role of technology in daily life. Topics include the nature of technology; how technology influences events; how events influence the development of technology; and the interaction between technology and human welfare in medicine, warfare, daily life, entertainment, government, and science.

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 Workplace Learning in Humanities (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Humanities (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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, any upper-level ARTH course, any upper-level ENGL course, any upper-level HUMN course, and any upper-level PHIL course. A study of humanities that synthesizes knowledge gained through previous study. An individually chosen research project is used to examine the nature of human responsibility to self, others, and the environment; the role of intellectual inquiry in human life; and the role of creativity in human life. Career options are also explored.

INFORMATION ON COURSES

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, or management studies
- a minor in human resource management or business administration
- a certificate in Human Resource Management or Management Foundations
- 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 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 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)

Prerequisite: HRMN 300. An examination of employee training and human resource development in various organizations. Topics include the development, administration, and evaluation of training programs; employee development; career development; and organizational change. Issues in employee development (including assessment of employee competencies, opportunities for learning and growth, and the roles of managers in employee development) are explored. Students may receive credit for only one of the following courses: BMGT 498I, HRMN 406, or MGMT 498I.

HRMN 408 Employment Law for Business (3)

(Designed for managers and human resource professionals.) Recommended: HRMN 300. A conceptual and functional analysis of the legal framework of employment relations. The aim is to understand employment law; comply with laws and regulations; and evaluate rights, obligations, and liabilities in the employment process, from hiring and staffing to compensation and layoff. 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; health and safety; independent contractors; and labor unions. Students may receive credit for only one of the following courses: BMGT 468, BMGT 498G, HRMN 408, or MGMT 498G.

HRMN 467 Global Human Resource Management (3)

Prerequisite: HRMN 300. Recommended: HRMN 367. A comprehensive study of global human resource management. The objective is to demonstrate intercultural competencies, identify trends in the globalized workforce, and analyze policies, practices, and functions in global human resources. Topics include global staffing, training, compensation, and evaluation.

HRMN 486A Workplace Learning in Human Resource Management (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Human Resource Management (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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, cybersecurity management and policy, or nursing for registered nurses
- a minor in information systems management or cybersecurity
- a certificate in Management Foundations or Project Management
- 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.

INFORMATION ON COURSES

IFSM 300 Information Systems in Organizations (3)

(Access to Microsoft Office or equivalent 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 Information Systems Management (3)

Prerequisite: IFSM 300. An overview of information technology management and governance. The goal is to be familiar with IT organizations, management of IT strategy, and factors in IT decision-making. Topics include strategic alignment, portfolio management, risk management, business continuity, compliance, and organizational relationships.

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 305 Information Systems in Health Care Organizations (3)

Prerequisite: IFSM 201. An overview of how information systems provide value by supporting organizational objectives in the health care sector. The goal is to evaluate how technology solutions support organizational strategy in the health care environment and improve quality of care, safety, financial management. Topics include the flow of data among disparate health information systems, and the ethical, legal, and regulatory policy implications.

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 (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 370 Telecommunications in Information Systems (3)

(Formerly CSIA 302.) 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: CMIS 370, CMSC 370, CSIA 302, IFSM 370, or IFSM 450.

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 to assess 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 the identification of 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 300. 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: IFSM 438 or TMGT 430.

IFSM 441 Agile Project Management (3)

Prerequisite: IFSM 438. An advanced study of agile project management methods for software development. The objective is to apply agile practices to better manage projects characterized by complexity and uncertainty with responsiveness and adaptability and to consider alternative approaches to managing projects by matching the approach to the characteristics of a project. Topics include estimation techniques; the scrum (software development) process, i.e., inspect, adapt, and improve; and dealing with organizational impediments to adoption.

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, or IFSM 461.

IFSM 486A Workplace Learning in Information Systems Management (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Information Systems Management (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

INFORMATION ON COURSES

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
- 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.

JAPN 221 Intermediate Japanese I (3)

(Not open to native speakers of Japanese.) Prerequisite: JAPN 115 or appropriate score on a placement test. Development of skills in intermediate spoken and written Japanese. The aim is to interact effectively with native speakers of Japanese in a range of personal and professional situations and to recognize and read approximately 275 Japanese characters in context. Focus is on using culturally appropriate language in a variety of contexts.

JAPN 222 Intermediate Japanese II (3)

(Not open to native speakers of Japanese.) Prerequisite: JAPN 221 or appropriate score on a placement test. Further development of skills in intermediate spoken and written Japanese. The aim is to communicate effectively with native speakers of Japanese in a broad range of personal and professional situations and to recognize and read approximately 320 Japanese characters in context. Practice is provided in interacting with others in a variety of interpersonal contexts.

JAPN 333 Japanese Society and Culture (3)

(Formerly ASTD 333. Fulfills the general education requirement in the arts and humanities. Conducted in English.) A study of the origin and historical background of contemporary Japanese society and culture. Students may receive credit for only one of the following courses: ASTD 333 or JAPN 333.

Journalism

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

- the general education requirement in writing (JOUR 201 only)
- a major or minor in communication studies
- 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 communications.) 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 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 486A Workplace Learning in Journalism (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Journalism (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

Korean

Courses in Korean (designated KORN) 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
- electives

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

KORN 333 Korean Society and Culture (3)

(Formerly ASTD 353. Fulfills the general education requirement in the arts and humanities. Conducted in English.) A study of the origin and historical background of contemporary Korean society and culture. Students may receive credit for only one of the following courses: ASTD 353 or KORN 333.

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 minor in law for business
- electives

LGST 101 Introduction to Law (3)

A survey of the U.S. legal system and the roles and responsibilities of the various personnel who work in that environment. The objective is to evaluate situations and make recommendations for action based on an understanding of law, legal institutions, and court procedures. Topics include the organization and powers of federal and state lawmaking institutions, court procedures, legal analysis, and careers in the legal environment. Students may receive credit for only one of the following courses: LGST 101 or PLGL 101.

INFORMATION ON COURSES

LGST 200 Techniques of Legal Research (3)

An introduction to common research methods used to locate primary and secondary authority relevant to given topics and issues. The goal is to find valid, relevant, mandatory primary authority. Topics include the analysis, publication, and citation of judicial opinions and statutory law; the features and use of secondary sources; and various computer-assisted research tools to find and validate primary authority. Students may receive credit for only one of the following courses: LGST 200 or PLGL 200.

LGST 201 Legal Writing (3)

Prerequisite: LGST 200. An introduction to the principles of writing clearly and effectively in the legal environment. The objective is to draft writings that synthesize law, analyze legal issues, and explain law and legal analysis to a nonlegal audience. Assignments include a legal synthesis memo, case law and statutory analysis memos, 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)

Prerequisite: LGST 200. An in-depth examination of research methods to identify primary authority relevant to legal issues. The goal is to identify legal issues, implement research strategies to find relevant primary authority, and use this authority to analyze the issues. Topics include the use of computer-assisted legal research systems to locate case law, statutory law, administrative law, and rules of procedure and evidence and methods to identify and analyze legal issues. Students may receive credit for only one of the following courses: LGST 300 or PLGL 300.

LGST 301 Advanced Legal Writing (3)

Prerequisite: LGST 201. A focused study of the principles and techniques for drafting legal advocacy writings. The objective is to analyze legal issues and advocate for results based on that analysis. Assignments include a complex office memorandum, a demand letter, and an external advocacy memorandum. Students may receive credit for only one of the following courses: LGST 301, LGST 401, or PLGL 401.

LGST 312 Torts (3)

Prerequisite: LGST 201. A study of the causes of action, defenses, and remedies in the major categories of tort law, as well as tort-litigation procedures and writings. 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)

A thorough study of the Maryland Workers' Compensation Act and the practice of workers' compensation law in Maryland. The goal is to apply knowledge of legal systems, concepts, and methodologies to support client objectives efficiently and ethically. Topics include employer/employee relationships, injuries, defenses, compensation benefits, vocational rehabilitation, and appeals. Assignments include legal and factual research and the composition of legal documents or completion of forms. Students may receive credit for only one of the following courses: LGST 314 or PLGL 398H.

LGST 315 Domestic Relations (3)

Prerequisite: LGST 201. A study of the processes, procedures, and writings of family law practice. The aim is to identify, analyze, and apply the rules of professional conduct to domestic issues; research applicable law and factual information related to domestic relations issues and draft legal writings; and complete standardized forms to resolve 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)

Prerequisite: LGST 201. A fundamental study of the legal concepts required to draft and prepare simple wills and administer estates. The goal is to construct an estate plan supporting the creation and administration of a simple estate. 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 that reflect the processes and procedures required by law. Students may receive credit for only one of the following courses: LGST 316, PLGL 216, or PLGL 316.

LGST 320 Criminal Law and Procedures (3)

Prerequisite: LGST 201. A study of the substantive and procedural aspects of the criminal justice system. 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 325 Litigation (3)

Prerequisite: LGST 201. 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; interpret and apply the rules to develop case strategies; and 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 330 Administrative Law (3)

Prerequisite: LGST 201. 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 340 Contract Law (3)

Prerequisite: LGST 201. A comprehensive study of the major areas of contract law. The objective is to identify and analyze contractual precedent and statutory authority; develop litigation strategies; and 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 486A Workplace Learning in Legal Studies (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Legal Studies (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 495 Advanced Legal Practices (3)

(Intended as a final capstone course to be taken in a student's last 9 credits of the major.) Prerequisite: LGST 301. A portfolio-driven study of professional practices in the legal field. The goal is to integrate the competencies gained through previous coursework and experience. Assignments include projects relevant to work in the legal environment.

INFORMATION ON COURSES

Library Skills and Information Literacy

Courses in library skills and information literacy (designated LIBS) may be applied toward

- the general education requirement in information literacy
- 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 or business administration
- a minor in marketing or business administration
- a certificate in Management Foundations
- 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 200 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 global organizations 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 Digital 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 consumer expectations into a digital marketing plan, evaluate digital marketing delivery options, analyze effective website design, evaluate competitive digital 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 Fundamentals of 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 Workplace Learning in Marketing (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

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MRKT 486B Workplace Learning in Marketing (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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
- electives

If you are planning to major or minor in management, computing, science-related fields (such as business administration or computer and information science), or the biological or social sciences, you should consider courses from sequence I. If you are planning a major or minor in computer science or mathematical science, you should consider courses from sequence II. Refer to your chosen curriculum for mathematics requirements if you are pursuing a major or minor other than those mentioned.

Sequence I

MATH 009	Introductory Algebra
MATH 012	Intermediate Algebra
MATH 106	Finite Mathematics
MATH 107	College Algebra
MATH 108	Trigonometry and Analytical Geometry

Approved course in statistics

Sequence II

MATH 009	Introductory Algebra
MATH 012	Intermediate Algebra
MATH 115	Pre-Calculus or MATH 107–108
MATH 140	Calculus I
MATH 141	Calculus II
MATH 240	Introduction to Linear Algebra
MATH 241	Calculus III

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, and 140. 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.

You 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, MATH 199A, or MATH 199M.

MATH 106 Finite Mathematics (3)

(Not intended for students planning to take MATH 107 or higher-numbered mathematics courses.) Prerequisite: MATH 012 or an appropriate result on the placement test. A 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 events; 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 and 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 apply appropriate technology and demonstrate fluency in the language of algebra; communicate mathematical ideas; perform operations on real numbers, 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. Technology is used for data modeling. Discussion also covers applications. Students may receive credit for only one of the following courses: MATH 107 or MATH 115.

MATH 108 Trigonometry and Analytical Geometry (3)

(The second course in the two-course series MATH 107–108. An alternative to MATH 115.) Prerequisite: MATH 107 or an appropriate result on the placement test. An introduction to trigonometric functions, identities, and equations and their applications. The goal is to demonstrate fluency in the language of trigonometry, analytic geometry, and selected mathematical topics; communicate mathematical ideas appropriately; apply and prove trigonometric identities; solve triangles and trigonometric equations; and perform vector operations. 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 demonstrate fluency in pre-calculus; communicate mathematical ideas appropriately; solve equations and inequalities; analyze and graph functions; and use mathematical modeling to translate, solve, and interpret applied problems. Topics include polynomials, rational functions, exponential and logarithmic functions, trigonometry, and analytical geometry. Students may receive credit for only one of the following courses: MATH 107, MATH 108, or MATH 115.

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MATH 140 Calculus I (4)

Prerequisite: MATH 108 or MATH 115. An introduction to calculus. The goal is to demonstrate fluency in the language of calculus; discuss mathematical ideas appropriately; and 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 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 solvability 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 486A Workplace Learning in Mathematics (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Mathematics (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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
- 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.

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
- 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, the role of the physical sciences in interpreting the natural world, and the integrated use of technology. Students may receive credit for only one of the following courses: GNSC 100, NSCI 100, or NSCI 103.

NSCI 101 Physical Science Laboratory (1)

(For students not majoring or minoring in a science. Fulfills the laboratory science requirement only with previous or concurrent credit for NSCI 100.) Prerequisite: MATH 012 or higher. Prerequisite or corequisite: NSCI 100. A laboratory study of the basic principles of physics and chemistry, 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, the role of the physical sciences in interpreting the natural world, and the integrated use of technology. Students may receive credit for only one of the following courses: GNSC 100, NSCI 100, or NSCI 103.

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.

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NSCI 171 Laboratory in Meteorology (1)

(For students not majoring or minoring in a science. With NSCI 170, 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 Management and Safety (3)

(Does not fulfill the general education requirement in the biological and physical sciences.) Recommended: WRTG 101 or WRTG 101S. 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 activity 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.

Nursing

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

- a major in nursing for registered nurses

NURS 300 Science and Research in Nursing (3)

(Open only to students majoring in nursing for registered nurses.) An overview of the basic concepts of nursing research. The aim is to understand the contribution of research to nursing knowledge and practice, demonstrate skill in conducting research using available scientific literature, critically appraise current evidence-based research, and apply the findings to promote clinical best practices in nursing. Evidence-based research is evaluated from a legal and ethical perspective in the protection of human subjects. Topics include the scientific process, research methods, experimental protocols, informed consent, evaluation of research literature, and ethical issues in research.

NURS 350 Global Health Issues (3)

(Open only to students majoring in nursing for registered nurses.) An overview of global health issues and strategies that promote the health of nations. Global perspectives on health issues and policies are explored. The aim is to understand how disparities in health and access to health care can influence the burden of disease. Discussion covers the global burden of disease, determinants of health, and other factors that affect the health of countries. Topics also include nutrition, maternal and child health, mental health, environmental health, communicable and noncommunicable diseases, and disaster/emergency response preparation.

NURS 360 Health Assessment (3)

(Open only to students majoring in nursing for registered nurses.) An overview of the role of the professional nurse in performing comprehensive health assessments. The aim is to conduct comprehensive and holistic health assessments, formulate thorough plans of care based on current research findings and tailored to the patient's individual needs, and recognize health deviations and anticipate treatment outcomes. Emphasis is on developing communication skills. Topics include diversity; special populations; care across the lifespan; and recognizing deviations in health, health promotion, and disease prevention.

NURS 410 Applying Evidence-Based Practice in Nursing (3)

(Open only to students majoring in nursing for registered nurses.) Prerequisite: NURS 300. A study of the principles and models of evidence-based nursing practice. The objective is to demonstrate critical-thinking skills in applying the findings of evidence-based practice to the clinical environment. Focus is on evaluating patient outcomes data to identify clinical practice areas that are amenable to quality improvement projects. Assignments include selecting a problem area of clinical practice and developing a proposal for a solution.

NURS 420 Advocacy and Politics in Nursing (3)

(Open only to students majoring in nursing for registered nurses.) Prerequisite: HMG 372. An overview of the legislative process and an examination of how nurses can use political advocacy strategies to influence health care policies. Focus is on applying interpersonal, communication, leadership, and advocacy skills to support the application of social justice principles in health care delivery practices to diverse populations and promote the nursing profession.

NURS 460 Family and Community Health Nursing (3)

(Open only to students majoring in nursing for registered nurses.) Prerequisite: NURS 360. An overview of the role of the professional nurse in the care of the family and community. Focus is on applying the nursing process to the care of families and communities. The goal is to identify health risks within a family, design a plan of care using evidence-based practices, and obtain information about family and community health systems using systematic research practices. The opportunity to explore available services and develop a health promotion education plan for the community is provided. Topics include diversity, community as a patient, environmental influences, families at risk, health promotion, risk reduction, vulnerable populations, disaster preparedness, and coalition building.

NURS 486A Workplace Learning in a Clinical Setting (3)

(Open only to students majoring in nursing for registered nurses.) Prerequisite: 9 credits in the discipline, including NURS 300, and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

NURS 486B Workplace Learning in a Clinical Setting (6)

(Open only to students majoring in nursing for registered nurses.) Prerequisite: 9 credits in the discipline, including NURS 300, and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

NURS 495 Leadership and Management in Nursing (3)

(Open only to students majoring in nursing for registered nurses. Intended as a final, capstone course to be taken in a student's last 9 credits.) A study of leadership concepts, theories, and techniques used in the nursing profession to promote high-quality patient care in a variety of settings. The aim is to integrate concepts and theories of nursing leadership into the various roles of the professional nurse, promote professional development, and apply business principles in the management of patient care in complex and diverse health care environments. Assignments include conducting a quality improvement project in a patient care setting and implementing, evaluating, and disseminating the project findings.

Nutrition

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

- the general education requirement in the biological and physical sciences
- electives

UMUC offers only a limited number of courses each session in this discipline.

NUTR 100 Elements of Nutrition (3)

A study of the fundamentals of human nutrition. The changing nutritional needs of individuals and families are explored. Students may receive credit for only one of the following courses: NUTR 100 or NUTR 200.

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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 in East Asian studies or humanities
- a minor in philosophy or East Asian studies
- 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. Emphasis is on developing awareness of the significance of philosophical problems and learning 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 inductive and deductive reasoning; the properties of arguments; methods of logical analysis; synthesis of ideas; informal fallacies; and the role of presuppositions and other factors in scientific, social, ethical, and political problems.

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 304 Contemporary Social Justice Issues (3)

Recommended: PHIL 100 and 140. A thematic exposition of social justice issues. Topics include the relationship of the individual to society, human relationships with the environment, the use of technology, medical decision making, social equalities and inequalities, and workplace issues. The objective is to improve one's awareness of ethical issues and recognize and analyze ethical problems in the contemporary global context through a deeper understanding of ethical theories.

PHIL 336 Ideas Shaping the 21st Century (3)

An overview of ideas and philosophies likely to affect humanity and this planet in the 21st century. The goal is to identify and understand predominant modes of thought; critically evaluate ideas that affect ways of living; articulate the principles underlying cooperation and dissension 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)

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 events and understand the interrelationships of these religious traditions, historically and doctrinally. 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)

An examination of the religions of the West, including the Zoroastrian, Judaic, Christian, and Islamic traditions. The aim is to gain a historical perspective on world events and to understand the interrelationships of these religious traditions, both historically and doctrinally. 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, diversity awareness, gerontology and aging services, or women's studies
- 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 300 Research Methods in Psychology (3)

(Formerly PSYC 305.) Prerequisites: PSYC 100 and STAT 200 (or PSYC 200). A survey of research methods focusing on the fundamentals of research design and behavior. The aim is to apply research methodologies critically and creatively to communicate effectively about the domains of psychology. 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 communicate effectively 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 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 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 309 Special Topics in Professional Psychology (1–3)

Seminar discussion of topics of current interest. The goal is to attain specialized knowledge in a particular area of professional psychology. Topics may extend or augment those covered in more general courses. May be repeated to a maximum of 6 credits when topics differ.

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.

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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. Recommended: PSYC 300. A study of major theories and perspectives on personality. The goal is to explain and evaluate major concepts in personality. Topics include trait, psychodynamic, behavioral, and humanistic theories. Methods of personality research and relevant findings are also introduced. 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 200 and PSYC 300. A review and analysis of the major phenomena and theories of human learning. The objective is to understand various theories about learning and their practical applications. Topics include conditioning, the application of behavior analysis to real-world problems, and laboratory techniques in learning research. 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 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 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 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 Workplace Learning in Psychology (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Psychology (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.) Prerequisites: 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.

INFORMATION ON COURSES

Public Safety Administration

Courses in public safety administration (designated PSAD) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in public safety administration
- electives

PSAD 302 Introduction to Public Safety Administration (3)

Prerequisite: WRTG 101 or WRTG 101S. An introduction to public safety administration for private- and public-sector applications. The objective is to identify key functions of public safety administration and describe the history and current forces and trends facing public safety administrators. An overview of public safety administration, highlighting its diverse aspects, is provided. Topics include management functions, paradigms and practices, challenges, and politics and risk.

PSAD 304 Contemporary Public Safety Practices (3)

Prerequisite: PSAD 302. An investigation of contemporary strategic public safety practices. The goal is to apply the concepts of hazard and risk identification and management, quality control methodology, customer service, integrated public safety services, and public and private partnerships to public service administration decision making. Discussion covers hazard and risk analysis, customer service awareness (including expectations and demands), quality control methodology (including industry standards and accreditation), integrated public services, best practices, and public/private partnerships.

PSAD 306 Public Safety Planning (3)

Prerequisite: PSAD 304. An examination of strategic and operational planning in public safety administration. The aim is to identify and analyze an existing organizational strategic plan that includes budgeting and resource allocation, identify and analyze an existing operational plan, and identify the process for implementation of operational plans. Topics include strategic plans, budgeting, resource allocation, operational plans, hazard mitigation plans, emergency operation plans, incident action plans, and implementation, including positive and negative forces.

PSAD 408 Public Safety Legal Issues and Public Policy (3)

Prerequisite: PSAD 304. A study of the legal and public policy issues faced by public safety administrators. The objective is to describe the legal system; the legal and political environment; administrative laws and regulations for the work environment; and the interrelationship among law, regulations, and public policy. Topics include the federal, state, and local legal systems; the legal and political environment; workplace administrative laws and regulations; public policy; liability; and risk reduction.

PSAD 416 Public Safety Leadership (3)

Prerequisite: PSAD 304. A study of leadership theories, skills, and techniques used in public safety administration. The objective is to define and explain basic concepts of leadership; analyze personal leadership knowledge, skills, and abilities; and evaluate leadership performance in the current public safety environment. Topics include leadership, leadership theories and styles, leadership roles, leadership performance, individual leadership skills and plans, effective leadership, and future trends.

PSAD 486A Workplace Learning in Public Safety Administration (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

PSAD 486B Workplace Learning in Public Safety Administration (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

PSAD 495 Public Safety Issues and Challenges (3)

Prerequisites: PSAD 306, 408, 410, 414, and 416. An intensive study of public safety administration that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Current and future issues in public safety administration are addressed. The aim is to integrate leadership, administration, and management concepts and apply them to current public safety issues and the protection of life, the environment, and property. Assignments include development of a comprehensive case study response to a current public safety issue and evaluation of peer reports.

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 major in social science
- a minor in sociology, African American studies, diversity awareness, or women's studies
- 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 300 American Society (3)

Prerequisite: SOCY 100. An intermediate-level survey of the structure and organization of American society, with special reference to recent social changes. The aim is to describe trends and patterns of social change in American society; compare American and global perspectives of American social values; and apply sociological theories to examine the character, structure, values, and ideology of contemporary American social thought. Topics include individualism; community commitment; and attitudes regarding work, leisure, and recreation in American society.

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 350 Contemporary Social Problems (3)

Prerequisite: SOCY 100. An advanced examination of various personal, institutional, cultural, historical, and global problems that confront American society today. Problems discussed 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, SOCY 210, or SOCY 350.

SOCY 398 Special Topics in Sociology (3)

Prerequisite: SOCY 100. A study of topics of special interest. May be repeated to a maximum of 6 credits when topics differ.

INFORMATION ON COURSES

SOCY 423 Race and Ethnicity: A Global Perspective (3)

Prerequisite: SOCY 100. An analysis of race, ethnicity, and human relations in global society. The goal is to analyze, communicate, and project future trends in racial and ethnic relations in the United States and abroad. Discussion covers factors (such as inequality, prejudice, discrimination, power, and privilege) that affect race and ethnic relations. Topics include theories of race relations; the historical emergence, demographic projections, development, and institutionalization of racism; effects of racism; conflicts that are racially and ethnically based; and contemporary issues.

SOCY 426 Sociology of Religion (3)

Prerequisite: SOCY 100. Recommended: BEHS 220 or HUMN 350. An advanced examination of religion from a sociological perspective. The aim is to evaluate the influence of social location on religious beliefs and attitudes; examine relationships between church and state; and analyze current religious conflicts and controversies. Topics include fundamentalism versus extremism; modernity; religious conflicts; and the relationship of religion with race, class, gender, sexuality, and politics.

SOCY 428 Migrants and Refugees (3)

Prerequisite: SOCY 100. An advanced sociological study of international, global, and economic issues regarding migrants and refugees, addressing population movements to and from countries. The objective is to analyze data and historical evidence and assess the role of globalization on migration. Topics include migrants and refugees, immigration, the role of conflict in migration, politics and laws regarding migrants and refugees, and the role of globalization in generating population flows.

SOCY 443 Sociology of the Family (3)

Prerequisite: SOCY 100. An advanced examination of the family in society. The aim is apply major sociological theories to understand family as a social institution; describe the changing definitions of family; examine demographic changes in marriage and family patterns; contrast micro- and macro-level interactions among individuals, families, and society; and evaluate the influence of media and technology on the perception and cohesion of the modern family. Topics include family research, single parenting, blended families, cultural differences in families, families over the life course, and governmental policies regarding families.

SOCY 462 Women in the Military (3)

Prerequisite: SOCY 100. An advanced examination of women in the military from a sociological perspective. The objective is to understand gender, power, and the changing roles of women in the military; assess how policies affect women in the military; examine military, community, and family support systems for military women; and compare the roles and duties of women in the U.S. armed forces in war and peacetime with those of military women in other countries. Topics include the social construction of gender and sexuality of the armed forces; the history of women in the military; violence against women in the military; rank, status, and advancement of women in the military; and postmilitary transitions and career options for women.

SOCY 464 Military Sociology (3)

Prerequisite: SOCY 100. An advanced examination of the U.S. military from a sociological perspective. The aim is to differentiate the roles of officer and enlisted corps; analyze health, morale, and welfare issues in today's armed forces; evaluate the legal and political components of military/civil relations; and assess the changing impact of the U.S. military nationally and globally. Topics include military structure, military doctrine, ethics, justice, sustainability, and the future of the U.S. military. Discussion analyzes current military events from a sociological perspective.

SOCY 473 Cities and Communities (3)

An advanced sociological study of cities and the urban landscape. The aim is to apply major sociological theories to investigate interdependencies between social action, urbanization, and the environment. Focus is on current issues relevant to the challenge of building livable and sustainable cities. Topics include urban social networks, suburbanization, social problems of urbanization, and urban planning and policies.

SOCY 486A Workplace Learning in Sociology (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Sociology (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

Software Development and Security

Courses in software development and security (designated SDEV) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing
- a major in software development and security
- electives

SDEV 300 Building Secure Web Applications (3)

Prerequisite: CMIS 242, CMIS 215, or CMIS 225. A hands-on study of best practices and strategies for building secure applications for the web. The objective is to defend against web application vulnerabilities. Topics include web application architecture, common threats and trends, cross-site scripting, SQL injection, input validation, and business logic flaws.

SDEV 325 Detecting Software Vulnerabilities (3)

Prerequisites: CMIS 325 and SDEV 300. An in-depth, practical application of techniques and tools for detecting and documenting software vulnerabilities and risks. The goal is to research, select, and use software to analyze code and isolate and prioritize application code and processes that could lead to failure or compromise data integrity or privacy. Topics include the top 25 software vulnerabilities, secure coding guidelines, static code analysis, and software assurance metrics.

SDEV 350 Database Security (3)

Prerequisite: CMIS 320. A study of processes and techniques for securing databases. The aim is to design, build, and maintain databases to minimize risks and security attacks. Topics include privileges and roles, user accounts, encryption, authentication methods, and auditing.

SDEV 355 Securing Mobile Apps (3)

Prerequisite: SDEV 325. A hands-on study of best practices for designing and building secure mobile applications. The aim is to formulate proper defenses and processes to mitigate common attacks. Focus is on mobile device infrastructure, security models, and mobile applications. Topics include code analysis, risk modeling, native and web mobile applications security, secure mobile communication, and back-end application attacks and counterattacks.

SDEV 360 Secure Software Engineering (3)

Prerequisite: CMIS 242. An in-depth study of the processes, standards, and regulations associated with secure software engineering. The objective is to plan, manage, document, and communicate all phases of a secure software development cycle. Topics include security requirements, secure software life development cycle, threat modeling, and Security Technical Implementation Guides (STIGs).

SDEV 400 Secure Programming in the Cloud (3)

Prerequisite: SDEV 300. A hands-on study of programming secure applications in the cloud. The goal is to design and build applications in the cloud while implementing appropriate security policies. Topics include cloud computing models, risks and security challenges of programming in the cloud, and data security.

SDEV 425 Mitigating Software Vulnerabilities (3)

Prerequisites: SDEV 325 and 360. An in-depth analysis and evaluation of the mitigation of software vulnerabilities. The aim is to detect and mitigate software vulnerabilities by evaluating code. Topics include language-specific software vulnerabilities, mitigation, and input validation.

SDEV 455 Risk Analysis and Threat Modeling (3)

Prerequisite: SDEV 360. An examination of risks and threats associated with application development. The objective is to identify valuable assets, create system architecture diagrams, decompose applications, identify and rate threats, and document results in the threat model. Topics include security requirements and objectives, threat identification and mitigation, and calculating risk.

SDEV 460 Penetration Testing (3)

Prerequisite: SDEV 360. A hands-on study of exploits, attacks, and techniques used to penetrate application security defenses and the mitigations of such attacks. The goal is to apply appropriate methodologies for penetration testing to identify application weaknesses and logic flaws and test and create scripts for exploitation and discovery. Topics include web architecture.

SDEV 486A Workplace Learning in Software Development and Security (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

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SDEV 486B Workplace Learning in Software Development and Security (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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.

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 Spanish for Business and the Professions
- electives

If you have prior experience in the Spanish language—through study or living abroad, informal learning from friends or family, or high school or other coursework that did not transfer to UMUC, you should take a placement exam before enrolling. You should also take the placement test if you have oral proficiency in Spanish and wish instruction in written Spanish.

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 114, SPAN 201, 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 311 Advanced Spanish I (3)

Prerequisite: SPAN 212 or appropriate score on placement test. An in-depth review and expansion of Spanish language communication skills. The aim is to express opinions and use narration and description in a variety of personal and professional contexts. Focus is on improving linguistic proficiency while increasing cultural awareness. Students may receive credit for only one of the following courses: SPAN 301 or SPAN 311.

SPAN 312 Advanced Spanish II (3)

Prerequisite: SPAN 311 or appropriate score on placement test. Continued in-depth review and expansion of communication skills in Spanish. The goal is to deliver detailed reports and discuss current topics in a variety of personal and professional contexts. Focus is on improving linguistic proficiency while increasing cultural awareness. Students may receive credit for only one of the following courses: SPAN 302 or SPAN 312.

SPAN 314 Modern Spanish-Speaking Cultures (3)

Prerequisite: SPAN 212 or appropriate score on placement test. An overview of the diverse cultures that constitute the Spanish-speaking world, taught entirely in Spanish. The objective is to foster intercultural communication skills, recognize aspects of Spanish-speaking cultures and their significance to global and American society, and employ strategies to enhance language development and cultural awareness. Discussion covers the social, historical, and political experience of the Spanish-speaking people of Latin America, Spain, and the United States.

SPAN 418 Business Spanish I (4)

(Formerly SPAN 318.) Prerequisite: Any 300-level SPAN course or appropriate score on placement test. An exploration of business contexts and practices in the Spanish-speaking world, taught entirely in Spanish. The objective is to use knowledge of diverse business cultures to communicate and interact effectively in a business environment. Topics include contemporary economic conditions in various Spanish-speaking areas (including those within the United States), enterprise, management, human resources, and cultural issues that influence the workplace. Assignments include preparing a job-search portfolio and making a business presentation, both in Spanish. Students may receive credit for only one of the following courses: SPAN 315, SPAN 318, or SPAN 418.

SPAN 419 Business Spanish II (4)

Prerequisite: Any 300-level SPAN course. A continued exploration of business conditions and practices in the Spanish-speaking world, taught entirely in Spanish. The goal is to use knowledge of diverse business cultures to communicate and interact effectively in a business environment in Spanish. Topics include contemporary economic conditions in various Spanish-speaking areas (including areas within the United States), marketing, investments, finances, logistics, and cultural issues that influence the market. Projects include preparation of a business proposal portfolio and a professional presentation with a peer review, both in Spanish.

SPAN 486A Workplace Learning in Spanish (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Spanish (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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, diversity awareness, or women's studies
- a major in communication studies
- 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 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 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.

INFORMATION ON COURSES

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 Workplace Learning in Speech (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Speech (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 psychology
- the statistics requirement for a variety of majors and minors
- 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 may receive credit for only one of the following courses: BEHS 202, BEHS 302, BMGT 230, ECON 321, GNST 201, MATH 111, MGMT 316, PSYC 200, SOCY 201, STAT 100, STAT 200, STAT 225, or STAT 230.

STAT 486A Workplace Learning in Statistics (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Statistics (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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
- 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. Emphasis is on engaging with theatrical performances as informed audience members and assessing one's role within the script-performance-audience dynamic. Assignments include attendance at two live professional performances. Students may receive credits for only one of the following courses: HUMN 110 or THET 110.

Women's Studies

Courses in women's studies (designated WMST) may be applied as appropriate (according to individual program requirements) toward

- a minor in women's studies
- 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.

Workplace Learning

Workplace Learning extends education beyond the traditional classroom by integrating career-related work opportunities within your field of study.

Workplace Learning courses carry the designator of the appropriate academic discipline and the number 486A or 486B. Workplace Learning courses may not be applied toward any general education requirements or some majors and minors. You are responsible for consulting your advisor about applying Workplace Learning credit to your degree program.

More details and contact information for Workplace Learning are available on pp. 197–98. Details are also available online at www.umuc.edu/wkpl.

Writing

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

- the general education requirement in communications
- a minor in communication studies
- a certificate in Project Management
- electives (including related requirements in various majors)

If you are seeking a degree, you must complete WRTG 101 or WRTG 101S (or present its equivalent in transfer) during your first 18 credits of enrollment at UMUC. WRTG 101 or WRTG 101S 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. 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. You should check the descriptions of your curricula.

The description of the general education requirements begins on p. 8.

INFORMATION ON COURSES

WRTG 101 Introduction to Writing (3)

(Fulfills the general education requirement in communications.) 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, WRTG 101S, or WRTG 101X.

WRTG 101S Introduction to Writing (3)

(Fulfills the general education requirement in communications.) Practice in effective writing and clear thinking at all levels, including the sentence and paragraph, with emphasis on the essay and the integration of research into one's writing. An intensive review of grammar is provided. Focus is on organizing, developing, and writing academic essays. The goal is to apply specific steps within the writing process, including formulating purpose, identifying an audience, selecting and using research resources and methods of development, and completing other rhetorical tasks. Revision and recursive writing practice are emphasized and encouraged. Assignments include a comparison-contrast analysis, a cause-effect analysis, a research-supported essay, and a final reflective paper. Students may receive credit for only one of the following courses: ENGL 101, ENGL 101X, WRTG 100, WRTG 101, WRTG 101S, or WRTG 101X.

WRTG 291 Research Writing (3)

(Fulfills the general education requirement in communications.) Prerequisite: WRTG 101 or WRTG 101S. 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 communications.) Prerequisite: WRTG 101 or WRTG 101S. 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 391 Advanced Research Writing (3)

(Fulfills the general education requirement in upper-level advanced writing.) Prerequisite: WRTG 101 or WRTG 101S. Instruction and practice in academic research skills. The objective is 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, ENGL 391X, WRTG 391, or WRTG 391X.

WRTG 393 Advanced Technical Writing (3)

(Fulfills the general education requirement in upper-level advanced writing.) Prerequisite: WRTG 101 or WRTG 101S. 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 using strategies and technologies 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)

(Fulfills the general education requirement in upper-level advanced writing.) Prerequisite: WRTG 101 or WRTG 101S. A comprehensive, project-based study of applied business writing. The aim is to develop documents appropriate to audience and purpose that are well argued and conform to standards of business writing. Topics include context, purpose, audience, style, organization, format, results, technologies, and strategies for persuasion in typical workplace messages. In addition to shorter assignments, a substantial formal report that incorporates research and support for conclusions or recommendations is required. Students may receive credit for only one of the following courses: COMM 394/394X, ENGL 394/394X, or WRTG 394/394X.

WRTG 486A Workplace Learning in Writing (3)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 Workplace Learning in Writing (6)

Prerequisite: 9 credits in the discipline and prior program approval (requirements detailed online at www.umuc.edu/wkpl). 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 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 assess the degree to which you 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 your grade point average (GPA) and in determining your eligibility for financial aid and veterans educational benefits. However, if you are required to take these courses, you 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 <i>Performance excels far above established standards for university-level performance</i>	4
B	Superior <i>Performance is above established standards</i>	3
C	Good <i>Performance meets established standards</i>	2
D	Substandard <i>Performance is below established standards</i>	1
F	Failure <i>Performance does not meet minimum requirements</i>	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 you choose either the pass/fail or audit option at the time you register, you will be given a letter grade according to the standard method. Under the standard grading method, you are given a grade of A, B, C, D, or F on the basis of your 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

If you are a degree-seeking student, have earned 30 credits (including at least 15 credits at UMUC), and have a cumulative grade point average of 2.0, you may take one elective 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. You must elect pass/fail grading at the time you register. 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.

If you register for pass/fail grading, you must still complete all the regular requirements of the course. The teacher evaluates your 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

If you do not wish to receive credit, you may register for courses as an auditor once you are admitted. You must indicate this intention when you register. You may request a change from credit to audit status anytime before the end of the first week of classes. As an auditing student, you do not

have to complete course assignments, but you may choose to do so to receive faculty feedback on your 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 the Office of the Registrar 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. If you are assigned the grade of F, you 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 of not attending or participating in course assignments and activities. It is assigned if you cease to attend class or fulfill requirements but have 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 when your work in a course has been satisfactory but, for reasons beyond your control, you have been unable to complete all the requirements of a course. The following criteria must be met:

- You must have completed at least 60 percent of the work in the course with a grade of C or better.
- You must request the mark of I before the end of the course.

The procedure for awarding the mark of I is as follows:

- You 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.
- Together you and the teacher agree on the remaining requirements of the course and the deadline for submitting the work.
- You are responsible for completing the work.
- After the work is completed, the teacher submits a grade change to replace the mark of I on your 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. Refer to UMUC policy 170.71 Policy on Grade of Incomplete at www.umuc.edu/policies for details.

You should be aware that a mark of I in your 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). If you elect to repeat an incomplete course, you 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

You 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 website at www.umuc.edu/withdraw. You must withdraw from a course before 65 percent of the total number of days in a session has expired. (For intensive format courses, you must submit withdrawals before the close of business on the first day of class.)

ACADEMIC AND ADMINISTRATIVE REQUIREMENTS

For most courses, this mark appears on your permanent record unless you withdraw before the end of the schedule adjustment period. For intensive format courses, you 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

If you repeat a course, only the higher grade earned in the two attempts is included in the calculation of your grade point average.

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. You 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, you must register, pay the full tuition and fees, and repeat the entire course successfully.

Repeated Registration for a Course

You may not register more than three times for the same course. Registering more than three times 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

Your grade point average (GPA) is calculated using the quality points assigned to each grade or mark (chart on p. 184). 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.

GPA's are computed separately for each degree after the first bachelor's degree. Only courses applied toward a second bachelor's degree are computed in the GPA for that degree, even if you earned a first degree at UMUC; only courses applied

toward a master's degree are computed in the GPA for that degree, even if you are a graduate of The Undergraduate School at UMUC.

Academic Warning and Dismissal

Once you have attempted at least 15 credits at UMUC, your cumulative grade point average is computed at the end of every term (fall, spring, or summer), based on all your graded coursework at UMUC. The Office of the Registrar then takes action, required by UMUC policy, according to your level of progress as described below.

There are four levels of academic progress: satisfactory, warning, probation, and dismissal. If you are in warning, probation, or dismissal status, you are notified of your status approximately three weeks after the end of the term. Warning or probation status notifications are sent via e-mail to your e-mail address of record. Dismissal status notifications are sent both via e-mail to your e-mail address of record and by letter to your permanent address of record. No notification is sent if you are making satisfactory progress.

If you have questions about your academic progress, e-mail us at SAACademicStanding@umuc.edu.

Levels of Progress

The complete UMUC policy 158.00 Academic Levels of Progress is available online at www.umuc.edu/policies.

SATISFACTORY

If your cumulative grade point average is 2.0 or higher, you are considered to be making satisfactory progress.

WARNING

If your cumulative GPA is less than 2.0, you will be placed on academic warning. You will remain on academic warning as long as your cumulative GPA is less than 2.0—even if your GPA for the term is 2.0 or better.

In addition, if you attempt 15 credits or more in a period of at least two sequential standard terms and earn no quality points, you will receive an academic warning regardless of your cumulative grade point average.

If you are on academic warning and your GPA for the term is 2.0 or better, but your cumulative GPA is less than 2.0, you will continue on warning until you have completed courses at UMUC that raise your cumulative GPA to 2.0 or better.

While on academic warning, you are limited to a maximum enrollment of 7 credits per standard term or a maximum of

4 credits per eight-week session. Additional limitations may apply during your first term on academic warning.

PROBATION

If you are on academic warning or were admitted on provisional status and your GPA for the term is less than 2.0, you will be put on probation.

If your GPA for the term is 2.0 or better while you are on probation, but your cumulative GPA is less than 2.0, you will return to academic warning or provisional status.

While on academic probation, you are limited to a maximum enrollment of 7 credits per standard term and 4 credits per eight-week session. Additional limitations may apply during your first term on academic probation.

DISMISSAL

If you are on probation and your GPA for the term is less than 2.0, you will be dismissed.

As long as you maintain an average of at least 2.0 during a particular term, you will not be dismissed at the end of that period, regardless of your cumulative GPA. Once dismissed, you are ineligible to register again for UMUC courses until you are reinstated.

Reinstatement After Dismissal

If you have been dismissed, you are required to wait at least one semester before petitioning to return. The petition for reinstatement should be addressed to the Reinstatement Committee and e-mailed to reinstatements@umuc.edu.

To be reinstated, you must first contact the Center for Student Success. Center personnel will assist you through the process of reinstatement.

After all the required steps are completed, you will receive a written response from the committee. If you are reinstated, you are placed on academic warning and may be required to meet certain conditions, such as participating in the mentoring program or making use of tutoring services. You may also be subject to additional enrollment limitations during the first term after you return to study.

Deadlines for requesting reinstatement are as follows:

Fall enrollment	July 15
Spring enrollment	November 15
Summer enrollment	April 15

Scholastic Recognition

Dean's List

If you complete at least 6 credits (in courses graded A, B, C, D, or F) with a GPA of at least 3.5 in a term and a cumulative GPA of 3.5 at UMUC, you are eligible for the dean's list.

If you fail to earn the required average by the end of the term, you must complete a minimum of 6 more credits during the next term to be considered for the dean's list again. All courses taken during the term are used in computing the average, even though the total number of credits may exceed 6. A term is designated as fall, spring, or summer.

If you make the dean's list, you will be notified via e-mail of your achievement by the Office of the Dean, The Undergraduate School.

Academic Honors

Academic honors for excellence in scholarship are determined by your 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 with a cumulative GPA of 3.901 to 3.999; *cum laude* honors are conferred on those with a cumulative GPA of 3.800 to 3.900. To be eligible for any of these categories of recognition, you 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, you are required to have a total of 45 new UMUC credits and the requisite GPA. (See p. 9 for more information on attaining a second bachelor's degree.)

Honor Societies

Inquiries concerning honor societies should be addressed to your advisor.

ALPHA SIGMA LAMBDA

As a UMUC student, you are eligible for membership in Alpha Sigma Lambda, the national honor society for students in continuing higher education. To qualify for membership, you 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.

ACADEMIC AND ADMINISTRATIVE REQUIREMENTS

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, you 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 toward an associate's or a bachelor's degree and have shown academic excellence. The honor society encourages members 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, you must be seeking a first associate's or bachelor's degree. You 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, you must have completed between 12 and 59 credits toward your degree. You are invited to join the honor society in the spring session.

PHI ALPHA THETA

As a UMUC student, you may qualify for membership in Phi Alpha Theta, the international honor society in history. To qualify for membership, you 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, you 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. Your 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.

SIGMA PHI OMEGA

Sigma Phi Omega is a national academic honor and professional society in gerontology that seeks to promote scholarship, professionalism, friendship, and services to older persons and to recognize exemplary attainment in gerontology and aging studies and related fields. Student membership is open to undergraduate students majoring or minoring in gerontology and aging services, social science (with a focus on gerontology), and related fields. You must be in at least your second term of enrollment, have completed a minimum of 12 credits at UMUC, and have a GPA of at least 3.3.

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, you 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 WRTG 101, and 6 credits of upper-level coursework. You must also have earned a GPA of 3.6 in English coursework at UMUC.

UPSILON PHI DELTA

Upsilon Phi Delta is a national academic honor society founded by the Association of University Programs in Health Administration for students in health care management and policy and designed to recognize, reward, and encourage academic excellence in the study of health administration. To be eligible for undergraduate student membership, you must have a cumulative GPA of 3.25 or higher and at least 18 credits of coursework in health services management with a GPA of 3.25 or higher in those courses.

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 as an undergraduate, you must be pursuing a bachelor's degree with a major in the computing and informa-

tion disciplines and must have completed at least 45 credits. You 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/studenthandbook. Refer to the handbook for the most current information.

Attendance and Participation

You are 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, you 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. You are expected to achieve the same intended learning outcomes and do the same amount of work in an online course as you would in an on-site course. Active participation is required in all online courses, and you should expect to log in to your online courses several times a week.

Absence from class does not excuse you from missed coursework. You are 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 your grade. Teachers are not expected to repeat material that you missed because of your absence from class.

Technology Use

Internet Access

UMUC is committed to ensuring that you have access to up-to-date resources and acquire the level of fluency in information technology you need to participate actively in contemporary society. As a UMUC student, you must be prepared to participate in asynchronous, computer-based class discussions, study groups, online database searches, course evaluations, and other online activities whether your course is held online or in a classroom.

You must therefore ensure that you have access to the Internet and a current e-mail address. If you do not have Internet access through a home computer, you may use one at a UMUC computer lab, a university or public library, or another source. However, that source should be regularly available, and you may need to be able to submit assignments electronically.

The most current technical requirements are available online at www.umuc.edu/techreq.

Electronic File Sharing

Peer-to-peer programs permit computers to share data in the form of music, movies, games, computer files, and software.

As a user of the UMUC network, you are required to comply with federal copyright laws. You are not permitted to share unauthorized copyrighted material over the UMUC network, whether you are using your own computer or a university computer.

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/computerresource. UMUC's computer use policy can be found at www.umuc.edu/computerpolicy.

More information on how to legally download music is available on the Recording Industry Association of America website at www.riaa.com. Information on how to legally download movies and television programs is provided on the Motion Picture Association of America website at www.mpa.org.

Examinations

You are responsible for obtaining information about quizzes and examination schedules and policies.

Exams and Testing Services (www.umuc.edu/testing) schedules sessions for placement exams and some standardized exams for which credit may be possible. There may be a fee for this service.

Course Load

For official data, full-time enrollment is defined as 12 or more credits per semester and half-time as 6–11 credits per semester.

Decisions on the number of courses you can successfully complete in any one session are normally left to your discretion. It should be noted, however, that the majority of UMUC students register for between 3 and 7 credits, and you are strongly advised not to exceed this limit. Carefully and

ACADEMIC AND ADMINISTRATIVE REQUIREMENTS

realistically assess your other commitments before you register for more than 7 credits. You may not register for more than 18 credits in a 17-week period without written permission. To initiate the permission process, contact your academic advisor. Permission to register for more than 18 credits is at the university's discretion and 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.

You may not register for courses whose scheduled meeting times overlap.

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, The Undergraduate School.

At UMUC, faculty members are expected to establish classroom environments conducive to the maintenance of academic integrity by promptly giving you a complete syllabus describing the course and its requirements, grading submitted work promptly and adequately, and arranging appropriate testing conditions.

As a UMUC student, you are expected to conduct yourself in a manner that will contribute to the maintenance of academic integrity. Failure to maintain academic integrity (academic dishonesty) may result in disciplinary action.

You 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/policies or is available from the Office of the Dean, The Undergraduate School.

Appealing a Grade

The established performance standards for a course grade are communicated in the syllabus and other course materials. If you believe that your grade was not based on such standards, you 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, The Undergraduate School, or online at www.umuc.edu/policies.

There is a time limit for appealing a grade; if you want to appeal a grade, you must initiate the process within 30 days of the posting of the grade.

Code of Student Conduct

You are subject to UMUC policy 151.00 Code of Student Conduct, which can be found at www.umuc.edu/policies or is available from the Office of the Registrar. 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

To file a formal complaint concerning the actions of members of the UMUC faculty or administrative staff, you must follow the procedures detailed in UMUC policy 130.70 Student Grievance Procedures, which is available at www.umuc.edu/policies or from the Office of the Dean, The Undergraduate School. If you wish to seek redress for the acts or omissions of a faculty or staff member, you 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

If you move during the session, you should not only leave a forwarding address with the U.S. Postal Service but also notify UMUC by updating your personal information in MyUMUC.

Transfer of Credits from UMUC

To have credits earned through UMUC transferred, you must obtain authoritative guidance from the institution to which you intend to transfer—even if it is another institution in the University System of Maryland. Only that institution can answer specific questions about its own residency and degree requirements or about the applicability of UMUC courses to its curricula.

Code of Civility

To promote a positive, collegial atmosphere among students, faculty, and staff, UMUC has developed a Code of Civility, which is available in the *Student Handbook* at www.umuc.edu/studenthandbook.

GENERAL INFORMATION AND OPEN HOUSES

Before the beginning of each term, UMUC holds open houses (online and on-site). These events offer an opportunity for you to learn about UMUC and its programs, student services, academic and career options, faculty members, and fellow students. You can apply for admission and sign up for courses at these times.

For general information, or to be directed to specific offices, 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. If you have a high school diploma from a regionally accredited or state-approved high school in the United States—or the equivalent—you can be admitted and register for undergraduate classes. If you have not completed at least 24 credits of transferable college coursework, you must submit high school transcripts (or equivalent) at the time of admission. Test scores are not required. Special requirements (see pp. 192–93) must also be met if you were educated abroad. You must be officially admitted to the university before you can register for classes.

UMUC policy 210.00 on Undergraduate Admission is available online at www.umuc.edu/policies.

Student Status

Upon being admitted to UMUC, you are assigned to regular or provisional status.

REGULAR

If you qualify for admission and want to receive credit for courses (whether you intend to receive a degree or not), you are admitted as a regular student. (For financial aid purposes, you must be seeking a degree or certificate at UMUC to be a regular student.) To be admitted as a regular student, you must submit a completed, signed application and certify that you fulfill *one* of the following academic requirements:

- Have graduated from a regionally accredited or state-approved high school in the United States.
- Have passed a high school equivalency exam.

The most commonly accepted high school equivalency exam is the General Education Development (GED) test. Passing scores depend on when the test was taken:

- Before January 2002, a total score of 225 and a minimum score of 40 on each section
- From January 2002 to January 2014, a total score of 2250 and a minimum score of 410 on each section
- After January 2014, a total score of 600 and a minimum score of 150 on each section

To be granted regular admission status, you should also 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. An academic probation or dismissal that occurred at least two years before you apply for admission has no bearing on your admission status.

If you were educated abroad, see p. 192 for information on how you may attain regular student status.

PROVISIONAL

You may be admitted in provisional status if

- You 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 your cumulative grade point average) during the last two years.
- You were educated abroad and have not completed at least 24 credits of transferable college coursework from a U.S. college or university.

As a provisional student, you may enroll for a maximum of 7 credits during a fall, spring, or summer term.

If you fit into the first category, during your first session of enrollment at UMUC you must submit transcripts from all colleges and universities you have attended. If your session grade point average at UMUC is less than 2.0, you are placed on probation. If, while on probation, your session grade point average is 2.0 or better, you return to provisional status. If, while on probation, your session and cumulative grade point averages are less than 2.0, you are dismissed and must follow the standard reinstatement procedures that apply to all dismissed students. Your status is automatically changed to regular after you have successfully completed 7 credits of graded coursework with a cumulative grade point average of 2.0 or higher.

If you fall into the second category (i.e., you were educated abroad), you must submit official transcripts verifying completion of the equivalent of a U.S. secondary education and prove English proficiency. You are eligible for regular admission status once UMUC has verified these qualifications. Details are on pp. 192–93.

ADMISSION AND ENROLLMENT

Procedures for Admission

To apply for admission, you must complete an undergraduate admission application and pay the nonrefundable fee. Applicants who intentionally provide false information on their application are subject to disciplinary action, as detailed in UMUC policy 151.00 Code of Student Conduct (available online at www.umuc.edu/policies). 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 you apply for admission. The determination made at that time remains in effect unless it is successfully challenged. You are responsible for providing the information necessary to establish eligibility for in-state status. Official criteria for determining residency are available at www.usmd.edu/regents/bylaws/SectionVIII.

Further information on tuition and fees may be found on p. 194.

Reenrollment

If you have not attended UMUC for two years, you must file a new application with Undergraduate Admissions before you will be allowed to register. However, you need not pay another application fee.

Transfer from UMUC Europe or UMUC Asia

If you attended UMUC overseas within the last two years and wish to attend UMUC in the United States, you must complete a divisional transfer form. This form is located on the websites of the overseas divisions. There is no fee for divisional transfers.

FORWARDING OF OVERSEAS STUDENTS' RECORDS

If you were formerly enrolled in UMUC Europe or UMUC Asia, your records are retained in the Office of Admission and Registration of that program. If you later enroll in UMUC stateside, your records are then requested by the Office of the Registrar. (**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

If you received a bachelor's degree from an approved U.S. institution, you are automatically admissible to UMUC as a regular (undergraduate) student upon submission of the admission application and fee. You may also be admitted as a

regular (undergraduate) student if you are a former graduate student in the University System of Maryland whose time limit in a program has expired. If you have been admitted to UMUC as a graduate student, you may take undergraduate courses only when satisfying approved prerequisites or as part of an approved articulation agreement. You may be admitted as either undergraduate or graduate but may not be admitted in both categories at the same time.

Students from Other USM Institutions

If you are an undergraduate student from another institution of the University System of Maryland, you may take undergraduate courses without applying to UMUC. Instead, you must submit a letter or form authorizing your enrollment at UMUC for the semester you wish to attend. If you are a graduate student from another institution of the University System of Maryland, you may also take undergraduate courses without applying to UMUC, but you must pay graduate tuition and related fees. Transferability of academic work completed at UMUC is determined by your home institution. Undergraduate courses may not be applied toward graduate degree requirements (except as part of specific articulation agreements).

Noncitizens and Foreign-Educated Students

If you are not a U.S. citizen or if you received your secondary school education outside the United States, you may be required to provide additional documentation related to high school equivalency, English language proficiency, or visa or immigration status, as detailed below.

1. If you have earned fewer than 24 credits at a U.S. college or university, you must verify completion of the equivalent of a U.S. secondary education by the end of your first term of study at UMUC by submitting one of the following:
 - An evaluation from an approved international credit evaluation agency (Details are available online at www.umuc.edu/internationalcredit.)
 - Official transcripts showing successful completion of a U.S. high school equivalency exam, such as the GED
2. If English is not your native language, you must demonstrate college-level proficiency in written English by presenting documentation of *one* of the following:
 - Graduation from a U.S. high school or regionally accredited university
 - A grade of C or higher in an English composition course from an approved U.S. college or university
 - A minimum score of 550 on a written version or 79 on the Internet 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

You must arrange to have official score reports sent directly from the testing agency to Undergraduate Admissions. All scores (TOEFL, IELTS, EIKEN) must be no more than two years old. Your documentation must be verified before you will be permitted to enroll.

3. If you are not a citizen of the United States and plan to study while resident here (as opposed to studying online from abroad), you must provide information on visa or immigration status with your admission application. To do so, enclose a copy of your permanent resident card, your visa and I-94 card, or an approval notice from U.S. Citizenship and Immigration Services noting your visa or immigration status.

If you hold a J-1 visa and attend another school, you must submit a letter of permission from your sponsoring institution before registration each semester.

Applicants Previously Suspended or Dismissed

An academic probation or dismissal from another institution that took place at least two years before the date when you apply for admission has no bearing on your admission status. However, if you were previously dismissed from UMUC, you must apply for reinstatement.

If you were academically suspended or dismissed from another institution within the previous two years, regardless of your cumulative grade point average, you may be admitted as a provisional student. You must fulfill the requirements for provisional status, detailed on p. 191.

However, if you received a disciplinary suspension or dismissal from another institution within the last three years, you may not be considered for admission to UMUC until the director of Admissions has thoroughly reviewed the case. You must make certain that the institution where the action was taken sends all records explaining the circumstances directly to Undergraduate Admissions. Because of how long it takes for the documents to be sent and reviewed, you may not be able to register during the session when you first apply.

Concurrent Secondary Enrollment

Based on the recommendation of a high school guidance counselor, UMUC accepts academically gifted high school seniors for admission in provisional status. If you are still in high school and can demonstrate a cumulative grade point average of at

least 3.5 (B+) in your high school academic subjects, you may qualify. At least a month before a session begins, UMUC must receive your application for admission, the application fee, official high school transcripts, and written permission from the appropriate officials at the high school. After being accepted, you may register as a “concurrent secondary” student and carry a maximum of 7 credits per session at UMUC while you finish work toward your high school diploma.

Golden Identification Card for Senior Citizens

The Golden Identification Card program allows qualified older students to register for two courses that total up to 7 credits each session for credit, on a space-available basis, without paying tuition. If you qualify, you may enroll only during the final week of registration and you must still pay all fees. Credits and fees associated with Portfolio Assessment must also be paid.

To qualify for the Golden Identification Card, you must meet all of the following criteria:

- Be classified as an in-state student for tuition purposes.
- 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.
- Not be employed more than 20 hours a week.

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 deadline listed. Check the current undergraduate schedule of classes (www.umuc.edu/schedule) and the online academic calendar (www.umuc.edu/calendar) for registration information.

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.

The Waiting List

If a class is already full at the time of registration, you can place your name on a waiting list for that class.

ADMISSION AND ENROLLMENT

WAITING LIST POLICIES

Regardless of how you register, the following policies apply:

- You may put your name on the waiting list for only six courses or sections.
- You may not attend a class for which you are on the waiting list.
- Faculty members and academic advisors are not authorized to add you to a closed class.
- If a space becomes available and you are the next person on the waiting list, you will automatically be registered for that class, and the charge will appear on your account. You will be notified of the enrollment by e-mail. If you are ineligible for enrollment (because you have not met prerequisites or are enrolled in another class that conflicts in time), the space will go to the next person on the waiting list.

If you no longer want a class, you should remove your name from the waiting list to prevent the possibility of being automatically enrolled.

Withdrawals or Dropped Courses

Stopping payment on checks for registration fees, or not paying at registration, does not constitute an official withdrawal or relieve you of your financial obligation to UMUC. Never attending or ceasing to attend class(es) does not constitute a withdrawal.

If you officially withdraw from a course after the schedule adjustment period, you receive a mark of W (described on pp. 185–86). You 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/withdraw. If you are receiving financial aid, you should contact the Financial Aid Office before withdrawing to fully understand the impact on your current and future aid. You are responsible for withdrawing yourself.

FINANCIAL INFORMATION

Tuition and Fees

All tuition and applicable fees must be paid in full at registration, unless you

- Applied for financial aid to cover tuition and fees for the session.
- Are 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)

Consult the appropriate sections of this catalog for further information about tuition assistance, financial aid, or veterans benefits. If you are interested in the monthly payment plan, administered by Heartland Campus Solutions ECSI, contact the company at 866-927-1438 or visit www.heartlandecsi.com. More information on payment is available online at www.umuc.edu/makeapayment.

Current Tuition and Fees

Tuition rates and fees are available online at www.umuc.edu/tuition. 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), transcripts, and various options for earning credit (such as Workplace Learning, Experiential Learning, and credit by examination). There is also a service charge for dishonored checks. Information on student classification and residency is provided at www.usmd.edu/regents/bylaws/SectionVIII/.

Refunds

If you withdraw from a course during the official drop period, you will receive a full tuition refund. If you withdraw after the drop period, you will be refunded a portion of the tuition, the amount to be determined by the date of the withdrawal. Dates for the drop period are specified online at www.umuc.edu/calendar.

Refunds for Workplace Learning courses follow university policy and are based on the date you registered for the course. The schedule for partial refunds is provided online at www.umuc.edu/refundpolicy.

If your tuition 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 you. Financial aid awards may be canceled or reduced if you withdraw from classes while receiving financial aid. Check with a financial aid advisor before withdrawing from a course to determine the impact on your award.

No offer of financial aid is considered an active, final award until the refund period has ended. If you withdraw before the end of that period, you 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).

Stopping payment on a check for tuition does not disenroll you from classes nor relieve you of responsibility for paying tuition and fees. If your checks for tuition or fees remain dishonored, you may be barred from classes.

Indebtedness to the University

If you incur debts to UMUC, you must clear them to be permitted to register. Requests for services (including transcripts and diplomas) are denied until all debts have been paid. Outstanding debts are collected against refunds due to you. After a reasonable period of time, uncollected debts are forwarded to the Central Collection Unit of the State Attorney General's Office.

If you fail to pay charges incurred with UMUC, UMUC has the authority to deem your 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, your information is reported to a credit bureau. Review the Student Accounts web page at www.umuc.edu/studentaccounts for more information.

Employer-Provided Tuition Assistance

If your employer is going to pay for part or all of your tuition, you must submit two copies of appropriate documentation at the time of registration. Requirements are listed at www.umuc.edu/payoptions. Documents that restrict payment or are in any way conditional will not be accepted.

If your employer does not pay UMUC, you are responsible for payment.

UMUC cannot issue refunds for authorizing documents submitted after registration. If the document authorizes payment for books and supplies, you must submit a separate copy to a participating bookstore (listed at www.umuc.edu/coursematerials) 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 bringing education to you wherever you 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, we incorporate the assessment of nontraditional learning (i.e., learning gained outside the classroom) into the evaluation of student competencies and academic credit.

EARNING CREDIT AT UMUC

Classroom and Online Study

UMUC uses every feasible instructional delivery mechanism or platform to extend degree opportunities to you. Most of UMUC's degree and certificate programs are available both on-site and online and allow blended formats to suit your 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 online.

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. 202–10).

Classroom-Based Study

UMUC courses are offered in classrooms at locations in Maryland and the national capital region; at a number of military bases throughout the United States; in classrooms on U.S. military bases throughout Europe and Asia through long-standing partnerships with overseas military commands; and at work sites through contractual arrangements with employers. If you live in the Maryland area and prefer direct interaction, you can be sure of finding courses and services close to home. See www.umuc.edu/locate to see if there is a location near you.

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 you 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 that teaches its on-site offerings.

In online courses, you 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. You are expected to participate frequently in online discussions.

To study online, you 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 at www.umuc.edu/techreq.

Course Evaluations

UMUC uses student feedback to make decisions about future courses. Individual responses are kept confidential. For online and hybrid classes, the notice usually appears in the online classroom when three-quarters of the class has been completed. For on-site classes in intensive formats, you generally complete a paper evaluation in class.

Learning Gained Through Experience

Learning acquired outside the college classroom may be assessed for credit toward a degree at UMUC. You can make use of life experience for possible college credit through Prior Learning (Portfolio Assessment or course challenge), Workplace Learning, and a variety of recognized external assessments (discussed on pp. 197–98). Details on Prior Learning and Workplace Learning follow. Advisors can help you determine the best routes to use in fulfilling any academic plan.

Prior Learning

The Prior Learning program teaches you to identify, articulate, and gain academic credit for the college-level learning you have acquired through work and life experience. You may earn credit for college-level learning acquired outside the classroom through two avenues: course-challenge examinations and Portfolio Assessment. As many as 30 credits may be earned through a combination of course-challenge examinations and Portfolio Assessment 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 Assessment and

course-challenge examinations) and credit by examination (described on p. 201). Any excess credits awarded are applied where appropriate in your program of study.

COURSE CHALLENGE

UMUC credit can be earned for any undergraduate course for which UMUC can prepare and administer a suitable examination or assessment. Advisors and Prior Learning office staff can inform you about specific courses that may not be challenged. If you are a degree- or certificate-seeking student at UMUC, have received an academic advisement report, and have a cumulative grade point average of at least 2.0 in UMUC coursework, you may be eligible for course challenge. Carefully review the rules, procedures, and limitations described at www.umuc.edu/coursechallenge before applying online.

Course challenge is not intended as a substitute for independent study. You may be required to show evidence of prior learning before being authorized to challenge a course. Credit may be applied toward a first or second bachelor's degree or toward a certificate. Assessments may not be taken more than twice and also may not be taken for courses for which you have previously enrolled. Only one course in a sequence may be challenged at a time, and you may not challenge a course that is prerequisite for a higher-level course you have already taken.

Credit earned by course-challenge assessment earns a letter grade that is computed in the grade point average. However, this credit may not be applied to the requirement for graded coursework in your major. You may not receive credit for introductory courses in your native language.

Course challenges may only be canceled before you receive the assessment. Refunds are given only if a suitable assessment cannot be prepared.

Visit the UMUC website at www.umuc.edu/coursechallenge or call 800-888-UMUC, ext. 2-2890, for more information.

PORTFOLIO ASSESSMENT

Portfolio Assessment is a unique way for you to articulate and identify college-level learning you have gained from work, community or political involvement, or other noncollegiate experiences and earn credit for it. To be eligible for Portfolio Assessment, you must

- Complete a Portfolio Assessment application.
- 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, you prepare a portfolio describing and documenting the college-level learning you have gained from past experiences. Because EXCL 301 is a demanding and complex course, you should not register for more than one other course during the session in which you are enrolled in EXCL 301 (assuming that you are attending part-time).

If you successfully complete EXCL 301 with a grade of S and submit a portfolio for evaluation, you may enroll in a supplemental class (EXCL X001) to complete additional portfolios. The supplemental class confers no credit and may not be applied toward degree completion. If you take this option, you may not target courses for which you were denied credit in EXCL 301. Contact the Prior Learning office for more information.

EXCL 301 is graded on an S/D/F basis (explained on p. 184). If the quality of your 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 your 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 Assessment, 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 Assessment fees.

You should carefully review the requirements, rules, and procedures for Portfolio Assessment. Visit www.umuc.edu/priorlearning or call 800-888-UMUC, ext. 2-2890, for more information.

Workplace Learning

Workplace Learning offers an opportunity for you to gain experience and develop new knowledge and skills in your chosen discipline while you earn upper-level college credit through an

WAYS OF EARNING CREDIT

integrated model that puts theory into practice and enables you to accelerate completion of both your academic and career goals.

To be eligible for Workplace Learning, you must

- Be seeking a degree or a certificate in which Workplace Learning credit may apply.
- Have completed 30 credits, including transfer credit, toward a degree (if you are seeking a degree).
- Have completed at least 9 credits in the discipline in which you plan to do your Workplace Learning project.
- Have completed at least 6 credits at UMUC.
- Have a GPA of 2.0 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.)

To participate in Workplace Learning, you must first apply to the program by the deadline published online at www.umuc.edu/wkpl. Once you are notified of your eligibility, you must 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. As soon as your learning proposal is approved, you are given permission to register for Workplace Learning. Your learning proposal is then developed into a three-way learning contract among your employer, you, and your faculty mentor.

Throughout the Workplace Learning experience, you work under the supervision of your employer on completing several of the identified project tasks and the faculty mentor on completing the academic assignments required to earn college credit for your 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. You are required to communicate regularly with your faculty mentor throughout the Workplace Learning session, which typically lasts 15 weeks.

You may earn either 3 or 6 credits during the Workplace Learning session. To earn 3 credits, you must devote at least 12 hours per week to tasks providing new learning (for a total of 180 hours during the Workplace Learning session) and complete a minimum of four project tasks identified in the learning contract. To earn 6 credits, you must devote at least 20 hours per week to project tasks (for a total of 300 hours during the Workplace Learning session) and complete five to eight project tasks identified in the learning contract.

Workplace Learning 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 Workplace Learning in business and management would be listed as BMGT 486A, a 6-credit as BMGT 486B. Tuition for the Workplace Learning course is charged at the current rate per credit, and an administrative fee is charged each time you enroll.

You may apply up to 45 Workplace Learning credits to your bachelor's degree (12 credits for a second bachelor's degree). Certificates that include a Workplace Learning option typically accept no more than 3 credits of Workplace Learning coursework. Workplace Learning courses may not be used to satisfy general education requirements or (unless specified) required academic coursework in the major. However, Workplace Learning credits may be applied to electives as well as to designated upper-level requirements in the major or minor. A standard letter grade is awarded for successful completion of Workplace Learning courses. It is strongly recommended that you consult with a UMUC advisor to determine how Workplace Learning credits may help you fulfill degree requirements.

Review the information, policies, and procedures detailed online at www.umuc.edu/wkpl or call the Workplace Learning program office at 800-888-UMUC, ext. 2-2890, for assistance.

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.

Be sure to discuss all previous experience and training with a new student advisor to ensure that you receive any credit that applies.

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; professional credit, on the basis of American Council on Education (ACE) recommendations on credit; and innovative learning, including learning evaluated by approved standardized examinations
- 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 you did elsewhere. If you have earned credit at another college or university, you are responsible for determining whether courses you plan to take at UMUC would duplicate any previously earned credit and for submitting all official transcripts from colleges and universities you attended, as well as documentation of military and professional learning and pertinent test scores (CLEP, AP, etc.)—regardless of whether they appear on a previous college transcript or not.

You may not pursue two degrees of the same type (associate's, bachelor's) at both UMUC and another institution using the same credits to meet both degrees.

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. If you plan to transfer credit from other institutions to UMUC, you should request a review of your previous credit to determine how those credits may apply to a degree from UMUC. No transfer credit is accepted without official transcripts.

If you are in doubt about whether a UMUC course duplicates previous study, you should consult an advisor before registering.

Credit from Other Colleges and Universities

Transfer credits from approved two- and four-year colleges and universities for courses in which you earned a grade of at least C (2.0) may be accepted for courses that apply to your 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 your 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

WAYS OF EARNING CREDIT

- 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. If you have already completed 70 credits, you may not apply further credit from a junior college or a community college to a degree from UMUC.

If you initially enrolled in any of the public community colleges in Maryland, you will be admitted to UMUC in conformance with the policy developed and approved by the Maryland Higher Education Commission. (Details are given in the chapter on Policies.) If you participated in one of the community college alliances with UMUC, you should consult with your advisors at both institutions if you 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 your chosen curriculum. UMUC generally accepts ACE recommendations 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 appli-

cable to your 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 (SOC) Degree Network System. Servicemembers Opportunity Colleges (SOC) was created in 1972 to provide educational opportunities to servicemembers who have trouble completing college degrees because of frequent moves.

SOC functions in cooperation with the Department of Defense, and active and reserve components of the military services to expand and improve voluntary postsecondary education opportunities for servicemembers worldwide. SOC is funded by the Department of Defense (DoD) through a contract with the American Association of State Colleges and Universities (AASCU). The contract is managed for DoD by the Defense Activity for Non-Traditional Education Support (DANTES).

The SOC Degree Network System consists of degree-granting colleges and universities that have pledged to help servicemembers and their adult family members complete college degrees by adopting policies that have been outlined in the Voluntary Education Partnership Memorandum of Understanding. Many courses offered by SOC Degree Network System institutions have two-way guaranteed transferability, making it easier for servicemembers to complete associate's and bachelor's degrees no matter where they move during their military careers.

SOC operates the two- and four-year Degree Network System for all the branches of the military service except the Air Force. Information and the SOC Degree Network System-2 and -4 Handbooks are available at the SOC website at www.soc.aascu.org.

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 your 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, Excelsior College Examinations, and the International Baccalaureate exam; approved industry certification examinations (listed online at www.umuc.edu/creditbyexam); and other approved 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. You may not receive credit for introductory courses in your native language. Consult an advisor for more information about credit by examination.

Advanced Placement

Advanced placement and college credit may be granted 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.

If you intend to transfer AP credit that was awarded at another college or similar institution, you 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.

You may also earn credit by successfully completing certain subject-area examinations. Contact your advisor for 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

You 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.

Industry Certification Examinations

Some industry certification examinations, such as those for Microsoft Certification, may be eligible for credit. Advisors have information on acceptable examinations and requirements.

International Baccalaureate Examinations

UMUC accepts credit for the International Baccalaureate exam. To receive credit, students must complete the exams before they graduate from high school. Transcripts must be sent directly to UMUC from the examining body and scores must meet UMUC standards. Advisors can furnish details.

SERVICES AND RESOURCES

AVAILABILITY OF SERVICES

UMUC provides numerous services and resources to help you complete your educational program from anywhere in the world—through 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 at www.umuc.edu/locate). A number of offices are responsible for the delivery of these services, including Admissions, Advising, Career Services, Student Financial Services, Information Technology, the UMUC Library, and the Office of the Registrar.

Among these, the Offices of Advising and the Registrar respond to most of your academic needs throughout your 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/national capital 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 (Walter Reed National Military Medical Center)

Phone 301-654-1377

Dorsey Station

Phone 443-459-3500

Fort Belvoir

Phone 703-781-0059

Fort Meade

Phone 410-551-0431 or 301-621-9882

Hagerstown (USM at Hagerstown)

240-527-2711

Largo (UMUC Academic Center)

ugadvising@umuc.edu

Phone 800-888-UMUC

Laurel College Center

Phone 443-518-4162

Little Creek (Joint Expeditionary Base Little Creek-Fort Story)

Phone 757-646-1530

Myer-Henderson Hall (Joint Base Myer-Henderson Hall)

Phone 703-527-4952 (Fort Myer)

703-232-9752 (Henderson Hall)

Patuxent River Naval Air Station

Phone 301-737-3228

Quantico

Phone 703-630-1543 (Marine Corps Base)

703-441-4401 (UMUC at Quantico)

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

GENERAL INFORMATION

UMUC representatives are available all day, every day, at 800-888-UMUC to provide answers to general questions you may have and to help you navigate UMUC's website (www.umuc.edu). Representatives can also make sure that you are signed up to receive upcoming announcements and open house invitations.

ADMISSION ASSISTANCE

Admissions counselors can help you if you are inquiring about becoming a UMUC student or are admitted but have not yet registered. They can help you apply for admission, identify the right payment option, plan your curriculum, and register for your first session. If you qualify for senior citizen benefits, they

can also help you apply for the Golden Identification program (described on p. 193).

Contact an admissions counselor by phone at 800-888-UMUC or by e-mail at studentsfirst@umuc.edu. More detailed information on admission is available on p. 192.

ACADEMIC ADVISING

Academic advisors provide the information you need to plan your academic program. Their assistance can include reviewing potential transfer credit, helping you clarify education and career goals, and helping you select appropriate courses. Advising services are available by phone or e-mail at times and places that are convenient to you. If you are close to UMUC's Academic Center at Largo, Maryland, or one of the UMUC sites in the Maryland region, you also have the option to schedule an appointment to discuss your needs with an advisor in person by calling between 8:30 a.m. and 5 p.m. eastern time, Monday through Friday.

Initial Estimate of Transfer Credit

You can have a review of your potential transfer credit done by an admissions counselor. This review provides 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. 199 and may be found online at www.umuc.edu/ugtransfercredit.) This review is not binding on either you or UMUC and is subject to change.

Review of International Records

If you are seeking a review of potential transfer credit from any international postsecondary educational institutions you may have attended, you need to

- Be admitted and be seeking an undergraduate degree at UMUC.
- Mail your official international transcripts to an approved credit evaluation agency. (Acceptable agencies are listed 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.

Academic Advisement Report

To access information about degree progress, you need to submit official transcripts from all the colleges and universities you previously attended, including other institutions of the University System of Maryland, whether or not transfer credit will be 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.

An academic advisement report

- Includes all transfer credits applicable to the degree program.
- Lists all courses you completed at UMUC.
- Incorporates other types of academic credit.
- Remains in effect only while you remain continuously enrolled.

In the academic advisement report, courses are applied to the most appropriate requirement remaining to be filled. Courses that could apply to multiple requirements are assigned to the first relevant category in the following order: requirements for your academic major, general education requirements, requirements for your academic minor (if you have one), and 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.

You 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 your first session at UMUC. To be considered official, documents must be sent directly from the issuer in either a sealed, unopened envelope or via an accepted secure electronic method. UMUC cannot accept official transcripts via fax or e-mail, regardless of the source. For more information, visit www.umuc.edu/transcripts.

Official documents should be mailed to the appropriate address, depending on carrier.

Via U.S. Postal Service

Attn: Undergraduate Transcripts
University of Maryland University College
3501 University Boulevard East
Adelphi, MD 20783-8070

Via UPS, Fed-Ex, or Other Parcel Service

Attn: Undergraduate Transcripts
University of Maryland University College
1616 McCormick Drive
Largo, MD 20774

SERVICES AND RESOURCES

ACCESSIBILITY SERVICES

Reasonable accommodations are available to help you if you have a disability and are enrolled in any program offered at UMUC.

You should make your request for accommodations as early as possible to allow sufficient time for requests and documentation to be reviewed and proper arrangements made. Such requests must be made every semester.

If you wish to receive accommodation because of a disability, you must officially register with Accessibility Services. To do so, you must first submit documentation of your disability. 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.

Once documentation is received, Accessibility Services will notify you of the status of your file and schedule an intake appointment, which may be held by phone, via e-mail, or in person. During the appointment, an intake form is completed and services and procedures are discussed.

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 listed in this catalog (beginning on p. 7 for bachelor's degree programs, p. 86 for certificate programs). You 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.

Visit www.umuc.edu/accessibility or contact Accessibility Services by phone at 800-888-UMUC, ext. 2-2287, or 240-684-2277 (TTY) or by e-mail at accessibilityservices@umuc.edu for more information.

MYUMUC

Through MyUMUC (<https://my.umuc.edu>), you have access to many of your personal UMUC records. The system enables you to register and pay for courses, change personal information (such as home address or phone numbers), view and print reports (such as your class schedule, grade report, statement of account, unofficial transcript, and academic advisement report), and check on the status of your financial aid application.

To access services, you must enter your UMUC log-in credentials.

FINANCIAL AID

UMUC's Financial Aid Office administers a variety of financial assistance programs—including grants, scholarships, and loans—to help you meet the costs of your educational goals. Aid is available based on financial need, academic merit, or both.

Regardless of your income level, you are encouraged to apply for assistance; many financing alternatives are available.

General Eligibility Requirements

To be eligible for UMUC assistance, you 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 half-time for most federal and institutional aid programs. Federal loan programs require enrollment of at least half-time. Audited courses, some repeated courses, credit by examination, and Portfolio Assessment 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, have borrowed in excess of loan limits, or 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. If you are eligible, you may receive

up to \$2,888 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 range from \$300 to \$700 per semester.

The **UMUC President's Grant** offers grants to students who demonstrate financial need. Typical awards range from \$100 to \$500 per semester, based on need.

UMUC scholarship programs, which include the UMUC President's Scholarship, offer a number of institutional scholarships as well as scholarships from corporate donors and foundations. Requirements vary according to the individual scholarship program. If you meet eligibility standards, you are provided an application for a UMUC scholarship automatically. Typical awards for most programs range from \$200 to \$1,500 per semester. You are not eligible if you are an employee of UMUC or a dependent of an employee or if you receive remission of fees from another institution. Scholarships are awarded for the academic year on a first-come, first-served basis, so it is essential that you submit your scholarship application as early as possible. Visit www.umuc.edu/scholarships for more information.

Maryland state grants and scholarships provide financial assistance to Maryland residents based on demonstrated financial need. For more information, contact the Maryland Office of Student Financial Assistance at 410-767-3301 or 800-974-0203 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 \$250 to \$1,000 per semester. Funds for these grants are allocated to UMUC on an annual basis.

You are also encouraged to apply for **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/scholarships.

Loans

Loan programs are available to students enrolled at least half-time. If you take loans to pay for college expenses, you 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 you leave school or attendance drops below half-time.

The **William D. Ford Federal Direct Loan** program offers low-interest federal loans. Loan amounts vary based on your grade level and dependency status. Repayment begins six months after you leave school or your attendance drops below half-time. For annual award amounts and general repayment terms, 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 at least half-time. 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 you might pursue. If your financial aid awards do not meet your financial need, you may be able to borrow up to your cost of attendance through private student loan programs offered by various banks and other lenders. These education loans are not federal loans; you borrow directly from and make payments to the lender. If you are interested in a private student loan, contact the bank of your choice or visit UMUC's web page on private student loans at www.umuc.edu/financialaid.

UMUC Financial Aid Standards for Satisfactory Academic Progress

Federal regulations require that you maintain satisfactory academic progress toward your degree or certificate if you are receiving federal financial aid. If you fail to meet the minimum requirements, you are not eligible to receive financial aid. Review the complete Satisfactory Academic Progress policy for financial aid students, including details of the appeal process, at www.umuc.edu/undergradsap.

The Financial Aid Application Process

You 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 you 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 your financial aid application and a determination of eligibility early enough for funds to be

SERVICES AND RESOURCES

reserved by registration, you should complete your FAFSA by the priority filing deadlines listed below.

If you meet these dates, you will have the opportunity to be considered for the various grant and scholarship programs with limited funds. If you do not meet these deadlines, you may not receive your financial aid in time for registration.

You may still receive aid if you apply late, depending on your 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

Federal student financial aid is awarded under the assumption that you will be enrolled for a specified period of time, such as a semester. When you receive these funds but do not stay enrolled as expected, the Financial Aid Office is required to determine whether you have been enrolled long enough to keep all the financial aid paid to you.

Therefore, UMUC's Financial Aid Office must perform a return of Title IV funds calculation any time you stop your enrollment (i.e., withdraw, drop, or stop participating in classes and receive an FN grade) before the end of the semester and do not certify your intent to return in another session before the end of the semester.

Visit www.umuc.edu/enrollmentchanges for further information.

For Further Information

All financial aid information and forms are also available at www.umuc.edu/financialaid on the UMUC website. For assistance, visit Help@UMUC at umuc.edu/help to e-mail, chat, or review an extensive list of frequently asked questions. You may also contact the Financial Aid Office by phone at 800-888-UMUC.

VETERANS BENEFITS

Veterans Benefits Programs

You 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 website at www.umuc.edu/vabenefits or on the Department of Veterans Affairs website at www.gibill.va.gov.

Application Procedures

If you are eligible for educational benefits from the U.S. Department of Veterans Affairs, you 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 should be submitted online directly to the U.S. Department of Veterans Affairs. You must also complete a UMUC request for certification form each session you 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 you may receive from the U.S. Department of Veterans Affairs depends on the educational assistance program for which you are eligible, the number of credits for which you are registered, the length of the session, and (for certain programs) the number of dependents you have. The current monthly payment for each educational assistance program is available online at www.gibill.va.gov.

Evaluation of Prior Training

When you file a claim for educational benefits, the U.S. Department of Veterans Affairs requires your previous training to be evaluated so that you receive correct transfer credit. (Information about types of training that qualify begins on p. 200; these include military training and service schools, postsecondary education, certain correspondence courses, and credit by examination.) You must have an academic advisement report completed during your first session of enrollment. If you do not comply, you may find future benefits delayed. After your first registration, you are provided with information on the necessary procedure.

Students' Responsibilities

If you are receiving benefits, you 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. You should be aware of the following requirements and consequences:

- You are expected to make satisfactory progress toward a degree or certificate; you must comply with the academic standards of UMUC.
- You 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 your degree or certificate program.
- Payment of benefits will be disallowed for MATH 009 and 012, which earn institutional credit only and may not be applied to degree requirements, taken in an online format.
- Payment of tuition and fees is required at time of registration, unless you are applying for Chapter 31, Vocational Rehabilitation, or Chapter 33, Post-9/11 benefits.
- You are responsible for debts caused by overpayment of benefits resulting from reductions of your course load.

Tutorial Assistance

You may qualify for tutorial assistance if you are a veteran, active-duty military servicemember, or reservist receiving funding assistance from the U.S. Department of Veterans Affairs and you are enrolled at least half-time. Payments are allowed when you demonstrate deficiency in courses that are required for your degree program.

Work-Study Allowance

If you are registered at least three-quarters time (9 credits) and need money to attend school, you may participate in work-study. Recipients of benefits under the provisions of Chapters 30, 31, 32, 33, 35, and 106 may be eligible. You 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 your advisor or at www.umuc.edu/vabenefits on the UMUC website.

GRADUATION CLEARANCE AND SERVICES

Application Deadlines

If you expect to complete the requirements for your program, you are responsible for making sure you have reviewed your academic advisement report with an academic advisor (details on p. 203), filed an application for graduation (available online through MyUMUC at <https://my.umuc.edu>) with Graduation Certification, and paid the appropriate fee (currently \$50). This may be done at the time you register for your final term or by the following deadlines:

December (fall term) graduation	October 1
May (spring term) graduation	February 15
August (summer term) graduation	June 15

If your application for a diploma is received after the deadline, it will be evaluated for the next graduation term.

The same deadlines apply if you are completing a certificate program. The application form must be completed via MyUMUC at <https://my.umuc.edu>. Follow the links from the Student Center, to MyAcademics, and Apply for Graduation.

SERVICES AND RESOURCES

Application Process

Once you have applied for graduation, the Degree Audit Team reviews your academic requirements and determines whether you are cleared for graduation. If you do not complete degree requirements in the term in which you first applied for graduation, you must complete a new graduation application and pay the fee for the term in which you will graduate.

Transcripts are not updated to show program completion, nor are diplomas and certificates mailed out, until the degree has been awarded.

Graduation Certification in the Registrar's Office then certifies degree completion, awards the degrees or certificates, and mails diplomas. Graduation Certification also processes letters of completion and embassy letters.

Commencement

Commencement is held annually in May in Adelphi, Maryland. If you are graduating in May or graduated in August or December of the previous year, you are invited to participate in the commencement ceremony. To be eligible, you must have applied for graduation. If you invite guests from outside the United States, you may request up to 10 embassy letters up to five months in advance (January).

More information on commencement is posted on the UMUC website in February or March.

TRANSCRIPT SERVICES

Official academic records are maintained by the Office of the Registrar at UMUC. Official transcripts show coursework taken through UMUC. A summary of your transfer credit from other institutions (including other institutions in the University System of Maryland) is also listed on your official transcript, if you have regular status and received an official evaluation. Your records are considered confidential. Therefore, UMUC releases transcripts only upon receiving an online transcript request from you and payment of the appropriate fee. Online requests are accessed through MyUMUC and authenticated through your personal log-in credentials. An electronic release form is provided during the request process and serves as your official signature.

Procedures for requesting transcripts are available online at www.umuc.edu/transcripts. 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.

VERIFICATION SERVICES

Enrollment Verification

UMUC participates in the National Student Clearinghouse, which in turn supplies verification of enrollment to lending agencies. UMUC reports enrollment data on students to the clearinghouse two times each month. Enrollment data is provided for all students who are enrolled in classes, whether they are attending full-time, half-time, or less than half-time, as well as for students who are considered to have withdrawn from the university. UMUC also reports degree information, including graduation date, for students who have completed an academic program.

You may request enrollment verification through MyUMUC free of charge. If you are no longer enrolled at UMUC, you may request a transcript of your academic record to verify past enrollment.

All enrollment verifications requested via MyUMUC are mailed out next business day.

Loan Deferment Form Certification

UMUC does not grant or deny deferment requests; any deferments are at the sole discretion of the lender. UMUC processes deferment forms, certifying your official dates of enrollment. If you are not enrolled in the current term (fall, spring, or summer), you are reported as having withdrawn, regardless of whether or not you plan to enroll or have already enrolled in a future term.

If you have William D. Ford Federal Direct Loans and wish to apply for a deferment, you must complete the In-School Deferment Request (available at www.umuc.edu/finaidforms) and submit it to the Registrar's Office by fax at 240-684-2005 or 240-684-2006 for certification.

You should be aware both of your lender's deadlines for receiving deferment requests and UMUC's reporting schedule to avoid having deferment forms processed and forwarded to the lenders before enrollment data has been reported.

Degree Verification

UMUC has authorized the National Student Clearinghouse to provide degree verification. Employers and background screening firms must contact the clearinghouse directly for this information, for which a fee is charged. Information on this service may be found at www.studentclearinghouse.org.

STUDENT ADVISORY COUNCIL

The Student Advisory Council provides advice to the university administration, and thus serves as an avenue for you and your fellow students to provide feedback about UMUC's mission and overall direction. The council consists of 12 members, elected by the student body, who act in an advisory capacity to the university leadership. The council does not have the authority to act on behalf of individual students but instead provides recommendations for the improvement of UMUC for the benefit of all.

If you would like to see certain issues addressed or have questions, you should contact your council representative by e-mail at stac@umuc.edu.

More information on shared governance is available online at www.umuc.edu/governance.

OTHER RESOURCES

Bookstores

You 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 are 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, you 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 Skype, 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 you to complete coursework but are also open to faculty members, staff, and alumni on a first-come, first-served basis on presentation of a valid UMUC ID. You must bring media to save data or documents. Acceptable media include flash drives or thumb drives.

Lab assistants are available during scheduled hours to help you with resident software programs but cannot provide tutoring.

You may also access host computers at UMUC using Telnet. Two host systems are accessible: Nova and Polaris. You must have an account for the particular system you wish to use. If you are taking courses in computing, an account is set up automatically as part of the coursework and is valid for the duration of the class.

If you are considering enrolling in online courses, you should review the technical requirements at www.umuc.edu/techreq for the most current detailed information.

Technical support related to your online courses is available 24 hours a day, seven days a week, at www.umuc.edu/help or 800-807-4862.

Drug and Alcohol Awareness

As required by federal law, UMUC provides referral services if you have concerns about the use or abuse of alcohol and drugs. You may discuss referrals with your advisor.

The UMUC Library

The UMUC Library serves to educate students, faculty, and staff in the use of library and information resources, 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

The UMUC Library 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). You 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 UMUC Library home page at www.umuc.edu/library or through the learning management system. UMUC Library

SERVICES AND RESOURCES

OneSearch allows you to search for scholarly articles, books, and/or other research resources via a single search engine in most of the databases to which the UMUC Library subscribes, either directly or as additional resources. The UMUC Library has also created subject-specific resource guides to serve as starting points for research. Each guide includes subject-relevant research databases, books, websites, and (where applicable) other Web 2.0 technologies.

If you are an enrolled student in the continental United States, you currently 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 UMUC Library home page. You may use the Document-Express service to request that journal articles or book chapters not available online in full text be sent to you electronically.

Library Instruction and Research Assistance

To help you gain the in-depth research skills you need to locate, evaluate, and use the rich research resources available, the UMUC Library offers library instruction, both in person and within the learning management system. This instruction serves to complement and reinforce skills and information provided in LIBS 150 Introduction to Research. Faculty members may contact the UMUC Library to request a library instruction session.

Reference and research assistance is available daily (except holidays), during regularly scheduled hours, through the UMUC Library web page under Ask a Librarian. For a complete list of library services, visit www.umuc.edu/library or call the UMUC Library at 240-684-2020 or 800-888-UMUC, ext. 2-2020, during regularly scheduled office hours.

Sexual Misconduct Awareness

UMUC is committed to providing an education and work environment that is free from sexual misconduct—a form of discrimination based on sex or gender that includes dating violence, domestic violence, sexual exploitation, sexual harassment, sexual intimidation, sexual violence, and stalking. UMUC promotes awareness and addresses sexual misconduct issues through educational programs, training, and complaint resolution. All administrators, supervisors, and faculty members are required to promptly and appropriately report allegations of sexual misconduct that are brought to their attention.

If you have any questions regarding sexual misconduct or need to report a complaint, contact Steven Alfred, Title IX coordinator, by phone at 301-985-7930 (voice) or 301-887-7295 (text only) or via e-mail at titleixcoordinator@umuc.edu. See UMUC Policy 041.00 Sexual Misconduct at www.umuc.edu/policies for details.

Tutoring, Mentoring, and Student Organizations

A variety of services are available to you if you are interested in academic support and social engagement beyond the classroom. Tutors are available in selected classes. Peer mentors can offer guidance on study strategies, time management, and other topics related to academic success. Student organizations also offer you the opportunity to network with other students with similar interests, ask questions of faculty, engage in your field of interest, and discuss related topics in an online forum. Visit www.umuc.edu/studentsupport to find out more about tutoring, the mentoring program, and student organizations.

Writing Resources and Tutoring

UMUC's online Effective Writing Center (www.umuc.edu/ewc) is available 24 hours a day. The center's experienced, trained advisors help you develop key writing skills by providing individual online tutoring, self-study modules, and other writing resources.

You can submit assignments for review and access a wide variety of information via MyUMUC and schedule live online advising sessions by sending an e-mail to writingcenter@umuc.edu. In addition to providing writing advice, the Effective Writing Center hosts the "Online Guide to Writing and Research" and various other multimedia resources. You can also join the Effective Writing Center's Google+ community.

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 for UMUC graduates. The association invites graduates to stay connected through volunteer service, social events, career networking, and philanthropy. Benefit programs and resources include career services, affinity partner discounts, and special alumni events.

Membership in the UMUC Alumni Association offers an exceptional opportunity to expand personal and professional networks. UMUC currently has more than 180,000 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 free membership is available at www.umucalumni.org. The Alumni Association can also be found on Facebook, Instagram, LinkedIn, and Twitter.

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UMUC

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The Undergraduate School

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Patrick Elliott, *Associate Registrar, Student Academic Records*

Henry Gittens, *Associate Registrar, Graduate Certification and Student Services*

Danielle White, *Associate Registrar, PeopleSoft Student Records and Operations Support*

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Claibourne Patty, *Director, Student Resolution and Judicial Affairs*

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Megan Tuozzo, *Director, Community College Alliances*

Olubunmi Akinnuoye, *Assistant Director, Community College Alliances*

Eva Raczka, *Assistant Director, Community College Alliances*

Vic Wang, *Assistant Director, Community College Alliances*

Marcus Wright, *Assistant Director, Community College Alliances*

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Frederick Merman, *Assistant Director*

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UMUC ASIA

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Chris L. Kelly, *Deputy Director, Student Affairs and Services*
William Stevens, *Senior Associate Registrar*

Faculty

The Undergraduate School 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, with their academic credentials, is available online at www.umuc.edu/facultylist.

UMUC STATESIDE

Adelphi Headquarters

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Fax

301-985-7977

E-Mail

ugadvising@umuc.edu

Web

www.umuc.edu

UMUC EUROPE

Europe Headquarters

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University of Maryland University College
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E-Mail

studentservices-europe@umuc.edu

Web

www.europe.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. Catalogs are also available online at www.europe.umuc.edu.

UMUC ASIA

Asia Headquarters

Address

- From overseas U.S. military installations or from the United States
University of Maryland University College
Unit 5060, Box 0100
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Fussa, Fussa-shi
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Japan Office

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Korea Office

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Guam Office

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DSN: 315-366-7132/7136/1425
- Civilian
1-671-366-7132

Fax

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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.

POLICIES

The information contained in this catalog reflects the policies of both UMUC and the University System of Maryland (USM). The complete list and text of UMUC's policies can be found at www.umuc.edu/policies. USM policies can be found at www.usmd.edu/regents/bylaws.

STUDENT CLASSIFICATION FOR ADMISSION AND TUITION

For information on student classification and residency, see USM policy VIII-2.70 at www.usmd.edu/regents/bylaws/SectionVIII.

TRANSFER OF GENERAL EDUCATION REQUIREMENTS

UMUC conforms with the general education requirements as laid out by COMAR 13B.02.02.16D(2)(b)-(c). Up to 36 general education credits earned at another Maryland public institution will transfer to UMUC as general education credits. UMUC's general education requirements may be found on p. 8 of this catalog.

A student who has satisfactorily completed a course identified as a general education requirement at a Maryland community college will receive credit toward UMUC's general education requirements, as stated in Code of Maryland Regulations Title 13B, Subtitle 06 Chapters 1–10. 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 online at artweb.usmd.edu. Consult an advisor for details.

DISCLOSURE OF STUDENT RECORDS

UMUC complies with the Family Educational Rights and Privacy Act ("FERPA"), a federal law that protects the privacy of students' education records. In accordance with FERPA, you have the right to inspect and review your education records; seek an amendment of your education records, where appropriate; limit disclosure to others of personally identifiable information from education records without your prior written consent; and file formal complaints alleging a violation of FERPA with the Department of Education. UMUC's policy on Disclosure of Student Records contains an explanation of information that may be disclosed without prior consent as well as procedures for requesting amendments to records, requests for nondisclosure,

and filing of complaints. The entire policy is available online at www.umuc.edu/policies/academicpolicies/aa21014.cfm.

SMOKING

In accordance with USM policy, UMUC seeks to promote a healthy, smoke-free environment for the UMUC community. More information on Policy 640.00 UMUC Policy on Smoking may be found at www.umuc.edu/policies/adminpolicies/admin64000.cfm.

STUDENT DRUG AND ALCOHOL USE

UMUC complies with all federal, state, and local laws that regulate or prohibit the possession, use, or distribution of alcohol or illicit drugs. Violations of such laws that come to the attention of UMUC officials will be addressed through UMUC procedures, through prosecution in the courts, or both.

All UMUC students are prohibited by UMUC from unlawfully possessing, using, manufacturing, distributing, or dispensing alcohol or any controlled substance on UMUC premises or at UMUC-sponsored activities. UMUC expects all students to comply with applicable federal, state, and local laws and regulations pertaining to possession, use, manufacture, distribution, or dispensation of alcohol and/or controlled substances.

Any student who violates any of the applicable standards of conduct is subject to corrective disciplinary actions and penalties up to and including expulsion from UMUC academic programs and referral to the appropriate federal, state, and/or local authorities for prosecution in the courts. Students should see section III of the most current annual information report (www.umuc.edu/inform) for additional information.

INTELLECTUAL PROPERTY

The primary mission of universities is to create, preserve, and disseminate knowledge. When that knowledge takes the form of intellectual property, a university must establish a clear and explicit policy that will protect the interests of the creators and the university while ensuring that society benefits from the fair and full dissemination of that knowledge. More information about UMUC's policy on intellectual property is available online at www.umuc.edu/policies/researchpolicies/research19000.cfm.

* Annotated Code of Maryland, Education Article, §12-101.

PEER-TO-PEER NOTIFICATION

Unauthorized use of copyrighted materials may bring civil and criminal penalties to the user. UMUC is committed to combating the unauthorized use of copyrighted materials on UMUC's network (including the online classroom) and therefore has established a written plan to achieve this goal. The intent of this plan is to inform UMUC students, faculty, and staff members of the appropriate use of copyrighted material on the network and to deter, detect, and discipline prohibited use, while reasonably maintaining the educational use of UMUC's network.

Summary of Civil and Criminal Penalties for Violation of Federal Copyright Laws

Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement.

Penalties for copyright infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or statutory damages affixed at not less than \$750 and not more than \$30,000 per work infringed. For willful infringement, a court may award up to \$150,000 per work infringed. A court can, at its discretion, also assess costs and attorneys' fees. For details, see Title 17, United States Code, Sections 504, 505.

Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to \$250,000 per offense.

More information is available on the U.S. Copyright Office website at www.copyright.gov.

UMUC Procedures for Handling Unauthorized Distribution

UMUC implements an active protocol to respond to copyright infringement allegations. In accordance with the Digital Millennium Copyright Act (DMCA), UMUC has designated the following individual to receive and respond to reports of alleged copyright infringement on UMUC's website:

Maureen Walsh David
Vice President and General Counsel
University of Maryland University College
3501 University Boulevard East
Adelphi, MD 20783

301-985-7080

legal-affairs@umuc.edu

To be effective under the DMCA, a notification of claimed infringement must be in writing and include the following information:

1. A physical or electronic signature of a person authorized to act on behalf of the owner of an exclusive right that is allegedly infringed;
2. Identification of the copyrighted work claimed to have been infringed, or, if multiple copyrighted works at a single online site are covered by a single notification, a representative list of such works at that site;
3. Identification of the material that is claimed to be infringing or to be the subject of infringing activity and that is to be removed or access to which is to be disabled, and information reasonably sufficient to permit the service provider to locate the material;
4. Information reasonably sufficient to permit the service provider to contact the complaining party, such as an address, telephone number, and, if available, an electronic mail address at which the complaining party may be contacted;
5. A statement that the complaining party has a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law; and
6. A statement that the information in the notification is accurate, and under penalty of perjury, that the complaining party is authorized to act on behalf of the owner of an exclusive right that is allegedly infringed.

Once an effective DMCA takedown request is submitted, UMUC will act expeditiously to remove or block access to the infringing material.

NONDISCRIMINATION

UMUC is committed to equal opportunity for all individuals and adheres to federal, state, and local laws and regulations that prohibit discrimination and retaliation, as incorporated by UMUC Policy 040.30 Affirmative Action and Equal Opportunity (www.umuc.edu/policies/adminpolicies/admin04030.cfm) and

POLICIES

UMUC Policy 041.00 Sexual Misconduct (www.umuc.edu/policies/adminpolicies/admin04100.cfm). UMUC does not discriminate against any person on the basis of race, religion, color, creed, gender, gender identity or expression, marital status, age, national origin, ancestry, political affiliation, mental or physical disability, sexual orientation, genetic information, veteran status (including Vietnam-era veterans), or any other protected characteristic under applicable federal, state, and local law. UMUC is committed to ensuring that all individuals have equal access to programs, facilities, admission, and employment; no person shall be excluded from participation in, be denied the benefit of, or otherwise be subjected to unlawful discrimination in this institution's programs and activities.

All inquiries regarding UMUC's Nondiscrimination Statement or compliance with applicable statutes or regulations should be directed to the fair practices officer, Office of Diversity and Equity, UMUC, 3501 University Boulevard East, Adelphi, MD 20783-8000 (phone 301-985-7955 or e-mail fairpractices@umuc.edu).

Inquiries regarding sexual misconduct, including sex- and gender-based discrimination, should be referred to UMUC's Title IX coordinator by phone at 301-985-7930 or e-mail at titleixcoordinator@umuc.edu.

SEXUAL MISCONDUCT

UMUC is committed to creating and maintaining an environment in which all persons who participate in university programs and activities, perform work, and provide services can learn and work together in an atmosphere free from sexual misconduct, a form of sex-based discrimination. UMUC provides training, education, prevention programs, and policies and procedures that promote prompt reporting; prohibit retaliation; and promote timely, fair, and impartial investigation and resolution of sexual misconduct cases.

Inquiries concerning the application of Title IX may be referred to the UMUC's Title IX coordinator or the Office for Civil Rights. For more information about UMUC's Sexual Misconduct Policy, contact the Title IX coordinator by phone at 301-985-7930, text message at 301-887-7295, or e-mail at titleixcoordinator@umuc.edu. See UMUC Policy 041.00 Sexual Misconduct at www.umuc.edu/policies for details.

RELIGIOUS OBSERVANCE

So that 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.

More information on Policy 051.00 Religious Observances may be found at www.umuc.edu/policies/academic_policies/aa05100.cfm.

ANNUAL INFORMATION REPORT AND DISCLOSURES

UMUC is committed to assisting all members of the UMUC community in providing for their own safety and security. UMUC provides an Annual Information Report to current and prospective students, faculty, and staff pursuant to U.S. Department of Education regulations. It is available on the Office of Legal Affairs web page at www.umuc.edu/legal/annualinfoareport.cfm. If you have any questions or if you would like to request a printed copy of the report, contact Security at 301-985-7371.

The Higher Education Act of 1965, as amended by the Higher Education Opportunity Act of 2008, includes many disclosure and reporting requirements that are intended to help current and prospective students access information about higher education institutions. Notice of required disclosures will be provided to all enrolled students, faculty, and staff on an annual basis and to all prospective students and employees.

APPENDICES

COMMUNITY COLLEGE ALLIANCE PARTNERS

Maryland

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

A complete list of out-of-state alliance partners is available at www.umuc.edu/alliances.

STATE REGISTRATIONS

As an online university, UMUC offers courses and services worldwide. Within the United States, individual states may require some form of registration. The following information is designed to meet such state requirements.

Alabama

State approval of a program to offer Alabama licensed nurses opportunities for advanced degrees does not indicate eligibility for approval to practice as an advanced practice nurse in Alabama. Applicants for approval in Alabama are required to meet the Alabama requirements for national certification, graduation from a specific-type program for the advanced practice approval, and completion of the appropriate application. Any program offering a prelicensure track to Alabama students shall meet the requirements of the Alabama regulations for prelicensure programs or the graduates may not be eligible to take the national licensure examination required by

the Alabama Board of Nursing to enter the practice. Details are available at www.abn.alabama.gov.

Iowa

UMUC is registered by the College Student Aid Commission on behalf of the state of Iowa.

UMUC complies with Iowa refund requirements found at Iowa Code section 261.9(1)(g), which require institutions to offer not less than the following options to a student who is a member, or the spouse of a member if the member has a dependent child, of the Iowa National Guard or reserve forces of the United States and who is ordered to state military service or federal service or duty:

- i. Withdraw from the student's entire registration and receive a full refund of tuition and mandatory fees.
- ii. Make arrangements with the student's instructors for course grades, or for incompletes that shall be completed by the student at a later date. If such arrangements are made, the student's registration shall remain intact and tuition and mandatory fees shall be assessed for the courses in full.
- iii. Make arrangements with only some of the student's instructors for grades, or for incompletes that shall be completed by the student at a later date. If such arrangements are made, the registration for those courses shall remain intact and tuition and mandatory fees shall be assessed for those courses. Any course for which arrangements cannot be made for grades or incompletes shall be considered dropped and the tuition and mandatory fees for the course refunded.

Qualified students seeking accommodation should fully complete and submit a Request for Exception Form to the Office of the Registrar and make reference to Iowa Code section 261.9(1)(g).

Minnesota

University of Maryland University College is registered as a Private Institution with the Minnesota Office of Higher Education pursuant to sections 136A.61 to 136A.71. Registration is not an endorsement of the institution. Credits earned at the institution may not transfer to all other institutions.

Minnesota students should refer to the Minnesota Baccalaureate Degree Standards or Associate Degree Standards, as applicable, for the general education requirements of that state.

APPENDICES

Virginia

UMUC is certified by the State Council of Higher Education for Virginia.

The university's largest site in Virginia is

UMUC at Quantico
525 Corporate Drive
Stafford, VA 22554

The university maintains locations with administrative capability at

Fort Belvoir
Barden Education Center, Building 1017
9625 Belvoir Road
Room 128
Fort Belvoir, VA 22060

Joint Base Myer-Henderson Hall
Education Center, Building 417
239 Sheridan Avenue
Room 215
Fort Myer, VA 22211

Joint Expeditionary Base Little Creek-Fort Story
1481 D Street
Building 3016
Virginia Beach, VA 23459

Washington

University of Maryland University College is authorized by the Washington Student Achievement Council and meets the requirements and minimum educational standards established for degree-granting institutions under the Degree-Granting Institutions Act. This authorization is subject to periodic review and authorizes University of Maryland University College to offer specific degree programs. The Council may be contacted for a list of currently authorized programs. Authorization by the Council does not carry with it an endorsement by the Council of the institution or its programs. Any person desiring information about the requirements of the act or the applicability of those requirements to the institution may contact the Council at P.O. Box 43430, Olympia, WA 98504-3430.

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STUDENT NAME _____ DATE _____

Degree Planning Worksheet 2015–2016

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	COURSE TAKEN OR TRANSFERRED	SESSION TAKEN
<i>Courses are listed in the order in which students should take them.</i> <i>Changes in courses and order may affect other elements of the degree plan.</i>		
<i>Recommendations will differ for specific majors. Refer to catalog for alternatives to recommended general education requirements (GenEds).</i> <i>Courses used for GenEds may not be used in the major or minor.</i>		
FIRST COURSES (7 credits) Take within first 18 credits. Take placement exams before registering for writing and math courses.		
LIBS 150 (1) <i>Required GenEd course</i>		
WRTG 101 or WRTG 101S (3) <i>Required GenEd course</i>		
MATH 106 or higher (3) <i>Required GenEd course (check requirements of individual major)</i>		
INTRODUCTORY COURSES (16 credits) Take within first 30 credits.		
ECON 103 (3) <i>Or other first behavioral/social science GenEd course</i>		
BIOL 103 (4) <i>Or other biological/physical science GenEd course with related lab</i>		
WRTG 293 (3) <i>Or other writing GenEd course</i>		
IFSM 201 or CMST 301 (3) <i>Required computing GenEd course</i>		
HUMN 100 (3) <i>Or other arts/humanities GenEd course</i>		
FOUNDATION COURSES (21 credits) Take within first 60 credits.		
STAT 200 (3) <i>or other statistics course—if required for major</i>		
BEHS 103 (3) <i>Or other second behavioral/social science GenEd course (discipline must differ from first)</i>		
◆ First course for major (3) <i>Check requirements for major</i>		
NSCI 100 (3) <i>Or other 3-credit biological/physical science GenEd course</i>		
HIST 125 (3) <i>Or other ARTH or HIST course for arts/humanities GenEd in historical perspective (discipline must differ from other arts/humanities GenEd course)</i>		
CMIS 111 or IFSM 300 (3) <i>Or other computing GenEd course (check requirements of individual major)</i>		
COMM 202 (3) <i>Or other communication, writing, or speech GenEd course</i>		

◆ *Required courses for major*

STUDENT NAME _____ DATE _____

SEQUENCE <i>Note total credits for major. At least half must be upper level and at least half taken through UMUC.</i>	COURSE TAKEN OR TRANSFERRED	SESSION 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		
GenEd course		
◆ Major course requirement (3) <i>See requirements for specific major</i>		
◆ Major course requirement (3)		
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◆ 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 (23–31 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

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University of Maryland University College (UMUC) specializes in high-quality academic programs that are convenient for busy professionals. Our programs are specifically tailored to fit into the demanding lives of those who wish to pursue a respected degree that can advance them personally and grow their careers.

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 more than 84,000 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 more than 20 countries and territories around the world.

UMUC serves its students through undergraduate and graduate programs, noncredit leadership development, and customized programs. For more information regarding UMUC and its programs, visit www.umuc.edu.



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