UNDERGRADUATE

The 2020-21 Undergraduate Academic Catalog

This Catalog includes official announcements of academic programs and major academic policies. Although it was prepared on the basis of the best information available at the time of publication, students are encouraged to seek the most current information from the appropriate offices. All students are responsible for knowing the policies of the University.

For educational and financial reasons, the University reserves the right to change, at any time, any of the provisions, statements, policies, curricula, procedures, fees, or dates found in this Catalog. Statements in the Catalog do not constitute an actual or implied contract between the student and the University. This Catalog is also available in print. The definitive version of the Catalog shall be the electronic HTML version published on the University website.

The University of Mary Washington is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate and masters degrees. Contact the Commission on Colleges at 1886 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of the University of Mary Washington.

The address and contact numbers for the Commission on Colleges are published so that interested constituents can learn about the accreditation status of UMW; file a third-party comment at the time of UMW's decennial review; or file a complaint against the institution for alleged non-compliance with a standard or requirement. Normal inquiries about UMW, such as admission requirements, financial aid, educational programs, etc., should be addressed directly to the appropriate office at UMW and not to the Commission.
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ADMISSION AND ENROLLMENT

The University of Mary Washington offers a number of different enrollment options. Each is designed to meet the needs of a particular student population. All of the University’s degree programs may be pursued on either a full-time or part-time basis.

The University’s College of Arts and Sciences offers undergraduate degree programs and course work in the liberal arts and sciences. Most students pursue the traditional Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) degree programs. A first time, first-year B.A./B.S. student is eligible to declare a major by submitting the Major/Minor Declaration Form to the chair of the chosen department at the end of their first year or upon the completion of 28 credits. Students are expected to have declared their major at the end of their second year. Students interested in programs offered by the College of Business or the College of Education enroll initially as undeclared students and then later apply for admission to either a Business or Education program. See the specific sections in this Catalog under College of Business or College of Education for further details.

The Bachelor of Liberal Studies (BLS) program offers a flexible degree option specifically designed to meet the needs of adult students who have substantial college experience and want to complete a bachelor’s degree in the liberal arts or sciences.

The Bachelor of Science in Nursing completion program (BSN) permits registered nurses to complete a baccalaureate degree in nursing. Students transfer credits from a community college or hospital nursing program and are enrolled in the BSN Completion program upon admission to the university.

Non-degree-seeking students are those who do not necessarily wish to earn a degree from the University of Mary Washington but who enroll in limited course work to satisfy particular needs or for general interest. The non-degree enrollment process is simpler than for degree programs. Individuals may enroll on a space-available basis as non-degree students for the regular session or the summer term. Non-degree students register at the Office of the Registrar by following the instructions for non-degree students (https://academics.umw.edu/registrar/registration-instructions-for-nondegree-students-and-auditors).

Anyone considering applying to the University should consult the most recent publications of the particular program or contact the Office of Admissions for more information.

Admission to the Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) Degree Programs

Admission to the B.A. or B.S. programs is competitive. Candidates for admission should present evidence of sound academic preparation including solid performance in a challenging academic program. Standardized test scores, extra-curricular activities, essays, and other factors such as recommendations are also considered. The Admissions Committee offers admission to those candidates who present the strongest overall credentials in the particular applicant pool.

To be admitted as a degree-seeking student in the B.A. or B.S. programs, an individual must submit an application, official transcripts from all secondary and post-secondary schools attended, and results of the SAT or ACT or other standardized tests when required (or provided at the student’s option). The University of Mary Washington uses the Common Application. Non-U.S. citizens also must submit proof of financial support and, if English is not the primary language, official results of the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). In lieu of the TOEFL, international students may also demonstrate English proficiency by completing levels 11 and 12 of the intensive English Program offered by ILA (International Language Academy of Washington, DC) or other approved ESL vendor.

Additional information is available in the sections about application for admission following high school (p. 6) or admission as a transfer student (p. 6).

Admission Following High School

A student who wishes to enter Mary Washington as a freshman immediately after graduating from high school should submit the Common Application including UMW supplemental questions, along with the non-refundable application fee or an official fee-waiver form. High school transcripts should be submitted directly to the University from the school. Applicants who choose or are required to submit the results of the SAT, ACT, or any other standardized tests should have those scores sent directly to the Office of Admissions at the University of Mary Washington.

High School Preparation

Each applicant must have graduated from an accredited secondary school or the equivalent with credit for at least 16 academic courses emphasizing college preparatory work. Although the University does not require specific courses for admission, successful applicants usually have completed four years of English, three or more years of mathematics (including Algebra II), three or more years of laboratory sciences, three or more years of social sciences, and at least three years of one foreign language or two years each of two foreign languages. In addition to the core academic courses, elective credits earned in subjects such as art, computer science, drama, journalism, and music are appropriate. The University strongly recommends that candidates for admission pursue advanced, honors, dual enrollment, Advanced Placement (AP), International Baccalaureate (IB), or Cambridge courses when appropriate. To ensure success at the University of Mary Washington, the senior year in high school is extremely important. Applicants should enroll in core academic subjects such as English, mathematics, laboratory sciences, social studies, and foreign language through the final term of high school.

Character, Personality, and Interests

The University welcomes recommendations from appropriate school officials. The recommendations should assess academic potential as well as character, personality, or interests. Activities that reflect leadership or intellectual interests are significant if they reinforce sound academic achievement. Since the University of Mary Washington operates under an honor system, assurance of personal integrity is essential.

Standardized Tests

Students may opt to not provide a standardized test score as part of the packet of material required for consideration for admission. Home
Admission Plans

Students applying for admission as freshmen may be considered under one of the following three plans:

**Early Decision.** Students with strong academic records whose single first choice college or university is UMW and who submit their applications by November 1 will be considered for early admission and early enrollment. Early Decision admission is binding. Students will submit an Early Decision Agreement signed by the student, parent and high school counselor indicating the student will attend the University if offered admission and will withdraw any application elsewhere. Students will be notified of admission by mid-December and are expected to make their deposit by January 15.

**Early Action.** Students with exceptionally strong academic records who submit their applications by November 15 will be considered for early notification of their admission. The Committee will admit students under the Early Action plan on the basis of outstanding high school performance and standardized test scores. Students who receive Early Action admission will be notified by late January but need not make a commitment to attend the University until May 1.

**Regular Admission.** Most applicants will be considered for admission under the Regular Admission plan. All freshman applications for fall semester admission should be submitted by February 1; applicants who meet this suggested filing date will be notified of the admission decision by April 1. Applications filed after February 1 will be considered as space permits. Various deadlines concerning final transcripts, deposits, and medical examinations occur following the offer of admission. All students accepted for admission will be sent the necessary information concerning these requirements. The University adheres to the May 1 National Candidates’ Reply Date.

Deferred Enrollment

Accepted applicants may ask the University for the option of deferring enrollment for up to two consecutive semesters by notifying the Office of Admissions in writing. Any deposits paid by students who defer enrollment are held as a credit until the student matriculates. In cases involving military deployment, mobilization, or change in duty assignment, accepted applicants may request to extend the enrollment deferment for longer than two consecutive semesters. Any such requests will be considered on an individual basis. A copy of the person’s military orders must be provided to the Office of Admissions to support such a request. Any accepted applicant who is eventually unable to matriculate to the University of Mary Washington because of military service will have any deposits fully refunded. Those who are granted deferred enrollment are subject to rules, regulations, and financial charges in effect when they actually matriculate. Students who enroll at another institution before enrolling at the University of Mary Washington may not defer and must reapply for admission.

Admission to the Honors Program

UMW enrolls sixty to eighty students annually into our interdisciplinary Honors Program. Consideration generally begins for students who indicate interest, who are enrolled in the most rigorous programs available to them, who have earned a 3.9 GPA on a 4.0 scale or higher, and who have received combined Evidence Based Critical Reading plus Math SAT scores of 1350 or higher or ACT Composite scores of 29 or higher. Students may apply test optional and be considered for the Honors Program. Students not admitted to the Honors Program as new first year students may apply directly to the program after their first semester at UMW. See the Honors Program description (p. 107) for additional details about program requirements and opportunities.

Admission to the STP Program

Nearly sixty students participate annually in the Student Transition Program (STP) which begins with a free five week residential summer session between high school graduation and the first semester at UMW and continues through the first year of enrollment. Priority consideration for admission to STP is given to underrepresented populations. All first year applicants may be considered for STP regardless of residency (domicile) or residential/commuter status. Students may be considered for both the Honors Program and STP or the Pre-Nursing Dual Degree Plan and STP.

Admission to the Pre-Nursing (1+2+1) Dual Degree Path

UMW partners with Germanna Community College to provide a unique dual degree pathway. First year applicants must indicate pre-nursing as their primary academic interest within the application to be considered. Students proceed as a cohort and are not admitted to the program as new transfer students or continuing sophomores or juniors. Due to limited spaces, applicants are strongly encouraged to apply under Early Decision (binding admission) or Early Action (non-binding admission) application processes for maximum consideration. Competitive applicants will have earned at least a “B” in high school math and science coursework including Algebra, Biology, and Chemistry. Students may not apply test optional for pre-nursing consideration. Minimum scores of 560 on Evidence Based Critical Reading and 550 on the Math sections of the SAT are required to continue on track within the cohort. Similar ACT scores of 22 will be considered. Admitted students are encouraged to deposit early to reserve a space. Space is limited to eighteen enrolling students each fall.

Additional admission details are provided in the section of the Catalog describing admission to the BSN degree program. (p. 9)

Pre-nursing students may be considered for the Student Transition Program but are not able to participate in the Honors Program.

Advanced Placement, International Baccalaureate, and Cambridge Credits

Students may apply for college credit through the examinations in various academic subjects given by the Advanced Placement Program of the College Board, through the International Baccalaureate examinations, through Cambridge examinations, or through College Level Examination

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Program (CLEP) tests. The completed IB Diploma will earn a minimum of 15 credits.

General policies regarding credit through examination placement (p. 18) are also outlined in a later section of the academic catalog (in the "Academic Policies" section).

Prospective students should consult the Transfer Information page at the Office of the Registrar’s webpage (https://academics.umw.edu/registrar/transfer-information/transferring-credit-ap-ib-or-previous-coursework) for information on the examination scores required for credit in particular subject areas. Additional information may also be obtained from the Office of Admissions.

To apply for credit, students must have official examination results forwarded to the Registrar at the University before matriculation. The University of Mary Washington’s CEEB code is 5398.

Dual Enrollment

Students earning college credit through dual enrollment while still in high school will have their credits evaluated for possible application toward degree requirements at the University of Mary Washington. Students participating in dual enrollment programs are considered as freshman applicants. Only official transcripts sent directly to Mary Washington from the credit-granting college or university will be evaluated for the awarding of dual enrollment or transfer credit. Dual enrollment courses taken at the high school are treated identically with the same course when taken on a college campus; dual enrollment status does not affect the transferability of the course.

Admission as a Transfer Student (B.A. and B.S. Programs)

The Transfer Admission Process

The Transfer Admission Process. Prospective B.A. or B.S. program transfer students should submit the Common Application, UMW supplemental questions and the non-refundable application fee as early as possible. Transfer applicants must arrange for their secondary schools and all post-secondary schools attended to send official transcripts to the University of Mary Washington. Standardized tests are not required for applicants who have completed at least 30 transferable credits (semester hours) at an accredited post-secondary institution or for applicants that are 5 or more years out of high school The University should receive all materials by March 1 for the summer session, April 1 for the fall semester, and October 15 for the spring semester. After these dates, the Admissions Committee will consider applications as space permits.

Transfer Credit

Previous college course work will be evaluated for transfer credit following an offer of admission. As a rule, transfer credit is granted for courses of the same type, on the same level, and taught under the same guidelines as courses offered by the University of Mary Washington. Courses for which a student requests transfer credit must have a minimum grade of “C” (2.0 on a 4.0 scale) and must not overlap or repeat those which the student takes at the University. No credit will be awarded for courses taken on a pass/fail basis (except physical education courses when grades are not given), prior to matriculation. Transfer applicants should have official transcripts from other institutions sent directly to the Office of Admissions. Applicants also may be asked to provide a catalog or course descriptions for evaluating their credits. In order to receive transfer credit, students must submit official transcripts by the deadline dates specified in the section of this Catalog on transfer credit policies (p. 26).

Virginia State Policy on Transfer Admission Criteria

The University of Mary Washington is committed to enrolling transfer students from the Virginia Community College System (VCCS) and Richard Bland College. Admission priority is extended to students who have completed specific Associate of Arts, of Science, or of Arts and Science degrees. Preference is also given to students from the local area. Admission to Maryland Washington is competitive and the availability of transfer spaces varies from semester to semester. Admission criteria for applicants to the Bachelor of Liberal Studies (BLS) program (p. 9) and the Bachelor of Science in Nursing (BSN) program (p. 9) are different from those for the B.A. and B.S. degree; however, such applicants also are encouraged to complete an associate degree.

Acceptance and Application of Credits

Students who have earned a transfer associate degree (to include the General Studies degree only at certain approved VCCS campuses) will be considered to have attained junior status (60 or more credit hours) and usually to have met lower-division general education requirements, although additional speaking intensive, writing intensive, and foreign language courses may be required to meet the University’s complete general education program. The UMW Transfer Credit Guide (https://academics.umw.edu/registrar/transfer-information/resources-and-publications/babs-transfer-credit-guide), available on the University website, describes in detail the Virginia State Policy on Transfer and the University’s implementation of that policy.

Additional details about transfer credits are available in the section on AP, IB, and Cambridge credits, and also in the section about Dual Enrollment.

Guaranteed Admission Agreement

The University of Mary Washington and the Virginia Community College System (VCCS), recognizing the need to facilitate the transfer of students from the community college to UMw, have established a Guaranteed Admission Agreement (GAA). To be guaranteed admission to UMw, students must complete the requirements to become GAA students (graduation from a transfer-oriented degree program at a Virginia community college with a cumulative grade-point average (GPA) of 3.0 or higher on a four-point scale with intent to transfer to the University of Mary Washington) and submit an official transcript showing completion of the associate degree to the UMW Admissions Office. In addition, GAA students who have completed specific Associate of Arts, of Science, or of Arts and Science degrees. Preference is also given to students from the local area. Admission to Maryland Washington is competitive and the availability of transfer spaces varies from semester to semester. Admission criteria for applicants to the Bachelor of Liberal Studies (BLS) program (p. 9) and the Bachelor of Science in Nursing (BSN) program (p. 9) are different from those for the B.A. and B.S. degree; however, such applicants also are encouraged to complete an associate degree.

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Admission to the Bachelor of Liberal Studies (BLS) Program

The Bachelor of Liberal Studies (BLS) program is designed to meet the needs of non-traditional students who have some college experience and want to complete a bachelor’s degree in the liberal arts or sciences. The program is intended for students who, for example, have graduated from high school six or more years ago; are financially self-supporting; or have significant life or professional experiences that translate into academic knowledge that can contribute to the completion of the Bachelor’s degree. Students in the BLS program may choose from a multidisciplinary major in Leadership and Management, Cybersecurity, or Criminal Justice open only to students in the Bachelor of Liberal Studies degree program; any of the majors available to arts and sciences degree students; or they may create a self-designed, interdisciplinary major (subject to approval by the Bachelor of Liberal Studies Committee).

To be admitted to the BLS program, applicants must have completed 30 transferable college credits with a minimum grade-point average of 2.5. A minimum of 15 of these credits should come from college courses taken at a regionally accredited institution. Non-traditional credits (for example, credits earned through the College Level Examination Program, credits for military experience or training, and credits documented by a life/work experience portfolio) are also accepted in transfer to the BLS program. Students may begin the program in the fall, spring, or summer. Prospective students should complete their applications by the April 1 for the fall semester, October 15 for the spring semester, and March 1 for the summer session. Applicants should submit the adult degree completion application, a non-refundable application fee or official fee waiver, essay, documentation of high school completion or the equivalent of an associate degree, and official college transcripts from all institutions attended. Additionally, any standardized test scores or military course work transcripts may be sent to the Office of Admissions to be considered for academic credit.

Admission to the Bachelor of Science in Nursing (BSN) Completion Program

The Bachelor of Science in Nursing (BSN) Completion Program is a post-licensure degree program administered by the College of Arts and Sciences.

To apply for the program, the applicant must submit the Adult Degree Completion Application for Admission (BSN) and:

1. A copy of a current, unencumbered RN license which permits them to practice nursing in the United States.
2. An official transcript from each college or university attended, including an official transcript awarding an associate degree or diploma from state-approved nursing program.
3. Applicants must have attained a minimum cumulative grade point average of 2.5 on a 4.0 scale on all college work attempted.
4. Be eligible for readmission to or be in good standing at the last college attended.

Send all application materials to the following address:

University of Mary Washington
Office of Admissions

The application and all transcripts must be received by the admissions office before a decision can be made. Application documents should be submitted by the application filing dates April 1 for the fall semester, October 15 for the spring semester, and March 1 for the summer session. The admissions office will notify applicants by letter. Following acceptance, the student will be contacted by the Director of the BSN Completion Program for advisement and registration.

Agreements with Germanna Community College Nursing Program

The University of Mary Washington (UMW) and Germanna Community College (GCC), recognizing the need for registered nurses (RNs) to achieve baccalaureate degrees in nursing through an education system which promotes seamless academic progression, have adopted three agreements.

Bachelor of Science in Nursing (BSN) Completion Program Direct Transfer Articulation Agreement (BSNC-P-DTAA)

Commonly referred to as the 3+1 BSN Plan, this agreement guarantees admission to GCC nursing students who meet the admissions criteria UMW has established for the BSN Completion Program. Applicants complete the same admission process for the BSN Completion Program; in addition, the applicant submits a Letter of Intent for the plan.

Bachelor of Science in Nursing (BSN) Concurrent Enrollment Plan (BSN-CE)

This agreement permits GCC nursing students to be concurrently enrolled in the BSN Completion Program while completing an Associate of Applied Science (AAS) degree in nursing. Applicants complete the same admission process for the BSN Completion Program; in addition, the applicant submits a Letter of Intent for the plan.

Bachelor of Science in Nursing (BSN) Academic Partnership Plan (BSN-APP)

Commonly referred to as the 1+2+1 BSN Plan, this agreement is designed for UMW students who are interested in earning a pre-licensure Associate of Applied Science (AAS) degree in nursing from GCC and a post-licensure BSN from UMW. This plan is only available to incoming freshman and is limited to twenty students. Students who are interested in the program complete the freshman student application process and must declare an interest in nursing within the application for admission. See the additional details about applying for the 1+2+1 BSN plan in the section of the Catalog explaining about Admission to Special Programs (p. 7). Incoming students interested in the program are ranked by their high school grades in Chemistry, Biology, Algebra and SAT scores. The top 20 students are selected for the program. Students who are interested in the program complete the freshman student application process. In addition, students declare their intended major as “pre-BSN” and complete ATTs Test of Essential Academic Skills V (TEAS V) by April 1st. The ATI TEAS V can be completed through TEAS at PSI (identify Germanna Community College as the program) or at Germanna Community College Testing Centers in Fredericksburg or Locust Grove. Additional information can be found at the ATI Test Store (https://www.atitesting.com/ati_store) or

University of Mary Washington
1301 College Ave
Fredericksburg, VA 22401
Admission as a Non-Degree-Seeking Student

Non-degree-seeking students are permitted to enroll in courses on any campus of the University of Mary Washington but are not matriculated in a degree program. An abbreviated application form is required. Non-degree students follow these instructions for non-degree student registration. Admission decisions are made by the Registrar at the time of enrollment.

Non-degree-seeking students may register for as many as 11 credits per semester. Payment is due at the point of registration and the charges are based upon the number of enrolled credits. Under certain conditions, a non-degree-seeking student may seek permission from the designated university official to exceed the 11-credit limit. Non-degree students wishing to apply for admission to a UMW degree program must do so before completing 30 credits in residence. Enrollment in specific courses is based on eligibility criteria and availability of space in courses; in certain courses or programs, enrollment may be restricted or prohibited.

Admission Before High School Graduation

On occasion, the University allows students with exceptional ability to enroll prior to graduating from high school. Three arrangements cover most circumstances: admission to the summer session; admission to part-time study during the regular session; or admission after the junior year. Details are available from the Office of Admissions or the Office of Academic Services.

Additional Requirements for International Students

In addition to the documents required for the admission process for each degree program, applicants who are non-US citizens or permanent residents must submit original academic records and, if those records are not in English, certified copies of the records translated into English. If the student has been educated in a non-English speaking country, all transcripts and documents must be submitted via an approved independent credentials evaluation service. If English is not the applicant’s native language, the University of Mary Washington requires the applicant to demonstrate English competency, normally by submitting results of the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) or by completing levels 11 and 12 of the intensive English Program offered by ILA (International Language Academy of Washington, DC) or by completing an approved ESL program.

Visa Information

Non-U.S. citizens who are not permanent residents may need to obtain a student visa. To obtain a visa, a student must be accepted for admission, pay the deposit, and submit an Affidavit of Support. Once the Affidavit of Support is accepted by the University, the student is issued the I-20 Form (Certificate of Eligibility for Non-Immigrant) to present to the U.S. consul or embassy in the country where the student will be issued an F-1 Visa to study in the United States. Students who are on F-1 Visas must carry a full-time course load while enrolled at the University.
ACADEMIC POLICIES

The policies and procedures presented in this Catalog are provided for the convenience of students, faculty, and staff. Each student is responsible for familiarizing him/herself with and noting changes in policy or procedures affecting his or her program and adjusting the program accordingly. Final responsibility for enrolling in appropriate courses in the right sequence and for meeting all degree requirements rests with the student. The remainder of this section of the Catalog provides information organized alphabetically on a number of general academic policies and procedures applying to all undergraduate students.

Additional academic policies pertaining to degree requirements and programs of study are provided in the “Undergraduate Degrees” and the “Majors” and “Minors” sections of this Catalog. The Academic Procedures Directory (http://publications.umw.edu/academicproceduresdirectory), found at the UMW Provost’s web site, provides additional guidance on the steps one should take when seeking to execute a particular policy outlined in this section of the Catalog (how to go about submitting a Leave of Absence request, for example).

The Student Handbook (http://publications.umw.edu/student-handbook), issued by the Office of Student Affairs, covers non-academic policies. The remainder of this section of the Catalog provides information on a number of important academic policies and procedures applying to all undergraduate students.

Academic Honors

Recognition of Student Academic Achievement

Student achievement is recognized by the University of Mary Washington in several ways. At the end of each semester, the University publishes The President’s List and The Dean’s List of Honor Students. Outstanding student achievement is also acknowledged at Commencement with a variety of honors and awards, and other recognitions are presented at annual Convocation ceremonies. In addition, most academic departments sponsor University chapters of national honor societies which recognize student achievement in specific disciplines. These academic discipline honor societies and their criteria for election to membership are published annually in the Student Handbook.

Dean’s List and President’s List

At the close of a semester’s grading period, each degree-seeking student who has completed at least twelve credits of course work on which grade points can be computed and attained a grade point average of 3.50 to 3.99 on that work earns a place on the Dean's List of Honor Students for the semester.

At the close of a semester’s grading period, each degree-seeking student who has completed at least twelve credits of course work on which grade points can be computed and attained a grade-point average of 4.00 on that work earns a place on the President's List of Honor Students for the semester.

Academic Distinction

The University recognizes the academic achievement of graduating bachelor’s degree students who have earned at least 60 resident credits through the awards of Cum Laude (3.75-4.00 grade-point average), Magna Cum Laude (3.50-3.74 grade-point average), and Summa Cum Laude (3.75-4.00 grade-point average). The University recognizes the academic achievement of all graduating bachelor's degree students who have earned at least 30 but fewer than 60 resident credits through the awards of With Distinction (3.30-3.74 grade-point average) and With Highest Distinction (3.75-4.00 grade-point average). Students eligible for one set of awards are ineligible for the other set. These awards are based solely on the student’s grade point average at the University of Mary Washington, and the requisite hours include only those UMW credits for which grade points can be computed.

Departmental Honors

Students may earn graduation with honors in their major subjects. Each department establishes its own requirements for honors projects or theses. All departments require that a student intending to undertake an honors project have a specified minimum grade-point average in the major subject and a minimum grade-point average for all work taken at the University of Mary Washington.

University Honors

University Honors are a recognition of multifaceted high achievement throughout the undergraduate years, in all colleges of the University. Students who gain competitive admission to the University Honors Program will earn University Honors after fulfilling all of the requirements of that program: complete 12 credits of honors-designated coursework, the service learning course, the capstone preparation experience, and a capstone project; maintain a cumulative GPA of 3.2; and participate in leadership activity and required co-curricular events.

Colgate W. Darden, Jr. Award

Established in 1960, this award honors Colgate W. Darden, Jr., President of the University of Virginia from 1947 to 1959. It consists of a medal designed by Gaetano Cecere, formerly of the Department of Art, and a cash award. It is presented to the senior having the highest University of Mary Washington grade-point average. To be eligible, a student must have earned at least 94 UMW credits on which grade points can be computed.

Mortar Board

Mortar Board is the national senior honorary recognizing those students who combine outstanding records of scholarship, leadership, and service. Founded as a women’s honorary in 1918, it has been open to both men and women since 1976.

Phi Beta Kappa

The oldest and most prestigious of national academic honor societies, Phi Beta Kappa recognizes the superior achievement of juniors and seniors in the pursuit of a liberal education. With only some 300 approved Phi Beta Kappa chapters nationwide, the installation of the University of Mary Washington’s Kappa of Virginia chapter in 1971 attests to the quality of the University as well as of its students, who are elected to membership by the Phi Beta Kappa faculty members and alumni who constitute the present Kappa of Virginia chapter.

Academic Records and Related Policies

The University maintains an official academic record in the Office of the Registrar for each student. This record contains all completed course work, grades, grade-point averages, and notes on the student’s academic
status. Access to academic records is allowed in accordance with the Family Educational Rights and Privacy Act as amended in 1974 (FERPA). Procedures for student access to the academic record are published annually in the Student Handbook.

**Directory Information**

The University may release “Directory Information” as defined by the University of Mary Washington under the authority of FERPA, unless the student informs the University’s Office of the Registrar that all such information should not be released without the student’s prior consent. A form is available for this purpose from the Office of the Registrar. If this form is not received in the Office of the Registrar by May 1 preceding the academic year, selected “Directory Information” will appear in the University's directory.

“Directory Information” includes a student’s name, campus mailbox, email address, class level, previous institution(s) attended, major fields of study, awards, honors (including Dean’s List and President’s List), degree(s) conferred (including dates), dates of attendance, past and present participation in officially recognized sports and activities, and physical factors (e.g., height, weight of athletes). A request to withhold “Directory Information” must be made on a form available in the Office of the Registrar. In accordance with Code of Virginia §23.1-405(C), UMW will not disclose the address, telephone number, or email address of a student pursuant to 34 C.F.R. §99.31(a)(11) or the Virginia Freedom of Information Act (§2.2-3700) unless the student has affirmatively consented in writing to such disclosure.

The request to restrict the release of “Directory Information” remains in effect until the student notifies the Office of the Registrar, in writing, to remove the restriction. A restriction on the release of “Directory Information” will remain in effect even if the individual is no longer a student, unless the restriction is removed by written request made to the Office of the Registrar.

Medical and Psychological Services Center records are not included in that category of records open to inspection; however, such records may be personally reviewed by a physician or other appropriate professional of the student’s choice.

Confidential records maintained by the Director of Disability Resources are open to inspection with limitations. Students may request a copy of disability documentation which is generated by the office, but may not request access to the Director’s personal notes or test protocols or to information released by private practitioners or by other agencies. Disclosure related to the student’s disability is released neither to any faculty member nor to another office on campus without the student’s permission. With the student’s written permission, disability documentation generated by the Office of Disability Resources may be released to any specified persons and agencies.

Custodians of educational records are not required to give access to financial records of parents or any information contained therein, nor are they required to give access to confidential letters and statements of recommendation that were placed in the educational records prior to January 1, 1975, or to which the student has waived the right of access. “Directory Information” may not be provided to any individual, company or entity for commercial purposes unless the release of this information is specifically authorized by the student or approved in writing by the Office of the Registrar.

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**Education Records**

Educational records are those records directly related to a student and maintained by the institution or by a party acting for the institution.

The permanent academic record, which is maintained by the Registrar, contains all completed course work, grades, grade-point average, and notes on the student’s academic status. The student’s application file, which contains the student’s application and accompanying transcripts, is maintained for five years following the student’s last date of enrollment.

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. Online learning creates a record of student activity; therefore, it is subject to FERPA privacy rights unlike verbal exchanges in a physical classroom. Distance education courses are covered by FERPA in the same manner as any other courses.

Students have the right to inspect and review education records within 45 days of the day the University receives a request for access. Students do not have the right to copies of those records. Students should submit to the Registrar written requests that identify the record(s) they wish to inspect. The Registrar or appropriate University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the Registrar, the Registrar shall advise the student of the correct official to whom the request should be addressed.

Students have the right to request the amendment of the student’s education records that the student believes are inaccurate or misleading. They should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

Students have the right to consent to disclosures of personally identifiable information contained in the student’s education records, except to the extent that FERPA authorizes disclosure without consent. One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA. The name and address of the office that administers FERPA are:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-4605
The University will not permit access to, or the release of, educational records without the consent of the student or eligible parent or legal guardian to anyone other than the following:

- Family Policy Compliance Office
  U.S. Department of Education
  400 Maryland Avenue, SW
  Washington, DC 20202-4605

The University will not permit access to, or the release of, educational records without the consent of the student or eligible parent or legal guardian to anyone other than the following:

1. University officials who, in order to perform their duties properly, must have access to official records;
2. Officials pursuant to their statutory responsibilities (the Comptroller General of the United States, the Secretary of Education, the Commissioner, the Director of the National Institute of Education or the Assistant Secretary for Education, and/or state educational authorities);
3. Any party legitimately connected with a student’s application for, or receipt of, financial aid;
4. State and local officials or authorities to which such information is specifically required to be reported or disclosed pursuant to state statute adopted prior to November 19, 1974;
5. Accrediting organizations, for the purpose of carrying out their accrediting functions;
6. Parents of dependent students as defined in section 152 of the Internal Revenue Code of 1954;
7. Parties acting under authority of a judicial order or pursuant to any lawfully issued subpoena, upon condition that the students are notified of all such orders or subpoenas in advance of the compliance therewith by the educational institution;
8. Appropriate persons in connection with an emergency if the knowledge of such information is necessary to protect the health or safety of a student or other persons.

**Attendance and Class Absences**

A primary responsibility of students is class attendance. Learning is an experience which requires active participation, and the University expects participation of students in all their scheduled classes be they lectures, online collaborations, laboratories, seminars, studios, field trips or other types of activities. It is understood that occasional absences are unavoidable, but the student is responsible for his or her decision to miss a particular class meeting. In deciding to miss a class, a student must be aware that he or she is accountable, nonetheless, for any test or quiz and all assignments, material covered, and announcements made in that class.

Because of the wide variety of courses and teaching methods employed, requirements for attendance in class and laboratory/studio sessions is not prescribed on a university-wide basis.

Class participation is an appropriate criterion for grading and a student’s failure to participate can be expected to affect his or her grade in the course. The expectations for class participation, the manner in which it is to be evaluated, and the impact of student absences on a class participation score should be clearly stated on the course syllabus.

While faculty have discretion about whether or not to allow a student to make up missed assignments, the following guidelines should be taken into consideration regarding student absences in a course.

**Disability-Related Absences**

A student who has a disability-related need for flexibility with regard to attendance expectations may register with the Office of Disability Resources (ODR). This accommodation would be listed as “Disability-Related Absences” on their accommodation letter, and it is the student’s responsibility to provide their accommodation letter to each faculty member for whom they wish to receive accommodations. Accommodations are not retroactive. Please see Disability-Related Absences Guidelines and contact the Office of Disability Resources for questions.

**Religious Observances**

Requests by students whose religious observance precludes class participation on specific days to reschedule graded work will be honored. Graded work includes final examinations, scheduled tests, graded written assignments, graded laboratory projects, and graded oral assignments. Alternative dates will be set by consulting with the instructor or instructors and, if necessary, through consultation with the Office of Academic Services. It is the student’s responsibility to make alternative arrangements as early as possible.

**Jury Duty**

UMW students may be summoned to serve as trial jurors. Jury duty is a legal obligation and those who fail to respond to a summons are subject to criminal prosecution. The University supports jury service as an important civic duty and community responsibility. Students who will need to miss class in order to fulfill their jury service obligation should promptly notify all instructors, provide a copy of the summons as documentation of the absence (if requested by the instructor), and make arrangements to complete any missed work. Absences from class because of jury duty service will not be penalized. Students should contact the Office of Academic Services if they have any questions or if they need assistance in making arrangements for missed class time due to jury duty service.

**Military Service**

UMW recognizes and appreciates the important contributions made in service to our country by Active Duty, Reserve, and National Guard members. Requests to reschedule graded work due to short term military absence will be honored. Short term military absence will be recognized either as a result of regularly scheduled drill/training, unexpected training/drill or short term activation/deployment (e.g., National Guard activation in response to a natural disaster or civil unrest). Details on the procedure for Military Service absence can be found in the Directory of Academic Procedures. (Note: military obligation requiring withdrawal from the University for the remainder of a term is covered elsewhere.)

**Scheduled Absences**

Certain absences are often considered legitimate. In such cases, students must make arrangements, when possible, to prevent such absences from affecting their performance in a course. Examples of such conflicts include participation in intercollegiate athletic competitions and academically-related performance activities. Students must provide written notification of potential scheduled absences to the faculty by the first class meeting. Once notification is made, faculty
Auditing a Course

A degree-seeking student may audit a class (sit in for no credit), by completing the Auditor's Registration Form in the Office of the Registrar the day after the end of the Add Period. Auditing is permitted, by written permission of the instructor, in non-restricted courses in which space is available. Non-degree students may also audit a course, provided that the instructor approves, space is available in the class, and the course is nonrestricted. Full-time students who audit a course that cause their semester load to exceed 18 credits must pay the audit fee. Students are not allowed to retake a course for credit once the course has been audited. Students are not allowed to retake a course for credit once the course has been audited. Additional details regarding the audit policy and registration procedures for auditors (https://academics.umw.edu/registrar/registration-instructions-for-nondegree-students-and-auditors) are provided by the Office of the Registrar.

B.A./B.S./BSEd Degree Graduation Requirements

These are reminder lists for students seeking a Bachelor of Arts (B.A.) or Bachelor of Sciences (B.S.) degree.

For details and other requirements, consult the academic policies and curriculum requirements specified in the Undergraduate Academic Catalog. Contact the Office of Academic Services (Lee Hall, room 206; 540-654-1010) for additional information or for responses to questions.

The final responsibility for meeting specific requirements for a degree rests entirely with the student.

Requirements For Students Matriculating Fall 2008 Through Summer 2020

1. A Degree Application (with correct completion and diploma dates) filed in the Office of the Registrar during the second semester of the junior year by the announced deadline.
2. An officially declared and successfully completed Major Program.
3. Departmental approval of the Major Program, evidenced by a Senior Checksheet/Degree Verification completed and signed by the student and the major advisor, on file in the Office of the Registrar by announced deadlines for summer, fall, or spring completion.
4. At least 120 valid credits earned.
5. At least a 2.00 grade-point average in the Major Program (UMW coursework) and at least a 2.00 cumulative grade-point average for all UMW coursework.
6. Successful completion of all General Education Course Requirements, as follows:
   a. First-Year Seminar - one course designated as a first-year seminar.
   b. Quantitative Reasoning - two courses
   c. Natural Science - one two-course sequence, one course which must include a laboratory
   d. Global Inquiry - one course
   e. Language - intermediate competency (202 level) in a second language
   f. Arts, Literature, and Performance - two courses focusing on art, literature, or performance (one appreciation, one process)
   g. Human Experience and Society - two courses from two different disciplines; one must be taken in a social science discipline
   h. Experiential Learning - one faculty supervised experience involving a significant experiential learning component
   i. Writing Intensive Requirement - four courses designated writing intensive (WI)
   j. Speaking Intensive Requirement - two courses designated speaking intensive (SI)
7. No more than two physical education (PHYD) credits in any single semester or entire summer session (all terms), and no more than 8 PHYD credits in all.
8. Completion of outcomes assessment testing, as required.
9. No more than one pass/fail course per semester or entire summer session, and no more than 8 pass/fail courses in all. No more than two satisfactory/unsatisfactory courses per semester.
10. No more than 7 repeated courses (repeats are permitted only in courses in which the original grade was C, D+, D, F, or FA).
11. Pass/fail courses used only as general electives.
12. At least 30 credits earned at UMW as a degree-seeking student (not including physical education credits or credits earned as a special non-degree student).
13. Fifteen of the last 21 credits for the degree earned at UMW (or a maximum of 6 transfer credits in the last 21 credits taken).
14. At least one-half of the Major Program required credits earned at UMW.
15. No more than 60 credits in any one discipline counted in the required 120 credits.
16. No more than 8 credits in theatre practicum, THEA 390 Theatre Practicum.
17. No more than 6 credits in URES 197 Undergraduate Research may be counted toward graduation.
18. No more than 3 courses or 9 credits can be shared between two majors.
19. No more than 2 courses can be shared between the major and the minor.
20. No more than 2 courses can be shared between two minors.
21. No more than 8 credits in debate and/or communication consulting practicum: COMM 481 Policy Debate Practicum, COMM 482 Public Debate Practicum, COMM 483 Communication Consulting Practicum.
22. No more than 8 credits in ENGL 380 Practicum in Journalism.
23. No more than 4 credits in ENGL 480 The Peer Tutoring of Writing.
24. No more than 12 credits of individual instruction in music counted in the required 120 credits, and no more than 10 credits in music ensemble courses (orchestra, chorus, ensemble).
25. No more than 12 credits (combined total) in internship and supervised teaching.
26. No more than 12 credits in education (EDUC) courses counted for students not accepted into a specific teacher licensure program.
27. Only the specific education courses required for one approved teacher licensure program counted in the required 120 credits. Students pursuing elementary licensure may not count any secondary education courses. Students pursuing secondary licensure may not count any elementary education courses. A student pursuing teacher licensure must apply and be accepted into a specific licensure program offered by the UMW Department of Education.

Requirements For Students Matriculating Fall 2020 And Beyond

NOTE: any students who matriculated before fall 2020 and who voluntarily elected to transition to the new general education requirements are also governed by this set of graduation requirements.

1. A Degree Application (with correct completion and diploma dates) filed in the Office of the Registrar during the second semester of the junior year by the announced deadline.
2. An officially declared and successfully completed Major Program.
3. Departmental approval of the Major Program, evidenced by a Senior Checksheet/Degree Verification completed and signed by the student and the major advisor, on file in the Office of the Registrar by announced deadlines for summer, fall, or spring completion.
4. At least 120 valid credits earned.
5. At least a 2.00 grade-point average in the Major Program (UMW coursework) and at least a 2.00 cumulative grade-point average for all UMW coursework.
6. Completion of one Writing Intensive (WI) course and one Speaking Intensive (SI) course taken in the major.
7. Successful completion of all General Education Course Requirements, as follows:

a. FOUNDATIONS
   i. One course designated as a First Year Seminar
   ii. Three courses designated Writing Intensive (WI) in addition to the one course required in the major
   iii. One course designated Speaking Intensive (SI) in addition to the one course required in the major
   iv. Intermediate competency in a second language, defined as the completion of any 201 course in a second language. (Completion of Level IV of a language in high school satisfies this requirement.)

b. METHODS OF INVESTIGATION
   i. Arts and Literature - one course
   ii. Humanities - one course
   iii. Natural Science - one course that includes a laboratory
   iv. Quantitative Reasoning - one course
   v. Social Science - one course
   vi. Two additional courses from at least two different methods of investigation

c. CONNECTIONS
   i. Digital Intensive - one course designated Digital Intensive (DI)
   ii. Diverse and Global Perspectives - one course designated Diverse and Global Perspective (DGP)
   iii. Beyond the Classroom - one faculty supervised experience involving a significant experiential learning component
   iv. After Mary Washington - one experience focused on translating the liberal arts experience for life after Mary Washington

8. No more than two physical education (PHYD) credits in any single semester or entire summer session (all terms), and no more than 8 PHYD credits in all.
9. Completion of outcomes assessment testing, as required.
10. No more than one pass/fail course per semester or entire summer session, and no more than 8 pass/fail courses in all. No more than two satisfactory/unsatisfactory courses per semester.
11. No more than 7 repeated courses (repeats are permitted only in courses in which the original grade was C-, D+, D, F, or FA).
12. Pass/fail courses used only as general electives.
13. At least 30 credits earned at UMW as a degree-seeking student (not including physical education credits or credits earned as a special non-degree student).
14. Fifteen of the last 21 credits for the degree earned at UMW (or a maximum of 6 transfer credits in the last 21 credits taken).
15. At least one-half of the Major Program required credits earned at UMW.
16. No more than 60 credits in any one discipline counted in the required 120 credits.
17. No more than 8 credits in theatre practicum THEA 390 Theatre Practicum
18. No more than 6 credits in URES 197 Undergraduate Research may be counted toward graduation.
19. No more than 3 courses or 9 credits can be shared between two majors.
20. No more than 2 courses can be shared between the major and the minor.
21. No more than 2 courses can be shared between two minors.
22. No more than 8 credits in debate and/or communication consulting practicum: COMM 481 Policy Debate Practicum, COMM 482 Public Debate Practicum, COMM 483 Communication Consulting Practicum.
23. No more than 8 credits in ENGL 380 Practicum in Journalism.
24. No more than 4 credits in ENGL 480 The Peer Tutoring of Writing.
25. No more than 12 credits of individual instruction in music counted in the required 120 credits, and no more than 10 credits in music ensemble courses (orchestra, chorus, ensemble).
26. No more than 12 credits (combined total) in internships and supervised teaching.
27. No more than 12 credits in education (EDUC) courses counted for students not accepted into a specific teacher licensure program.
28. Only the specific education courses required for one approved teacher licensure program counted in the required 120 credits. Students pursuing elementary licensure may not count any secondary education courses. Students pursuing secondary licensure may not count any elementary education courses. A student pursuing teacher licensure must apply and be accepted into a specific licensure program offered by the UMW Department of Education.

BLS Degree Graduation Requirements

These are reminder lists for students seeking a Bachelor of Liberal Studies (BLS) degree.

For additional details and other requirements, consult the academic policies and curriculum requirements specified in the Undergraduate Academic Catalog. Contact the Bachelor of Liberal Studies Office (540-654-2050) for additional information or for responses to questions. The final responsibility for meeting specific requirements for a degree rests entirely with the student.

Requirements For Students Matriculating Fall 2008 Through Summer 2020

1. A Degree Application (with correct completion and diploma dates) filed in the Office of the Registrar one year prior to the anticipated graduation date.
2. Senior graduation check completed the semester before the planned semester of graduation.
3. An officially declared and successfully completed Major Program.
4. BLS Committee approval of a special major (and any later changes in the major) as evidenced by an approved degree plan and appropriate follow-up paperwork.
5. At least 120 valid credits earned.
6. At least a 2.00 grade-point average in the Major Program (UMW coursework) and at least a 2.00 cumulative grade-point average for all UMW coursework.
7. Successful completion of all General Education Distribution Area requirements:
   a. Quantitative Reasoning: 3 credits
   b. Natural Science: 4 credits
   c. Quantitative Reasoning or Natural Science: 3 credits
   d. Human Experience and Society: 6 credits
   e. Global Inquiry: 3 credits
   f. Arts, Literature & Performance: 6 credits
8. Successful completion of the Across-the-Curriculum Requirements:
   a. Writing Intensive: 9 credits
   b. Speaking Intensive: 3 credits
9. No more than 20% pass/fail courses in all, provided the courses are not transfer courses or general education/major courses.
10. Pass/fail courses used only as electives.
11. No more than 6 credits in PHYD.
12. No more than 8 credits in theater practicum, THEA 390 Theatre Practicum.
13. No more than 8 credits in debate practicum, COMM 481 Policy Debate Practicum, COMM 482 Public Debate Practicum.
14. No more than 7 repeated courses (for courses in which the original grade was C-, D+, D, F, or FA). Only 2 repeats per semester.
15. At least 30 resident credits at UMW.
16. At least 15 major credits at UMW.
17. No more than 30 credits for a Life/Work Portfolio submitted within one year of successfully completing BLST 101 Portfolio Development Portfolio Development and before the maximum of 90 transfer credits reached.
18. No more than 30 credits total in alternative credit testing (i.e., DANTES, CLEP, etc.).
19. No more than 30 military-based credits.
20. No more than 12 credits (combined total) in internship and supervised teaching.
21. No more than 12 credits of individual instruction in music counted in the required 120 credits, and no more than 10 credits in music ensemble courses (orchestra, chorus, ensemble).

Requirements For Students Matriculating Fall 2020 And Beyond

1. A Degree Application (with correct completion and diploma dates) filed in the Office of the Registrar one year prior to the anticipated graduation date.
2. Senior graduation check completed the semester before the planned semester of graduation.
3. An officially declared and successfully completed Major Program.
4. BLS Committee approval of a special major (and any later changes in the major) as evidenced by an approved degree plan and appropriate follow-up paperwork.
5. At least 120 valid credits earned.
6. At least a 2.00 grade-point average in the Major Program (UMW coursework) and at least a 2.00 cumulative grade-point average for all UMW coursework.
7. Completion of one Writing Intensive (WI) course and one Speaking Intensive (SI) course taken in the major.
8. Successful completion of all General Education requirements:
   a. FOUNDATIONS
      i. Three courses designated Writing Intensive (WI) in addition to the one course required in the major
      ii. One course designated Speaking Intensive (SI) in addition to the one course required in the major
   b. METHODS OF INVESTIGATION
      i. Arts and Literature - one course
      ii. Humanities - one course
      iii. Natural Science - one course that includes a laboratory
      iv. Quantitative Reasoning - one course
      v. Social Science - one course
vi. Three additional courses from at least two different methods of investigation

c. CONNECTIONS
   i. Digital Intensive - one course designated Digital Intensive (DI) that is not being used to satisfy any of the Methods of Investigation requirements.
   ii. Diverse and Global Perspectives - one course designated Diverse and Global Perspective (DGP) that is not being used to satisfy any of the Methods of Investigation requirements.

9. No more than 20% pass/fail courses in all, provided the courses are not transfer courses or general education/major courses.
10. Pass/fail courses used only as electives.
11. No more than 6 credits in PHYD.
12. No more than 8 credits in theater practicum, THEA 390 Theatre Practicum.
13. No more than 8 credits in debate practicum (COMM 481 Policy Debate Practicum), COMM 482 Public Debate Practicum.
14. No more than 7 repeated courses (for courses in which the original grade was C-, D+, D, F, or FA). Only 2 repeats per semester.
15. At least 30 resident credits at UMW.
16. At least 15 major credits at UMW.
17. No more than 30 credits for a Life/Work Portfolio submitted within one year of successfully completing BLST 101 Portfolio Development Portfolio Development and before the maximum of 90 transfer credits reached.
18. No more than 30 credits total in alternative credit testing (i.e., DANTES, CLEP, etc.).
19. No more than 30 military-based credits.
20. No more than 12 credits (combined total) in internship and supervised teaching.
21. No more than 12 credits of individual instruction in music counted in the required 120 credits, and no more than 10 credits in music ensemble courses (orchestra, chorus, ensemble).

Class Standing and Academic Progress

If a B.A./B.S./BSEd student intends to graduate in eight semesters, normal progress toward a degree is a minimum of 28 credits completed by the end of the second semester of the first year and 15 to 18 credits completed during each of the remaining six semesters for a total of 120 credits. Under this definition of normal progress, students are classified as follows:

• First Year: 1 to 29 credits
• Sophomores: 30 to 59 credits
• Juniors: 60 to 89 credits
• Seniors: 90 or more credits

Students who wish to accelerate their progress and graduate in fewer than eight semesters must consistently take 17 or 18 credits each semester and attend summer sessions. In this way, a student can graduate in three calendar years.

Commencement

UMW holds commencement annually in May. The date for the degree awarded is the conclusion of the summer, fall or spring terms in which all the degree requirements were completed. The student is cleared for the degree award and the degree is posted on the official transcript at the conclusion of the summer, fall or spring terms in which all degree requirements were completed and all other obligations to the university have been met. Students submit degree applications during the second semester of the junior year. A student who requires no more than one course (up to a maximum of 4 credits) for graduation or faces extraordinary circumstances and plans to complete the degree requirement following commencement may petition the Office of the Registrar for special consideration to participate in the commencement ceremony no later than the close of business on the Tuesday immediately preceding commencement for special consideration to participate in the commencement ceremony.

Continuing at the University

Non-attendance does not cancel registration and may result in failing grades and financial obligations to the University. Registration must be cancelled prior to the first day of class in order to avoid these consequences. Students planning to discontinue attendance at the University should follow the procedures outlined under the “Leave of Absence” or “Withdrawing from the University” policies, as appropriate.

Course Changes

Course Changes – Initiated by Students

Students may add courses to their schedule by enrolling through Banner. Banner displays all courses for which a student is enrolled. Credit can be awarded only for those courses in which the student is enrolled. The end of the first week of classes is the last day to add a full-semester course.

Students may drop courses from their schedule. Courses dropped from a student’s schedule will not be displayed on the student’s schedule or transcript, or on the instructor’s course roster. The end of the third week of classes is the last day to drop a course.

After the third week of the semester, a student may withdraw from a course by completing the required course withdrawal form (available from the Office of the Registrar). Courses from which a student has withdrawn will be displayed on the student’s record with a final grade of W. This has no effect on a student’s GPA calculation and does not satisfy any graduation requirements. The last day to withdraw from a semester-long course is the Friday of the 9th week of the semester. The last day to withdraw from an eight-week session course offered with the fall or spring semester is indicated on the Academic Calendar, included in this Catalog.

NOTE: Discontinuing attendance in a class does not constitute dropping the course. A Drop (or Add) is not official until the student successfully completes and verifies the action in Banner or completes the appropriate form and delivers it, in person, to the Office of the Registrar on either campus. No student should assume that an instructor has dropped him/her from a course. Each student is responsible for seeing that his or her schedule is accurate in Banner.

During the Add/Drop Periods, students may make changes in their course schedules without written permission from their advisors. After the first three weeks of the semester, withdrawal from a course requires written approval of both the advisor and the course instructor (provided on the Course Withdrawal form). Students living in campus housing are expected to maintain a course load of at least 12 credits.
Instructor Initiated Course Changes

An instructor may drop a student from a class roster if the student fails to come to the first class meeting of any class or does not attend the first class meeting after the student adds the class. Students with a legitimate reason for missing the first class meeting should make prior arrangements with the instructor. Since instructors are not required to drop students in this manner, no student should assume that he or she has been dropped from a class for non-attendance. If a student does not plan to attend a class, he or she should follow regular drop procedures.

If a student has not logged into a majority online course during the first three days after the start of the semester or term, the instructor may drop this student from the course. Since instructors are not required to drop students in this manner, no student should assume that he or she has been dropped from a class for non-attendance. If a student does not plan to attend a class, he or she should follow regular drop procedures.

Credit Through Examination and Placement

Advanced Placement (AP)

Students entering from high school may apply for college credit by taking examinations given by the Advanced Placement Program of the College Entrance Examination Board. Students who have taken any of these examinations should arrange to have the results forwarded to the University by the College Board. As determined by the University, credits will be awarded for AP scores of 3 or higher and awarded credits may count toward the major program or general education requirements. The University will determine satisfactory AP scores and how they will be applied to the degree. Credit awarded for particular tests is posted on the University website. Questions regarding credit equivalencies should be directed to the Office of the Registrar.

Cambridge Examinations

Students may earn course credit for satisfactory scores on eligible Cambridge A-Level and A/S Level examinations as determined by the University. Credits awarded may count toward the major program or general education requirements. Students who have taken these exams should forward their scores to the University. Credit awarded for particular tests is posted on the University website. Questions regarding credit equivalencies should be directed to the Office of the Registrar.

Credit Through Standardized Testing (CLEP and DANTES)

Students may earn college credit through College Level Examination Placement (CLEP) or Defense Activity for Non-Tradition Education Support (DANTES). Examinations must have been taken before the student has been granted B.A./B.S./BSEd degree-seeking status at UMW. B.A./B.S./BSEd students cannot receive CLEP credit for exams taken after matriculation at UMW. BLS and BSN degree candidates are eligible for CLEP or DANTES credit any time before earning 30 credits in alternative credit testing and before earning 90 transfer credits toward the degree. CLEP and DANTES are designed for the student who has gained knowledge in a subject area through means other than formal academic course work. The University grants CLEP credit for selected Subject Examinations if predetermined satisfactory scores are achieved. B.A./B.S./BSEd credit is not granted for any of the General Examinations. The BLS and BSN programs award credit for all the General Examinations and appropriate Subject Examinations when the scores earned are in the 50th percentile or higher (the TOTAL score must be reflected as 50 or higher). A maximum of 30 credits can be earned by examination toward a BLS or BSN degree. Credits earned through CLEP or DANTES can count toward the major program or general education requirements, or can be scored as elective credits. Credit awarded for particular tests is posted on the University website. CLEP and DANTES credits do not fulfill Writing or Speaking Intensive requirements. Questions regarding credit equivalencies should be directed to the Office of the Registrar.

International Baccalaureate (IB)

The University awards academic credit for test scores of four (4) or higher on individual higher-level IB courses and for scores of five (5) or higher on individual standard-level IB course. Credit is also provided for the completion of the IB Diploma. A minimum of 15 credits will be awarded for the completed IB Diploma. If the IB Diploma student's test scores results do not result in at least 15 credits, the difference will be awarded as elective credit (to add up to a minimum of 15 credits). Credit is awarded at the time of matriculation and is based on the scores earned on the IB examinations. All credit awarded will be recorded on the student's permanent record and will be included in the credit total toward degree requirements. Credit will be awarded for 100-and 200-level course work (upper level credit can be awarded in some language areas). Credits awarded may count toward the major program or general education requirements. Credit awarded for particular tests is posted on the University website. Questions regarding credit equivalencies should be directed to the Office of the Registrar.

Guidelines Covering the Application and/or Deletion of Transfer Credits

The following provisions apply to all forms of examination-based transfer credit (AP, Cambridge, IB, CLEP, DANTES).

1. Transfer credits will be forfeited and removed from the record if the equivalent course or courses are completed at UMW or another institution (and transferred into UMW for credit).
2. Transfer credits are counted as completed credits toward graduation, and thus affect all decisions regarding probation, suspension, and
3. A student may request the permanent deletion of transfer credits from his or her record at any time except after academic

Credit By Examination at UMW

An enrolled, degree-seeking student may request a special examination in any course offered by an academic department other than a seminar, individual study, studio, or laboratory courses. The department must agree that an examination is appropriate in the requested course. If the student passes the examination, the course and a grade of CR will be recorded on the student's permanent record to indicate credits earned. No quality points are awarded. If a student fails the examination, a grade of CI will be recorded. The student must then enroll in the course in the next semester in which it is offered. The student's earned grade and attendant quality points will replace the grade of CI. Should the student not enroll, the CI is converted to a grade of F. There is a charge for each examination.
Final Examinations

Final Examination Policy

All final examinations or alternative assessments given in lieu of final examinations must be given during the regularly scheduled examination period at the end of each semester or 8-week session at the time listed for the course in the officially announced schedule.

Examinations are scheduled for specific periods and should not interfere with subsequent examinations. Take-home examinations may be distributed as early as the last day of classes and cannot be due before the regularly scheduled examination period for that class. In accordance with Honor Council procedures, a student is required to pledge to disclose neither the contents nor the form of any examination until after the conclusion of the examination period. A student who has not taken a required final examination has not completed the course requirements and therefore fails the course.

Rescheduling Final Examinations

In instances of multiple sections of the same course taught by the same instructor (including lab periods), it is permissible, at the discretion of the instructor, to allow students to take final exams in either scheduled exam period. It is the student’s responsibility to make him/herself aware of the final examination schedule and to make arrangements to be available to take the examination at the scheduled time. Any adjustments to a student’s examination schedule MUST be made by the FRIDAY PRECEDING THE LAST WEEK OF CLASSES.

Students who have more than two examinations scheduled within a 24-hour period may reschedule until there are only two exams within that 24-hour period. The student shall decide which examination would best be moved and then should consult with the instructor who teaches that course. If the instructor deems it inappropriate because of the nature of the examination to reschedule the examination, the student should then approach the other two instructors. If none of the instructors is able to reschedule the examination given in the course, then the student will bring the dilemma to the attention of the Office of Academic Services who will then contact the instructors to work out a solution. It is the responsibility of the student to start this process early enough in the semester so that it will be completed by the FRIDAY PRECEDING THE LAST WEEK OF CLASSES.

Examination Make-up Dates

The make-up date will be decided by mutual agreement of the instructor and the student. Alternate examination dates will be set by consulting with the instructor or instructors and, if necessary, through consultation with the Office of Academic Services. In cases where an examination conflicts with a student’s religious observances, students should follow the procedures with respect to religious holiday observances as noted in the earlier section titled “Class Attendance.”

Full-Time Student

To be considered full-time, an undergraduate student must be enrolled in 12 or more credits for the semester. The U.S. Department of Education and the Department of Veterans Affairs classifies a student enrolled in 9 to 11 credits as three-fourths time. Six to eight credits is considered half-time, and five credits or fewer is less than half-time.

If a student intends to graduate in eight semesters, normal progress towards a degree is as follows: A minimum of 28 credits completed in the first two semesters and 15 to 18 credits completed during each of the remaining six semesters, for a total of 120 credits for B.A./B.S./BLS (see Class Standing and Academic Progress).

A student who starts with more than 12 credits in a semester may drop below a 12-credit course load; however, a residential student may not live in a residence hall while carrying fewer than 12 credits unless special written permission has been obtained. Students receiving financial aid should consult the Office of Financial Aid before dropping below a full course load. Students participating in NCAA intercollegiate sports must maintain a minimum credit course load unless they have been granted a special written exemption from the Director of Athletics.

Also see the section on overload (p. 23).

Grade Appeals (Academic Disputes)

If there is a dispute between a student and a faculty member concerning a decision of the faculty member, every effort should be made by them to resolve the matter. If the disagreement cannot be resolved, the student may request a review of this decision no later than the end of the following semester, recognizing that the burden of proof is on the student. Complaints that do not involve grade disputes are handled through the General Complaint procedure, which is outlined in the Student Handbook and in the UMW Online Policy Manual (policy number D.9.1 (https://go.boarddocs.com/va/umw/Board.nsf/goto?open&id=A72NJL5A4B39)).

The Academic Disputes policy described below applies to students enrolled in all UMW courses, including ones offered in fully online formats.

In Academic Dispute cases, the following procedure is to be followed:

The student will submit a written statement of the grade dispute, with any supporting material, to the chair of the department of the faculty member concerned, if the grade dispute is with a faculty member in the College of Arts and Sciences (CAS). For grade disputes in the College of Business (COB) or College of Education (COE), the written statement is sent to the associate dean in COB or COE. If the grade dispute is with the chair of a CAS department, or with the associate dean in COB or COE, the written statement is sent to the college dean. The student must also send a copy written statement of the grade dispute (with supporting materials) to the faculty member.

1. Within seven (7) days, the chair of the CAS department or the COB or COE associate dean will review the dispute, consulting with the faculty member and student concerned, with other department or college members as appropriate, and will attempt to settle the dispute. If agreement is reached at this level, the process ends.

2. If either party does not accept the recommendation of the department chair or the COB or COE associate dean, the chair or associate dean will forward all material including his or her recommendation to the college dean.

3. The college dean will review the material submitted and will determine whether or not further consideration of the matter would be fruitful. If the decision is that additional consideration would not be fruitful, the college dean will render a final decision.

4. If the college dean determines that further consideration is needed, the matter will be referred to an academic review board. The dean of the college in which the faculty member is housed will determine the makeup of the academic review board.
5. The academic review board will hear the evidence of both the student and the faculty member on the matter and, within two weeks of being convened, communicate its recommendation to the college dean with copies to the student, faculty member and chairperson involved.

6. The college dean will then render a decision, which will be final.

7. Either party may appeal the dean’s decision on procedural grounds only by submitting, within seven (7) days, a written appeal to the provost outlining the specific procedural irregularities being alleged to have occurred during the review of the academic dispute. The provost will determine whether or not a procedural review is warranted, who should be requested to undertake that review, and the timeline for completing the procedural review and reporting to the provost. The appeal process is completed with the provost’s decision.

Note:

If a student has exhausted the avenues provided by the policy described above and the complaint has not been resolved, the student may submit a “Student Complaint Form” to the State Council of Higher Education for Virginia (SCHEV). Upon receiving a completed form, SCHEV will open an investigation if the matter being disputed falls within its authority. If preliminary findings indicate a violation of SCHEV regulations by UMW, SCHEV shall attempt to resolve the complaint through mediation. All parties will be notified in writing of the outcome of the investigation. UMW fully accepts SCHEV oversight in resolving complaints from students taking distance education courses under the aegis of the State Authorization Reciprocity Agreements (SARA).

Grading and Grade Reports
Course Grades

Academic performance in any course is rated according to the following system:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00 quality points</td>
<td>Excellent</td>
</tr>
<tr>
<td>A-</td>
<td>3.70 quality points</td>
<td>Good</td>
</tr>
<tr>
<td>B+</td>
<td>3.30 quality points</td>
<td>Acceptable</td>
</tr>
<tr>
<td>B</td>
<td>3.00 quality points</td>
<td>Acceptable</td>
</tr>
<tr>
<td>B-</td>
<td>2.70 quality points</td>
<td>Acceptable</td>
</tr>
<tr>
<td>C</td>
<td>2.30 quality points</td>
<td>Acceptable</td>
</tr>
<tr>
<td>C-</td>
<td>2.00 quality points</td>
<td>Acceptable</td>
</tr>
<tr>
<td>D+</td>
<td>1.30 quality points</td>
<td>Acceptable</td>
</tr>
<tr>
<td>D</td>
<td>1.00 quality points</td>
<td>Marginal</td>
</tr>
<tr>
<td>F</td>
<td>0.00 quality points</td>
<td>Failure</td>
</tr>
</tbody>
</table>

The following grades carry 0.00 quality points:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>Pass in a Pass/Fail Class</td>
</tr>
<tr>
<td>FA</td>
<td>Failure in a Pass/Fail Class</td>
</tr>
<tr>
<td>SA</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>UN</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>W</td>
<td>Course Withdrawal</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
<tr>
<td>G</td>
<td>Delayed Grade</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI</td>
<td>Test Incomplete (Test Failed For Credit-by-Examination)</td>
</tr>
<tr>
<td>CR</td>
<td>Credit-by-Examination</td>
</tr>
<tr>
<td>TR</td>
<td>Transfer Credit</td>
</tr>
<tr>
<td>NG</td>
<td>Audit</td>
</tr>
<tr>
<td>NC</td>
<td>No Credit</td>
</tr>
<tr>
<td>ZC</td>
<td>Zero Credit</td>
</tr>
</tbody>
</table>

See the additional information relevant to grading in the sections covering pass/fail grades, satisfactory/unsatisfactory grades, and incomplete grades.

Grade-Point Average

Grade-point averages are computed only on courses taken at the University of Mary Washington. Each grade, “A” through “D” carries a numeric quality-point value which, when multiplied by the number of course credits, produces the number of quality points for the course. The overall cumulative grade-point average (GPA) is the product of the total number of quality points divided by the total number of completed UMW graded credits. For example, a three-credit course with a grade of “A” provides 12 quality points (3 credits times 4.0 quality points = 12 quality points); a four-credit course with a grade of “A−” would yield 14.8 quality points (4 credits times 3.7 quality points = 14.8 quality points). A student who completed 15 graded credits with a total of 45 quality points would have a grade-point average of 3.0. Transfer credits (including AP, IB, Cambridge, ACE, DANTES, and CLEP), credit-by-examination, physical education or 100-level dance credits, or courses taken for a pass/fail grade for which a pass grade (PA) was earned are not included in the computation of the grade-point average (GPA). However, a failing grade (FA) received in a course taken for a pass/fail grade will be included in this calculation.

Mid-Semester Grade Report

In the middle of each semester, faculty submit student progress reports of satisfactory (S), unsatisfactory (U), or never attended (N). Although the report is not entered on a student’s permanent record, mid-semester reports are posted in Banner and sent to advisors. Because a “U” is a warning that significant improvement is needed, the student should consult instructors, advisors, or the Office of Academic Services for assistance.

Final Grade Report

Final grade reports are made available to students at the end of each semester. According to the Family Educational Rights and Privacy Act of 1974 as amended, a federal law, a student’s educational record may not be disclosed to anyone outside the University, including parents, without the student’s written permission.

Incomplete Grades

Incomplete grades are issued on a case-by-case basis when students cannot complete the assigned work or final examination for a particular course due to unforeseen circumstances, e.g., illness, natural disaster, or family catastrophe. Supporting documentation may be required. A grade of I is issued in lieu of an actual grade for the course. To secure permission for an incomplete grade, the student and faculty member must communicate in writing (such as an email), clearly stating the reason for the incomplete, the work to be completed, and the due date. The faculty member is required to submit a copy of the terms to the Office of the Registrar. In cases where the course is taught by an adjunct
or temporary instructor, the department chair’s approval will be required before the incomplete grade is recorded. It is the responsibility of the faculty member to consult with his/her chair before awarding a grade of F. If appropriate, students must drop any subsequent course for which the incomplete course is a prerequisite. Students must complete the course work by the specified contract date which will be no later than the last day of classes of the subsequent semester, whether enrolled in University course work or not. Should a specified contract date not have been explicitly agreed upon at the time of granting the incomplete, the deadline shall default to the last day of classes at the end of the following semester. A grade of F will be applied automatically to the course after the completion deadline has passed if the student fails to complete the work or the faculty member submits no other grade.

Students who are in military service (active duty, reserves, or National Guard) may request an incomplete grade for military deployment, mobilizations, or duty changes occurring in the final three (3) weeks of the course. A copy of the military orders must be provided to the Office of Academic Services as documentation. The deadline for removing an incomplete given on the basis of military service is last day of the semester following the one in which the incomplete was given. Every effort will be made to work with the student and the faculty member to facilitate completion of the incomplete. Should military service commitments prevent the student from fulfilling the requirements for removal of the incomplete, a grade of W will replace the incomplete.

As soon as the emergency is over, the student should attempt to make up the Incomplete by working directly with the instructor. If the course instructor is not employed during the semester in which the work is to be completed, then the department chair will oversee the course work and assign the final grade. If the work for the course cannot be completed in this way, the Office of Academic Services will, by appointment, administer examinations and/or receive student papers so that the work can be completed as expeditiously as possible. Within two weeks after receiving the work or by the last day of classes for the semester, the instructor (or chair if the instructor is unavailable) must submit a grade change request and assign a permanent grade for the student’s performance in the course. If these conditions are not met, the grade will be changed to an F.

**Internships**

No more than six internship credits may count toward the minimum number of credits required in a major. No more than twelve credits in academic internship experiences may be counted toward the credits required for graduation. Internship credit is based on the work assignment, time commitment and academic component. The time commitment alone does not determine the number of credit hours awarded. Each credit hour of internship requires at least 3 hours of work at the internship site per week as outlined on the following chart:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>On-Site Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>84</td>
</tr>
<tr>
<td>3</td>
<td>126</td>
</tr>
<tr>
<td>4</td>
<td>168</td>
</tr>
<tr>
<td>5</td>
<td>210</td>
</tr>
<tr>
<td>6</td>
<td>252</td>
</tr>
</tbody>
</table>

To be approved for academic credit, the internship experience must be:

1. **structured,**
2. **supervised,**
3. **approved in advance by the department awarding credit,** and
4. **evaluated by a University of Mary Washington faculty member.**

An internship contract following the requirements outlined on the Internship Policies web page (https://www.umw.edu/careercenter/students/internships) must be submitted to the Office of the Registrar before a student is enrolled for internship credit.

To be eligible for internship credit, the student must:

1. be a degree-seeking student at UMW,
2. have at least 12 hours of credit earned at UMW, and
3. have a cumulative G.P.A. of 2.0 or better at the start of the semester in which the internship occurs.

In certain circumstances, internships may be done at an administrative office on campus. In all cases, internship sites and the site supervisor must be approved by the faculty member evaluating the internship and shall not also serve simultaneously as the site supervisor. Students may receive academic credit for a paid internship.

Additional details are provided at the Internship Policies web page (https://www.umw.edu/careercenter/students/internships).

**Leave of Absence**

Non-attendance does not cancel registration and may result in failing grades and financial obligations to the University. Registration must be cancelled prior to the first day of class in order to avoid these consequences. Students who will not be attending for a semester, but who intend to return after an absence, must file the appropriate request for a leave of absence.

Any degree-seeking student who interrupts the pursuit of the degree must request an **official Leave of Absence** by submitting the appropriate form prior to the beginning of the first semester of absence. A student who drops all courses prior to the drop deadline must apply for a Leave of Absence. A Leave of Absence may be granted for a maximum of two consecutive semesters. Students on Leave and those who re-enroll within one semester after an approved Leave of Absence will be permitted to complete the degree program as originally begun. Those who interrupt the pursuit of the degree for any reason other than approved Leave of Absence or academic suspension will be required to comply with any changes in academic regulations and degree requirements made during their absence of three or more consecutive semesters. They will be required to complete the general education and major program requirements in effect at the time of re-enrollment at UMW.

There are three types of leave:

1. **Personal Leave** – for students who do not plan to take courses for one or two semesters for any reason (health, finances, etc.);
2. **Study Leave** – for students who plan to take pre-approved courses at another college or university in the United States; and
3. **Education Abroad Leave** – for students who plan to participate in semester and academic year academic programs abroad which have been approved by the Center for International Education.
For a Personal Leave, B.A./B.S./BPS students must submit a Request for Personal Leave of Absence form to the Office of the Registrar. BLS students submit the form to the BLS Office.

For a Study Leave, students must submit a Request for Study Leave of Absence form to the Office of the Registrar. Study leave will be granted to any qualified student who plans to enroll in a program, which has been fully approved by UMW in advance. After a student has chosen a program or school, applied and been accepted, he or she works with his or her major advisor to develop the most appropriate selection of courses for the semester or year. The student then obtains the appropriate transfer permission form from the Office of the Registrar, secures written approval from his or her major advisor for any major program courses, and submits this form to the Office of the Registrar for final course approval. This process must be completed prior to enrollment in any study leave course work or the course(s) will not be transferred to UMW. A BLS student must seek permission from the BLS Office and complete appropriate paperwork prior to taking a Study Leave.

For an Education Abroad Leave, students must register in EagleNet and contact the Center for International Education (CIE) to complete the necessary paperwork prior to beginning programs abroad for a semester or a full academic year which have been approved by CIE.

Major and Minor Requirements

Bachelor of Arts/Bachelor of Science Major Program Requirements

A major program within a single discipline requires at least 30, but no more than 48, credits. All must be graded credits. Students must take at least one-half of the major program at Mary Washington, earning a grade-point average of 2.00 in the courses. To see the requirements for a particular major, use the option for "Majors" available at the Catalog home page.

Beginning in fall 2020, one Writing Intensive (WI) and one Speaking Intensive (SI) course must be taken in the major. This requirement applies to all students declaring a major, or changing to a new major, in the fall 2020 semester or thereafter.

Many students complete two major programs to satisfy diverse personal or career interests. Students who intend to "double major" should read the section titled "Second Degree or Post-Baccalaureate Major." In addition to majors in the traditional arts and sciences disciplines, the University offers a B.A./B.S Special Major Program. A student and faculty advisor may design a special major program by selecting, from two or more departments, courses that define a coherent field of concentration. Examples of approved special majors include programs in Creative Non-Fiction Writing, Italian Studies, Linguistics, Medieval Studies, Public Affairs, and Journalism. Any student interested in developing a special major program must apply to the College of Arts and Sciences Curriculum Committee prior to completing 15 credits in the proposed special major program. The approval of the Committee is required before a special major program can be undertaken. Special majors must meet these guidelines (https://cas.umw.edu/faculty-2/cas-faculty-governance/guidelines-for-special-majors).

Bachelor of Science in Elementary Education (BSEd) Major Program Requirements

Forty-eight (48) credit hours are required. Specific major requirements are outlined on the Elementary Education major page in the Catalog. One Writing Intensive (WI) and one Speaking Intensive (SI) must be taken in this major. An additional degree requirement in this program is the completion of a nine (9) credit internship.

Bachelor of Liberal Studies (BLS) Major Program Requirements

A BLS student may select from many liberal arts majors offered by the University or may choose the Leadership and management major (p. 71), which is available only to BLS students. A BLS student may also create an approved, coherent interdisciplinary BLS Special Major from the offerings of at least two departments. Additional details about the BLS Special Major are available here (http://cas.umw.edu/bls/degree-requirements/academic-requirements/major/special-major). At least fifteen credits in the major must be earned at the University of Mary Washington. Students must also earn a grade-point average (GPA) of at least a 2.0 in the major/concentration area. Beginning in fall 2020, one Writing Intensive (WI) and one Speaking Intensive (SI) course must be taken in the major.

BLS students who intend to “double major” should read the section titled “Second Degree or Post-Baccalaureate Major.”

Bachelor of Science in Nursing (BSN) Major Program Requirements

Thirty (30) credits must be completed at UMW with a cumulative GPA of 2.00 on all UMW work. Specific major requirements are outlined on the Nursing major page (p. 75) in the Catalog. In order to take any UMW courses that begin with the NURS prefix, the student must present a current and valid unencumbered RN license to practice nursing in the Commonwealth of Virginia.

Minor Program Requirements

To allow students to gain expertise in an area beyond their major field of study, a student may elect to pursue programs of studies designated as minors. Minors are offered by departments and consist of no fewer than 15 and no more than 28 credits. At least three minor courses must be at the 300-400 level. Students must take at least 9 credits in the minor at UMW.

Individual courses may count for both a minor and General Education requirements. In the case of a major and a minor, the maximum degree of overlap permitted between the major and minor is two courses. In the case of two minors, the maximum degree of overlap permitted between the minors is two courses. No minor courses may be taken on a Pass/Fail basis. A student must earn at least a 2.0 grade-point average in any minor.

To see the requirements for a particular minor, use the option for “Minors” available at the Catalog home page.
Major/Minor Declaration

A first time, first year B.A./B.S. student is eligible to declare a major by submitting the Major/Minor Declaration Form to the chairperson of the chosen department at the end of their first year or upon completion of 28 credits. To declare a major go to the appropriate academic department (or college), where you will be assigned a major advisor. You can also declare a minor by visiting the academic department or college of interest. If you change your mind about the major and/or minor you originally select, it is possible to change to a different major simply by visiting the new program of interest.

Non-Degree Student

Any student who has not been officially admitted into one of the University's degree programs is a non-degree student. Non-degree students are governed by the same academic regulations as degree-seeking students. Non-degree students may register for as many as 11 credits per semester and may not register for individual study, research, or internship courses. Enrollment in specific courses is based on eligibility criteria and availability of space in courses; in certain courses or programs, enrollment may be restricted or prohibited. Non-degree students enroll by following these instructions for non-degree student registration (https://academics.umw.edu/registrar/registration-instructions-for-nondegree-students-and-auditors).

Overload

Without special permission, a continuing student in good standing may take no more than 18 credits. Permission for an overload is given only on the basis of academic performance. Students with a cumulative GPA of 3.00 for the most recent semester at UMW are eligible for an overload to 19 credits. Students with a GPA below a 3.00 or who wish to attempt 20 or more hours will be considered on a case-by-case basis. Students may request an overload by completing a request form in the Office of Academic Services in Lee Hall, on the Fredericksburg campus or the Office of the Registrar on the Stafford campus. Students whose petition to exceed 18 credit hours is approved will be charged additional fees according to the tuition overload rate.

Pass/Fail Grade

A student may take one course each semester, or during a complete summer session, on a pass/fail basis, up to a maximum of eight pass/fail courses. BLS students may take a maximum of 20% of courses (electives only) on a pass/fail basis. For such courses a grade of PA (pass) or FA (failure) is recorded; a grade of PA does not affect the grade-point average, but a grade of FA counts the same as an F in a graded course and will lower the grade-point average. Performance required to "pass" in a pass/fail course is the same as the performance required to "pass" in a graded course – i.e., D or better. Courses taken pass/fail can be used only for elective credits; they cannot be used to fulfill Major Program or Minor Program or General Education Goal requirements (with the exception of the Experiential Learning requirement), General Education Across-the-Curriculum requirements, or to fulfill teacher licensure course requirements. Students should be careful about using the pass/fail option before choosing a major. A student may take up to one pass/fail and two satisfactory/unsatisfactory courses in the same semester.

The decision to take a course pass/fail must be made no later than the deadline to withdraw from individual courses. If the decision is not made at registration, the student must go to the Office of the Registrar by the deadline to withdraw from individual courses to change a course from graded to pass/fail or from pass/fail to graded credit. Before electing to use the pass/fail option, a student should consider its effect on the opportunity to earn academic awards, honors, and distinctions, for these are determined, in part, on the basis of a specified minimum number of graded credits earned, excluding pass/fail and satisfactory/unsatisfactory credits.

Prerequisite and Corequisite Courses

Prerequisite courses must be taken in the appropriate sequence to count toward graduation. A prerequisite for a course is the required preparation for that course. If course 101 is specified as a prerequisite for course 102, then course 101 must be successfully completed (passed) before the student takes course 102. Course prerequisites are listed in the course descriptions published in this Catalog, and are also available in the online Schedule of Courses. Students are responsible for checking their courses before registering.

As a general rule, no course may be taken for credit that is a prerequisite for, or introductory to, a course already completed successfully. In rare instances, and in the event of compelling reasons, a student may need to take a course out of sequence (e.g., take a course that is a higher-numbered course before or concurrently taking the lower-numbered, prerequisite course). Students seeking permission to take a course out of sequence MUST obtain the permission of the course instructor and the department chair prior to registration.

A corequisite is a course to be taken at the same time as another specified course, or courses, as designated by the department. A corequisite course may also be completed before taking the course or courses with which it is paired. If one course in the corequisite pair is completed before the other, the student should call the Office of the Registrar during the registration time to be registered in the remaining corequisite course.

Probation, Suspension, Dismissal – Academic

Students in Bachelor of Arts, Bachelor of Science, and Bachelor of Liberal Studies degree programs are expected to make satisfactory academic progress by maintaining a 2.00 overall cumulative UMW GPA, the standard required for graduation. Students who fall below a 2.00 overall cumulative UMW GPA are in academic jeopardy and are subject to these probation, suspension and dismissal policies.

The purpose of probation, suspension and dismissal is to warn students that they are not doing satisfactory work, to stimulate them to improve their performance, or, finally, to serve notice that the institution does not choose to allow them to continue because there is little or no likelihood of their finishing successfully.

Evaluation of academic standing is based on two factors: the number of attempted credits at UMW and the minimum overall cumulative GPA. For both full-time and part-time students, the number of attempted credits is based on the total of all UMW attempted hours (including UMW graded credits, PA, SA, UN, W and repeated credits). The minimum overall GPA is calculated on UMW graded credits (Grades of PA, SA, UN and W are not considered in calculating the UMW GPA.)
Academic Warning and Academic Probation

A student is placed on academic warning the first time the student's overall cumulative UMW GPA falls below 2.00. Students on academic warning who achieve an overall cumulative UMW GPA of 2.00 or higher at the conclusion of either the fall or spring semester will be removed from probation. Any student previously on warning whose overall cumulative UMW GPA falls again below a 2.00 at the conclusion of either the fall or spring semester will be placed on academic probation.

A student is placed on academic probation whenever the student’s overall cumulative UMW GPA falls below 2.00 for a second time. Students on academic probation who achieve an overall cumulative UMW GPA of 2.00 or higher at the conclusion of either the fall or spring semester will be removed from probation. Any student previously on academic probation whose overall cumulative UMW GPA falls again below a 2.00 at the conclusion of either the fall or spring semester will be returned to probation as appropriate. A notation of the student's probation status is entered on the student's permanent record. A student placed on academic warning or probation is expected to consult with his or her faculty advisor and the Office of Academic Services no later than the first week of the ensuing semester. A student placed on “academic warning or probation” may continue to participate in any extracurricular opportunities offered by the institution except those activities that require a specific GPA threshold.

Suspension/Dismissal

Students who do not make satisfactory progress (please see chart below) while on probation will be suspended/dismissed. No student can be suspended after only one semester at the University; a period of probation of at least one semester duration will always precede suspension/dismissal action. As appropriate, a notation of the student’s suspension/dismissal status is entered on the student’s permanent record. A suspended student may not register for any classes at UMW (fall or spring semester) until his or her term of suspension expires. However, a student under suspension may enroll in UMW’s summer school after consultation with the Office of Academic Services. A student under first suspension may take up to two courses at another college or university for transfer to UMW but must obtain written approval from Academic Services and the Registrar before registering for classes during the semester of suspension. A dismissed student is ineligible to obtain a degree from UMW or to continue enrollment in courses offered by the University.

The academic records of all students on probation are subject to review for academic suspension/dismissal at the conclusion of the fall and spring semesters. All students on probation must have met the appropriate minimum overall cumulative UMW GPA, based upon their number of credits (including AP, IB, CLEP, Cambridge, and transfer credits as well as all UMW attempted GPA hours). All students on probation who have not achieved the requisite minimum overall cumulative GPA at the conclusion of each fall or spring semester will be suspended/dismissed, according to the terms below:

<table>
<thead>
<tr>
<th>Number of Attempted Credits</th>
<th>Minimum Overall Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-30</td>
<td>1.25</td>
</tr>
<tr>
<td>31-45</td>
<td>1.50</td>
</tr>
<tr>
<td>46-60</td>
<td>1.75</td>
</tr>
</tbody>
</table>

First Suspension

One semester suspension. The student will be ineligible to attend the subsequent semester, but he or she would be eligible to return for the semester following the semester away from the University. However, a suspended student would be eligible to attend UMW’s summer school after consultation with the Office of Academic Services. If a suspended student’s GPA meets the minimum overall cumulative GPA at the end of the summer session, that student will be automatically reinstated. Students who are on a first suspension at the time of departure may depart on a study abroad course only after being advised by the Office of Academic Services.

Second Suspension

Two-semesters suspension. The student will be ineligible to attend the subsequent summer session, fall semester and spring semester; but he or she would be eligible to return for the following summer term and/or fall semester. Students on a second suspension are not eligible to study abroad. Any student placed on suspension may appeal his or her suspension to the Committee on Academic Standing. Students cannot be evaluated for a second suspension until they return from a first suspension as either a full-time or part-time student during the fall or spring semester following the guidelines but not the deadlines in the following section: Reinstatement after suspension.

Dismissal-Permanent Suspension

A dismissed student is ineligible to obtain a degree from UMW or to continue enrollment in courses offered by the University.

Note: Courses taken at other institutions while a student is on disciplinary or honor suspension from UMW are not accepted by UMW for transfer credit and will not fulfill any degree requirement. Prior permission for future transfer course work is automatically revoked when a student is suspended/dismissed for disciplinary or honor reasons.

Reinstatement after Suspension

A student returning from suspension after the end of the spring semester is eligible to take courses during the subsequent summer term. (See Readmission/Reinstatement (p. 24).)

Readmission/Reinstatement

An undergraduate degree-seeking student who remains enrolled each semester, without interruption, is considered a continuing student. The student maintains this status by completing Advance Registration each semester through the Office of the Registrar. Students with cumulative UMW GPA’s of at least 2.0 who interrupt their enrollment for only one or two consecutive semesters are still considered degree-seeking students.

Readmission

An undergraduate degree-seeking student who discontinues attendance for three consecutive semesters or more are no longer considered to be in a degree program at the University. Students who wish to return to study must reapply for admission if their last cumulative GPA was a 2.0 or better and if they were not on an approved Leave of Absence. Students who do not return to study within one semester after the conclusion of their approved Leave of Absence are also no longer considered to be in a degree program at the University. Students may begin the readmission process through the Office of Admissions by applying for readmission.
For student's whose last cumulative GPA was less than 2.00, readmission is subject to review by the Committee on Academic Standing which is administered through the Office of Academic Services. Students seeking readmission requiring such review must first complete the application for readmission with the Office of Admissions and then schedule a readmission advising appointment with the Office of Academic Services.

Students seeking such readmission must submit transcripts of any academic work completed while not in attendance at the University of Mary Washington for evaluation and consideration of transfer credit. Previously earned UMW credits will also be reviewed for possible application to the current curriculum. Further, students who are readmitted must follow the graduation requirements and major requirements of the Academic Catalog at the time of their readmission.

An undergraduate student who is seeking readmission to the University may choose to have all University of Mary Washington course work that is at least seven academic years old not counted in the calculation of the GPA by declaring Academic Bankruptcy. A student who chooses this option receives credit for courses in which a grade of at least "C" was earned; the grades for such courses, however, are not included in the computation of the GPA. The decision to declare Academic Bankruptcy must be made at the time of re-enrollment and can be claimed no more than once in a student's career at the University.

Students who have completed undergraduate degree at UMW and who are continuing their enrollment to complete a second major or to complete requirements for teacher licensure do not need to reapply for admission. However, students who are resuming attendance after completing one degree to complete a second degree must seek admission to the second degree program through the Office of Admissions.

Reinstatement of Students Returning from Military Service

Students who withdrew from the University as a result of military deployment, mobilizations, or duty changes are entitled to return without having to re-qualify for admission so long as the student:

1. returns after a cumulative absence of no more than five years, and
2. notifies the Office of Admissions of the intent to return to the University not later than three (3) years after the completion of the military service obligation.

The student must provide the Office of Admissions with a copy of the military orders to substantiate the end of duty date.

Repeating a Course

Students may repeat certain courses in which their original grades were C-, D+, D, F or FA. Although both the old grade and the new grade will be shown on the permanent record, the grade in the repeated course is the grade that determines the student's grade-point average and the amount of credit earned for the course. No additional credits will be earned for repeating courses for which credits have already been earned (courses in which a grade of C, D+, or D was recorded).

Note: The University of Mary Washington does not guarantee that courses will be available in future semesters. When a course is no longer offered, another course will not replace the repeated course.

Before registering to repeat a course, the student should verify that he or she is eligible to do so according to the restrictions listed below. Registration software may not block students from registering for courses when not eligible, but it is the student's responsibility to adhere to these guidelines regardless of the technical ability to register. Only courses repeated at UMW can improve the student's grade-point average. If a student repeats and passes (with a grade of C or better) a pre-approved transfer course at another institution that he or she failed at UMW, he or she will receive transfer credits, but the UMW record will still include the credits attempted (and therefore the grade-point average penalty) for the failed UMW course.

Restrictions on Repeating Courses

1. No course may be repeated more than once.
2. No more than three courses may be repeated in a single semester, with the entire summer session considered a single semester.
3. No more than seven courses altogether may be repeated.
4. No course may be repeated that is a prerequisite for a course that has already been completed.

Satisfactory/Unsatisfactory Grades

With the exception of PHYD 130 Introduction to Sports Management, PHYD 330 Events and Facility Management, and PHYD 499 Sports Management Internship, all other Physical Education courses and 100-level Dance (DANC) courses are graded as either satisfactory (SA) or unsatisfactory (UN). With the exception of PHYD 130 Introduction to Sports Management, PHYD 330 Events and Facility Management, and PHYD 499 Sports Management Internship, no more than two credits of physical education (PHYD) courses may be taken in a single semester (or complete summer session). Excluding PHYD 130 Introduction to Sports Management, PHYD 330 Events and Facility Management and PHYD 499 Sports Management Internship, a maximum of 8 credits in other physical education (PHYD) courses may be included in the credits required for graduation. With the exception of PHYD 130 Introduction to Sports Management, PHYD 330 Events and Facility Management, and PHYD 499 Sports Management Internship, a BLS student may take a maximum of 6 other PHYD credits toward the degree. A student may not take two sections of the same PHYD or DANC course in a semester, regardless of level. A student may take up to one pass/fail and two satisfactory/unsatisfactory courses in the same semester.

Taking Graduate Courses as an Undergraduate

An undergraduate student with 18 or fewer hours of course work remaining for degree completion may take up to two graduate courses. Such graduate credit may count as undergraduate electives or toward major program requirements (if applicable). The student must either be in an undergraduate program requiring a graduate course as part of the undergraduate degree requirements (such as the BSN program) or have a minimum 3.0 cumulative grade-point average and must receive permission from his/her academic advisor and the chair of the department/program offering the course. The University also offers Accelerated Degree Programs in which undergraduate and graduate degrees have a maximum of four common courses. These credits are offered at the graduate level, and may be taken by students who apply for and are conditionally admitted to the graduate program during their undergraduate studies. Accelerated degree programs are noted in both the Undergraduate and the Graduate Academic
Catalogs. The courses may count toward both the undergraduate and graduate degrees if formal admission to the graduate degree program is received within five years of the award of the undergraduate degree. All graduate courses applied to the undergraduate degree will count in the undergraduate grade-point average.

Transfer Credit Policies

Transfer Credit from Other Institutions

The University considers awarding transfer credits from other regionally-accredited institutions on two conditions:

1. the institution’s accreditation is recognized in the directory Accredited Institutions of Postsecondary Education published by the American Council on Education (credits from international institutions will be considered on a case-by-case basis), and
2. the credits are for graded courses which are deemed appropriate for a liberal arts and sciences degree at the University of Mary Washington.

Regulations governing the consideration of courses for transfer credit vary according to whether the credits are transferred BEFORE or AFTER matriculation.

Before Matriculation

As a rule, transfer credit is given for courses of the same type, on the same level, and under the same guidelines as University of Mary Washington courses. Courses for which transfer credit is awarded must neither overlap nor repeat those that the student takes at the University, and a grade of C (2.00) or better must be earned. Previously awarded transfer credits will be forfeited and removed from the UM record if the equivalent course work is later completed at UMW or another university. This does not apply to students receiving GI Bill® benefits; the VA will not pay for courses/credits that have not been successfully completed and transferred to UMW. For more information, please see the school Certifying Official in the Office of the Registrar. Approved transfer credits can count toward the major program or general education requirements, or can be used as elective credits.

After an official transcript has been received and evaluated by UMW, a student will be notified of the transfer credit that can be counted toward a University of Mary Washington Bachelor of Arts, Bachelor of Science degree, Bachelor of Nursing degree, or a Bachelor of Liberal Studies degree. B.A./B.S./BSN students who wish to have their transfer credit award re-evaluated should contact the Office of the Registrar to make a specific re-evaluation request. BLS students should contact the BLS Office.

After Matriculation

All students at the University of Mary Washington who wish to earn transfer credit at another university (e.g., during summer school) must secure written permission from the Office of the Registrar before registering for the course. Students seeking transfer credit from a foreign university as part of an education abroad program must work with the Center of International Education in order to secure all the necessary transfer credit approvals prior to the beginning of their abroad program.

Transfer credit will only be awarded for courses completed within the semester for which approval has been granted by the Office of the Registrar. Approved transfer credits can count toward the major program or general education requirements, or can be used as elective credits. A student wishing to apply for transfer credits for courses for the academic major must submit a pre-approval form, signed by the department chair, to the Office of the Registrar. This form is available in the Registrar’s Office or online via the Registrar’s web page.

The student seeking transfer credit is responsible for seeing that an official transcript, complete with the final grades for requested course work, is received by UMW. Pre-approved transfer credit will be applied to a UMW degree only if the Office of the Registrar receives an official transcript of that course work by the University’s final deadline.

Transfer Credit Deadlines

No UMW credit will be awarded for any transfer work (including all pre-approved transfer work) for which UMW has not received official transcripts by the following deadlines:

- For continuing B.A., B.S., BLS, and BSN students, official transcripts for pre-approved transfer credit MUST be received by UMW by November 15 for spring and summer courses taken in the same calendar year.
- For continuing B.A., B.S., BLS, and BSN students, official transcripts for approved transfer credit MUST be received by UMW by April 15 for fall courses taken in the previous calendar year.

If the official transcript from the other institution is received by UMW by the appropriate deadline, the pre-approved credits on which the student has earned a grade of C (2.00) or better, will be recorded on the student’s permanent record at the University of Mary Washington. Transfer credit is not awarded for duplicate courses (courses already taken, either at UMW or another institution).

The one exception to this policy is ENGL 101 Writing Workshop. An additional three hours of transfer credit will be awarded Writing Intensive designation if two transfer courses are considered equivalent to ENGL 101 Writing Workshop or if a student earns a grade in ENGL 101 Writing Workshop at UMW after receiving transfer credit for one course equivalent to ENGL 101 Writing Workshop. There is a limit of six 100-level English composition credits that can be applied to the graduation requirement of 120 credits.

Guidelines Covering the Application and/or Deletion of Transfer Credits

The following provisions apply to transfer courses taken at other institutions.

1. Transfer credits will be forfeited and removed from the record if the equivalent course or courses are completed at UMW or another institution (and transferred into UMW for credit).
2. Transfer credits are counted as completed credits toward graduation, and thus affect all decisions regarding probation, suspension, and disciplinary or honor suspension or after academic.
3. A student may request the permanent deletion of transfer credits from his or her record at any time except when he or she is on disciplinary or honor suspension or after academic.

Withdrawal from the University

Withdrawal for a Term, Voluntary

Regardless of the date, students who wish to drop or withdraw from all of their courses are voluntarily withdrawing from study for that term. Ceasing to attend classes does not constitute a withdrawal and may
result in failing grades as well as additional charges. Such withdrawals must be completed by the last day of class for the session or term. If students have received grades in a completed session of the term, they are not eligible to withdraw. In this case, students may drop courses registered for in the upcoming session; however, they are subject to drop policies for the courses, and grades received for courses in completed sessions will be recorded as part of the student’s permanent academic record for the term.

Students must complete a withdrawal form. A student who fails to withdraw properly may incur additional charges and may receive failing grades. Students are fully responsible for all outstanding charges on their accounts. Students will not be permitted to return to the University or register for courses until their account is cleared. Students living in the residence halls must vacate their rooms if they withdraw for the term.

**Military Activation and Withdrawal from the Term**

Students who are in military service (active duty, reserves, or National Guard) and will be unable to complete the courses in which they are enrolled because of a military deployment, mobilization, or change in duty assignment may withdraw from all courses as of the effective date on their military orders. Students should contact the Office of the Registrar in order to process the course withdrawals, and a copy of the military orders must be provided as documentation. Students withdrawing in this manner will receive a full refund of all tuition and fees and pro-rated refunds for dining or housing contracts. Textbooks purchased from the UMW Bookstore may be returned for credit in accordance with the UMW textbook return policy. For withdrawals occurring beyond return policy end date, students should bring books to the Bookstore for the best available buyback prices.

**Withdrawal from the University**

Students who discontinue attendance for three consecutive semesters or more (including a term in which the student withdrew from the University) are no longer considered to be in a degree program at the University and are withdrawn from the University. Students who wish to return to study must reapply for admission following the process described in the section on Readmission/Reinstatement.

**Administrative Withdrawal (Non-Academic)**

After the last day to withdraw from the term has passed, a student may petition the University for a retroactive administrative withdrawal from all courses in a given term for substantiated nonacademic reasons. Nonacademic reasons include matters such as hospitalization, debilitating mental illness, incarceration, or a family crisis. Administrative withdrawals of this nature are extremely rare and require appropriate and detailed documentation including a rationale explaining why the student was unable to withdraw by the last day of classes.

Petitions for Non-Academic Administrative withdrawals are initiated by the student through the Office of Academic Services on the “General Request Form.” All petitions for retroactive withdrawals must be made prior to the last day of classes in the subsequent semester. Partial retroactive withdrawals (i.e., from only some courses) are not offered and all grades for the semester in question will be indicated as a W if the petition is approved.

Following receipt of the appeal, the Director of Academic Services will initiate a formal review of the request. If the retroactive withdrawal is approved, the faculty members of the courses in which the student was withdrawn will be notified by the Director of Academic Services. The explanation provided will indicate simply that the withdrawal was done for substantiated non-academic reasons and was approved following careful review of documentation submitted. The nature of the reasons behind the withdrawal action will not be disclosed.

UMW’s standard refund schedules apply to retroactive administrative withdrawals and no special refunds or financial considerations will be offered.
UNDERGRADUATE DEGREES

The University of Mary Washington’s undergraduate degree program are built upon three interrelated components: General Education, the Major, and Electives.

General Education is the foundation of a liberal arts education and is designed to cultivate the skills, knowledge, and habits of mind that are essential in every field of study and which enable graduates to make effective decisions as citizens of a rapidly changing, richly diverse, and increasingly interconnected world. The University’s General Education requirements introduce students to a variety of learning perspectives and methods of inquiry, which combine to foster an appreciation of the connections between different ways of viewing, knowing, and engaging with the world. General Education facilitates collaborative learning, individual intellectual development, and constitutes the basis for lifelong learning. Depending upon the degree program the student pursues, general education requirements will vary. See the additional information about general education requirements of each undergraduate degree program.

The Major develops expertise in a specialized area of study resulting from focused investigation in a particular academic discipline or disciplines (in the case of an interdisciplinary major). Majors are organized areas of inquiry and knowledge with defined learning goals and methodologies. Major requirements complement, reinforce, and extend the objectives of General Education while adding depth of study in course work, individualized learning, and curricular experiences. Certain majors are available only to students in a particular degree program. The leadership and management major is available only to students enrolled in the Bachelor of Liberal Studies (BLS) degree program. The nursing program may be only pursued by those who enrolled in the Bachelor of Science in Nursing (BSN) degree program.

The final component of the degree is electives, which affords students opportunities to explore personal interests, add variety to one’s studies, and advance particular academic, career, or professional goals (such as preparation for law or medical school). Electives also enable the study of an area of knowledge in greater depth through individually selected courses or experiences that build on a Major’s formal requirements. Student can select a minor as one way to organize their studies beyond general education and the major. A minor is not required in order to graduate from UMW.

The combination of experiences provided through General Education, the Major, and Electives enable students to achieve the following learning goals and to emerge fully prepared to contribute to the world beyond the University.

B.A./B.S. Degree

The choice of major program determines which degree one receives.

Bachelor of Arts (B.A.) degrees are offered in:

- Anthropology;
- Art History;
- Classics (majors in Classical Archaeology, Classical Civilization, and Latin);
- Communication and Digital Studies;
- English (majors in English and English: Creative Writing Concentration);
- Geography;
- General Liberal Arts and Studies (majors in American Studies, Women and Gender Studies, or approved interdisciplinary special major);
- Historic Preservation;
- History;
- International Affairs;
- Modern Foreign Languages (majors in French, German, and Spanish);
- Music;
- Performing Arts (major in Theatre);
- Philosophy and Religious Studies (majors in Philosophy; Philosophy: Pre-Law; and Religious Studies);
- Political Science;
- Sociology; and
- Studio Art.

Bachelor of Science (B.S.) degrees are offered in:

- Biology (majors in Biology and Conservation Biology);
- Business Administration (majors in Accounting, Business Administration, International Business, and Marketing);
- Chemistry (majors in Chemistry and Biochemistry);
- Computer Science (majors in Computer Science and Cybersecurity);
- Economics;
- Environmental Science and Geology (majors in Environmental Geology, Geology, Environmental Science: Natural Science Concentration, and Environmental Science: Social Science Concentration);
- General Liberal Arts and Studies (major in Interdisciplinary Science Studies or approved interdisciplinary special major);
- Mathematics;
- Physics (majors in Applied Physics and Physics); and
- Psychology.

All B.A. and B.S. degrees require 120 credits for completion. Both degrees also require an overall cumulative grade-point average of at least 2.00 (equivalent to a “C” average) on Mary Washington course work, as well as a cumulative grade-point average of at least 2.00 in each major program on Mary Washington course work. The residence requirement is as follows: To be considered a degree candidate, a student must earn at least 30 academic credits at the University of Mary Washington, including at least half the credits required for the major program unless more are required by the major department. Students must also earn at least 15 of the last 21 credits at Mary Washington. Active duty military students may request a waiver to the residency requirement that 15 of the last 21 credits be earned at UMW. (Students should contact the Office of Academic Services to request the waiver; a copy of the student’s orders is required as documentation.)

Additional important information is contained in the description of B.A./B.S./B.S.Ed. General Education Requirements (p. 35).

See the details about Major Requirements (p. 38) for important information about the major program.
Interdisciplinary special major program. A student and faculty advisor may design a special major program by selecting, from two or more departments, courses that define a coherent field of concentration. The program of study must be approved by a College Curriculum Committee. The degree earned is General Liberal Arts and Studies (either B.A. or B.S., depending on the content of the curriculum as approved by the Committee).

BLS Degree

The Bachelor of Liberal Studies (BLS) degree is designed for adults whose life and/or experiences may require a non-traditional approach to completing their degree. The program is intended for students who, for example, have graduated from high school six or more years ago; are financially self-supporting; or have significant life or professional experiences that translate into academic knowledge that can contribute to the completion of the Bachelor's degree. Unlike a traditional baccalaureate degree, the BLS offers greater flexibility in the timetable leading to graduation because it does not require full-time study, extended residence at the University or language requirements (unless one majors in a language). A maximum of 90 semester hours of transfer credit may be used to fulfill the requirements for the BLS degree. These credits may include a maximum of 30 credits earned through military service and a maximum of 30 credits earned through a life/work portfolio. BLS students may choose to major in any one of the more than 30 majors available in arts and sciences or may create a self-designed, interdisciplinary major (subject to the approval of the Bachelor of Liberal Studies Committee). BLS students may also select the Leadership and Management major. This major is open only to BLS students.

The BLS degree requires a minimum of 120 semester hours, distributed in three categories: general education, major, and electives. Students must also take courses listed as writing intensive and speaking intensive. BLS students generally take courses from among those listed in the College of Arts and Sciences section of the Catalog. A grade-point average of 2.00 on all work at the University of Mary Washington is also required, with no more than six credits in physical education courses counting toward the degree.

Students who have registered for classes in the B.A./B.S. program at UMW within the past calendar year and who have completed more than 30 credits at the University are not eligible to enroll in the BLS program.

Students are encouraged to complete BLST 100 Orientation. Others may wish to enroll in BLST 101 Portfolio Development, for assistance in developing portfolios that document learning gained through life and work for possible conversion to academic credit.

Additional important information is contained in the BLS General Education Requirements (p. 36).

Portfolio Credit (Credit for Life/Work Experience)

The portfolio system is designed to award college credit for applicable college-level learning acquired through nonacademic experiences. Portfolio credit is available to students enrolled in the Bachelor of Liberal Studies (BLS) program. Students in the Bachelor of Arts or Bachelor of Sciences degree programs are not eligible for portfolio credit. Learning documented in the portfolio must be equivalent in scope and complexity to what students learn in college classrooms. Hence, the portfolio system is a way of recognizing experiential learning, which is generally equivalent to college classroom learning. All credit earned through portfolio assessment must be measurable or verifiable by a qualified, formally-appointed assessor; such credit is considered transfer credit.

While a great deal is learned from life's experiences, e.g., marriage and parenthood, these experiences do not automatically translate into college credit; a portfolio must present what a student has learned in such a way that the assessor can identify and measure it. While most adults can do a great many complex things — such as complete income tax forms, balance checkbooks, and vote for presidential candidates — the University does not award college credit for typical adult competencies.

Individuals who wish to present a portfolio must be enrolled at the University as BLS degree-seeking students. In addition, they are required to enroll in and satisfactorily complete BLST 101 Portfolio Development Portfolio Development, prior to presenting the portfolio for assessment. This course carries one pass/fail credit and is offered on an as-needed basis. The course defines the kind of learning a portfolio can present successfully, provides a detailed outline of the portfolio format, and offers each student specific instruction in the assembly of the initial stages of his/her portfolio. It also outlines additional methods, other than the portfolio, for providing documentation of experiential learning for college credit.

The usual ceiling for portfolio credit awards is 15 credits; in exceptional cases the award can be as high as 30 credits. Thirty is the maximum number of credits that can be awarded through the portfolio, and applied toward the degree. Due to the nature of the program and changing technologies, students currently enrolled in the BLS program should not include knowledge and experiences older than 10 years; exceptions are considered on an individual basis. Students may submit as many portfolios as they like, and each one is not to exceed 250 typewritten pages. The assessment fee for each portfolio is $100. Portfolios must be submitted prior to accumulating 90 semester hours of transfer credit. Students using GI Bill® benefits will not be charged the portfolio assessment fee.

Portfolios must be submitted to the BLS Office within 12 months of completion of the portfolio course, and must be submitted prior to the student's final semester in the degree program. Credits awarded may be used to satisfy general education requirements, elective credit requirements, and selected major credit requirements.

Because there is a significant amount of work involved in preparing a portfolio with no guarantee of a successful outcome, students should discuss the project at some length with their faculty advisors and with the BLS Office (Combs Hall, Room 108). If the decision is made to pursue credit awards through the portfolio process, permission to enroll in BLST 101 Portfolio Development Portfolio Development must be secured from the BLS Office.

Transfer Credit

The transfer credit total for the Bachelor of Liberal Studies degree — including a combination of credits from other accredited institutions, standardized tests, portfolio, military, CLEP and ACE — cannot exceed 90 semester credits. Contingent on an evaluation of course content, transfer credit may be used to satisfy general education, concentration, or elective credit requirements.

The University accepts many of the College Level Examination Program (CLEP) and DANTES Subject Standardized tests as undergraduate transfer credit. Students may earn credit by meeting the minimum required score on selected CLEP or DANTES tests; these credits may be used to fulfill general education and other requirements or as elective
Second Degree or Post-Baccalaureate Major

A student who has earned a bachelor's degree from the University of Mary Washington and wishes to pursue further undergraduate work may either complete a post-baccalaureate major and have it noted on the permanent record (with the date of completion) or earn a second degree if it is different from the first degree (for example, a subsequent B.A. or BLS, if the first degree was a B.S.). Second Degree. The student must apply for admission to the new degree program through the Office of Admissions and must earn at least 30 additional credits at Mary Washington after completion of the first degree. No more than 14 of these credits can be completed prior to matriculation for the second degree. The most appropriate 90 credits will be selected to count toward the second degree. The student must complete the major program and general education requirements in the Academic Catalog in effect at the time of matriculation into the second degree.

A student who earned his or her first degree from another institution must enter Mary Washington as a transfer student, then complete the major program and general education requirements of the second degree as defined in the Academic Catalog in effect at the time of matriculation into the second degree.

Post-Baccalaureate Major. A student who has earned a degree at UMW who is completing only an additional major must complete the Major Program requirements printed in the Academic Catalog at the time of major declaration if the student has not discontinued enrollment at UMW for more than two semesters. A student returning after an absence of more than two semesters will be required to complete the major program requirements listed in the Academic Catalog in effect at the time of re-enrollment. Any B.A./B.S. student wishing to pursue a post-baccalaureate major must apply in the Office of the Registrar. A BLS student must apply in the BLS Office.

Taking Graduate Courses as an Undergraduate

An undergraduate student with 18 or fewer hours of course work remaining for degree completion may take up to six hours of graduate credit beyond the undergraduate degree requirements. Such graduate credit may be counted toward a master's degree at the University, but will not be used to fulfill undergraduate degree requirements unless the student receives special permission. The student must have a minimum 3.0 cumulative grade-point average and must receive permission from his/her academic advisor and the chair of the department offering the course.

BSEd Degree

The BSEd degree program has one major in Elementary Education. The program prepares students to serve as elementary teachers in Pre-K-6 grades. Graduates will be prepared to work in public and private elementary schools. Graduates will be capable of working with diverse learners and adapting instruction based on the needs of their students. The program affords students the opportunity to be licensed as elementary teachers in four years. For additional details, review the program requirements on the Elementary Education major page.

This degree program is pending final approval by the State Council of Higher Education for Virginia.

BSN Completion Degree (Nursing)

Janet M. Atarthis-Dugan, Director of the Bachelor of Science in Nursing Completion Program
Pamela S. McCullough, Lecturer

The Bachelor of Nursing (BSN) degree is a completion program for registered nurses. The BSN Completion Program meets the American Association of Colleges of Nursing (AACN) Essentials of a Baccalaureate Education for Profession Practice. Upon completion of the BSN degree, nurses are able to practice as a member of a profession and assume the roles of provider, designer, manager, and coordinator of care in a healthcare system of growing complexity.

The baccalaureate degree in nursing at the University of Mary Washington is accredited by the Commission on Collegiate Nursing Education (https://catalog.umw.edu/undergraduate/undergraduate-degrees/bsn-completion-degree-nursing/www.ccneaccreditation.org).

Additional details about program requirements, regulations, and courses are offered in the Nursing Degree Completion Program (p. 75) section of this Catalog.

Second Degree or Post-Baccalaureate Major

A student who has earned a bachelor's degree from the University of Mary Washington and wishes to pursue further undergraduate work may either complete a post-baccalaureate major and have it noted on the permanent record (with the date of completion) or earn a second degree if it is different from the first degree (for example, a subsequent B.A. or BLS, if the first degree was a B.S.).

Second Degree

The student must apply for admission to the new degree program through the Office of Admissions and must earn at least 30 additional credits at Mary Washington after completion of the first degree. No more than 14 of these credits can be completed prior to matriculation for the second degree. The most appropriate 90 credits will be selected to count toward the second degree. The student must complete the major program and general education requirements in the Academic Catalog in effect at the time of matriculation into the second degree.

A student who earned his or her first degree from another institution must enter Mary Washington as a transfer student, then complete the major program and general education requirements of the second degree as defined in the Academic Catalog in effect at the time of matriculation into the second degree.

Post-Baccalaureate Major

A student who has earned a degree at UMW who is completing only an additional major must complete the Major Program requirements printed in the Academic Catalog at the time of major declaration if the student has not discontinued enrollment at UMW for more than two semesters.
A student returning after an absence of more than two semesters will be required to complete the major program requirements listed in the Academic Catalog in effect at the time of re-enrollment. Any B.A./B.S. student wishing to pursue a post-baccalaureate major must apply in the Office of the Registrar. A BLS student must apply in the BLS Office.
GENERAL EDUCATION

The University of Mary Washington has two different sets of general education requirements.

The general education requirements for Bachelor of Arts/Bachelor of Science/Bachelor of Science in Education degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A., B.S., or BSEd degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

The general education course list (p. 32) indicates the courses that satisfy a particular general education requirements for the B.A., B.S., BSEd, and BLS degree programs.

Students enrolled in the Bachelor of Science in Nursing program have a separate set of BSN general education requirements (p. 37).

It's helpful for students to remember that they have four years to fulfill all graduation requirements. Completion of general education requirements and the major should not be viewed as two separate activities. In fact, many of the courses that satisfy general education requirements will connect well with the intended major program of study.

"Double Counting" General Education Courses

Courses identified as "across the curriculum" (ATC) courses – those marked as Writing Intensive (WI), Speaking Intensive (SI), Digital Intensive (DI) or Diverse and Global Perspectives (DGP) – will be counted as meeting both the ATC requirement and a Method of Investigation category requirement. For example, if a course was listed as an Arts and Humanities option, and it was marked as Writing Intensive (WI), it would be counted in both of those categories.

Taking general education courses on a pass/fail basis

In the B.A., B.S., and BSEd degree programs, the only general education courses that may be taken on pass/fail basis on ones being used to meet the Beyond the Classroom and After Mary Washington requirements. All other general education courses must be taken for a letter (A-F) grade.

In the BLS and BSN degree programs, no general education courses may be taken on a pass/fail basis.

General Education Course List

Courses listed below fulfill the indicated general education requirements for all B.A., B.S., and BSEd degree-seeking students. Instances where requirements for BLS students are different are noted.

Foundations

First-Year Seminar

(Not required of BLS students.)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSEM 100</td>
<td>First-Year Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Written Communication

Three courses designated as writing intensive (WI).
WI courses are indicated in the online schedule of courses. The course must be designated as WI in the semester in which it is taken in order to satisfy the requirement. Some sections of a particular course may be designated as WI while others are not; students should be aware of this fact when selecting courses for their schedule.

Oral Communication

One course designated as speaking intensive (SI).
SI courses are indicated in the online schedule of courses. The course must be designated as SI in the semester in which it is taken in order to satisfy the requirement. Some sections of a particular course may be designated as SI while others are not; students should be aware of this fact when selecting courses for their schedule.

Language

Intermediate competency in a second language (not required of BLS students). Demonstrated by:
1. completion of 201 or higher in a language including ASL;
2. a score of 620 or higher on any language SAT II subject test;
3. a score of 3 or higher on any modern language or language and literature AP Exam or a score of 4 or higher on a Latin AP Exam;
4. a score of 4 or higher on any group 2 (second language) higher-level IB Exam;
5. a score of 6 of higher on specified group 2 (second language) standard-level IB Exams (check equivalency chart [https://academics.umw.edu/registrar/transfer-information/transferring-credit-ib-credit-ap-ib-or-previous-coursework/freshmen-international-baccalaureate-ib-credit] carefully);
6. a passing score on the University of Mary Washington language competency exam;
7. a rating of “Intermediate” on the Sign Communication Proficiency Interview (SCPI);
8. a rating equivalent to “Intermediate-Low Competency” on the American Council for the Teaching of Foreign Languages (ACTFL) scale on an approved third-party exam;
9. a score of 60 or higher on the CLEP exam;
10. completion of Level IV in a language in high school; or
11. the submission of pertinent documents which verify that a student has had a high school education conducted in a language other than English or has lived extensively in and become fluent in the language of a non-English-speaking country.

Methods of Investigation

Arts and Literature

One course focusing on visual art, performing art, and/or literature from the following list:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 114A</td>
<td>History of Western Art I</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 115A</td>
<td>History of Western Art II</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 118</td>
<td>History of Asian Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 105</td>
<td>Design Principles</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 202C</td>
<td>Ancient Tragedy</td>
<td>3</td>
</tr>
</tbody>
</table>
The following list:

One course focusing on the humanities (including history) from the following list:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAS 204</td>
<td>Epic Traditions</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 205</td>
<td>The Art of Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 206A</td>
<td>Global Issues in Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 207</td>
<td>Literature in Performance</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 245</td>
<td>Introduction to Cinema Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 251</td>
<td>Issues in Literature</td>
<td>3</td>
</tr>
<tr>
<td>HISP 105</td>
<td>The American Built Environment</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 151A</td>
<td>Great Musical Masterworks</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 152</td>
<td>Music and Society</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 154</td>
<td>Musics of the World</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 156</td>
<td>American Music</td>
<td>3</td>
</tr>
<tr>
<td>THEA 111</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA 112</td>
<td>Introduction to Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 113</td>
<td>Introduction to Theatre Design</td>
<td>3</td>
</tr>
<tr>
<td>THEA 131</td>
<td>Technical Production</td>
<td>4</td>
</tr>
<tr>
<td>THEA 132</td>
<td>Technical Production</td>
<td>4</td>
</tr>
<tr>
<td>THEA 211A</td>
<td>Dramatic Literature</td>
<td>3</td>
</tr>
<tr>
<td>THEA 212A</td>
<td>Dramatic Literature</td>
<td>3</td>
</tr>
<tr>
<td>THEA 218</td>
<td>Voice and Body Movement</td>
<td>4</td>
</tr>
<tr>
<td>THEA 240</td>
<td>Stage Makeup</td>
<td>3</td>
</tr>
<tr>
<td>THEA 290</td>
<td>Scene Painting</td>
<td>3</td>
</tr>
</tbody>
</table>

Humanities

One course focusing on the humanities (including history) from the following list:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 101</td>
<td>Introduction to Cultural and Social Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 114A</td>
<td>History of Western Art I</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 115A</td>
<td>History of Western Art II</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 118</td>
<td>History of Asian Art</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 103</td>
<td>Ideas and Culture: Greek Civilization</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 105</td>
<td>Ideas and Culture: Roman Civilization</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 110</td>
<td>Greek and Roman Mythology in Art and Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 200</td>
<td>News Journalism</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 202</td>
<td>Writing Seminar</td>
<td>3</td>
</tr>
<tr>
<td>HISP 100</td>
<td>Introduction to Historic Preservation</td>
<td>3</td>
</tr>
<tr>
<td>HIST 121</td>
<td>Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>HIST 122</td>
<td>Western Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>HIST 131</td>
<td>American History to 1865</td>
<td>3</td>
</tr>
<tr>
<td>HIST 132</td>
<td>American History Since 1865</td>
<td>3</td>
</tr>
<tr>
<td>HIST 141</td>
<td>Asian Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>HIST 142</td>
<td>Asian Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>LING 101B</td>
<td>Introduction to Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 207</td>
<td>History of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 153</td>
<td>Women in Opera</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 101</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 160</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 201</td>
<td>Ancient Greek Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 202</td>
<td>Early Modern Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 225</td>
<td>Practical Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 226</td>
<td>Medical Ethics</td>
<td>3</td>
</tr>
<tr>
<td>RELG 103</td>
<td>The Abrahamic Religions</td>
<td>3</td>
</tr>
<tr>
<td>RELG 278</td>
<td>Religion in America After the Civil War</td>
<td>3</td>
</tr>
</tbody>
</table>

| RELG 205 | Hebrew Bible                                           | 3       |
| RELG 206A | Christian Beginnings                                   | 3       |
| RELG 208 | Christianity After the New Testament                   | 3       |
| THEA 211A | Dramatic Literature                                    | 3       |
| THEA 212A | Dramatic Literature                                    | 3       |

Natural Science

One course focusing on natural sciences that includes a laboratory from the following list:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 101</td>
<td>Introduction to Cultural and Social Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 114A</td>
<td>History of Western Art I</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 115A</td>
<td>History of Western Art II</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 118</td>
<td>History of Asian Art</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 103</td>
<td>Ideas and Culture: Greek Civilization</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 105</td>
<td>Ideas and Culture: Roman Civilization</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 110</td>
<td>Greek and Roman Mythology in Art and Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 200</td>
<td>News Journalism</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 202</td>
<td>Writing Seminar</td>
<td>3</td>
</tr>
<tr>
<td>HISP 100</td>
<td>Introduction to Historic Preservation</td>
<td>3</td>
</tr>
<tr>
<td>HIST 121</td>
<td>Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>HIST 122</td>
<td>Western Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>HIST 131</td>
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<td>3</td>
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<td>HIST 132</td>
<td>American History Since 1865</td>
<td>3</td>
</tr>
<tr>
<td>HIST 141</td>
<td>Asian Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>HIST 142</td>
<td>Asian Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>LING 101B</td>
<td>Introduction to Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 207</td>
<td>History of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 153</td>
<td>Women in Opera</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 101</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 160</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 201</td>
<td>Ancient Greek Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 202</td>
<td>Early Modern Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 225</td>
<td>Practical Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 226</td>
<td>Medical Ethics</td>
<td>3</td>
</tr>
<tr>
<td>RELG 103</td>
<td>The Abrahamic Religions</td>
<td>3</td>
</tr>
<tr>
<td>RELG 278</td>
<td>Religion in America After the Civil War</td>
<td>3</td>
</tr>
</tbody>
</table>

Laboratory Courses (all are 4 credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 121</td>
<td>Biological Concepts</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 125</td>
<td>Phage Hunters I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 126</td>
<td>Phage Hunters II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 132</td>
<td>Organism Function and Diversity</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 105A</td>
<td>Chemistry and Society with Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 106A</td>
<td>Chemistry and Society with Laboratory II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>EESC 111</td>
<td>Our Dynamic Earth</td>
<td>4</td>
</tr>
<tr>
<td>EESC 112</td>
<td>Evolution of Earth</td>
<td>4</td>
</tr>
<tr>
<td>EESC 120</td>
<td>Principles of Environmental Sustainability</td>
<td>4</td>
</tr>
<tr>
<td>EESC 121</td>
<td>Oceanography</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 110</td>
<td>Introduction to Weather and Climate</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 111</td>
<td>Landform Processes</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 103A</td>
<td>Elementary Astronomy w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 105</td>
<td>University Physics, w/lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 106</td>
<td>University Physics w/Lab</td>
<td>4</td>
</tr>
</tbody>
</table>

Non-Laboratory Courses (all are 3 credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 127</td>
<td>Human Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 128</td>
<td>Current Topics in Biology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 107</td>
<td>Societal Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>EESC 110</td>
<td>Environmental and Ecological Systems</td>
<td>3</td>
</tr>
<tr>
<td>EESC 221</td>
<td>Environmental Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 240</td>
<td>Natural Hazards</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 241</td>
<td>Biogeography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 325</td>
<td>Dynamic Climatology</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 104</td>
<td>Elementary Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 108</td>
<td>General Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>University Physics</td>
<td>3</td>
</tr>
</tbody>
</table>

1 If a student takes a non-laboratory science before taking a laboratory science, the Natural Science requirement will not be considered to have been met until the laboratory course has been completed.
Quantitative Reasoning
One course focusing on quantitative information and abstract reasoning from the following list:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 260</td>
<td>Biostatistics and Research Design</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 284</td>
<td>Applied Discrete Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>DATA 101</td>
<td>Introduction to Data Science</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 252</td>
<td>Introduction to Quantitative Methods in Geography</td>
<td>3</td>
</tr>
<tr>
<td>MATH 110</td>
<td>Finite Mathematics with Applications</td>
<td>3</td>
</tr>
<tr>
<td>MATH 115A</td>
<td>Introduction to Mathematical Modeling</td>
<td>3</td>
</tr>
<tr>
<td>MATH 120</td>
<td>Quantitative Reasoning for Decision-Making</td>
<td>3</td>
</tr>
<tr>
<td>MATH 121</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 151B</td>
<td>Introductory Logic</td>
<td>3</td>
</tr>
<tr>
<td>STAT 180</td>
<td>Introduction to Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Social Science
One course focusing on the social sciences from the following list:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 101</td>
<td>Introduction to Cultural and Social Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ECON 100</td>
<td>Economics of Social Issues</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>Introduction to Human Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 221A</td>
<td>Geography of Eastern North America</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 222A</td>
<td>Geography of Western North America</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 237</td>
<td>Cities</td>
<td>3</td>
</tr>
<tr>
<td>LING 101B</td>
<td>Introduction to Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 101A</td>
<td>Introduction to Political Science</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 102A</td>
<td>Introduction to International Relations</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 201</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 100</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOCG 105</td>
<td>The Social World</td>
<td>3</td>
</tr>
<tr>
<td>SOCG 155</td>
<td>Social Issues</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional Methods of Investigation
Two additional courses from two different Methods of Investigation. (BLS students must take three additional courses from two different Methods of Investigation.)

Students electing to take a second course in the Natural Sciences as one of their Methods of Investigation requirements will choose from a list of approved courses that may include non-laboratory courses. If a student takes a non-laboratory science before taking a laboratory science, the Natural Science requirement will not be considered to have been met until the laboratory course has been completed.

Connections
Digital Intensive
One course designated as digital intensive (DI).

DI courses are indicated in the online schedule of courses. The course must be designated as DI in the semester in which it is taken in order to satisfy the requirement. Some sections of a particular course may be designated as DI while others are not; students should be aware of this fact when selecting courses for their schedule.

Diverse and Global Perspectives
One course designated as diverse and global perspective (DGP).

DGP courses are indicated in the online schedule of courses. The course must be designated as DGP in the semester in which it is taken in order to satisfy the requirement. Some sections of a particular course may be designated as DGP while others are not; students should be aware of this fact when selecting courses for their schedule.

Beyond the Classroom
One faculty supervised experience involving a significant experiential learning component designed to challenge students to go outside of the bounds of the typical classroom. (Not required of BLS students.) Selected from the following:

- All courses numbered 491 and 492 (individual studies) and all Undergraduate Research 197 courses meet this requirement.
- Some sections of additional courses approved as Community Engaged (CE) courses and taught by specified approved instructors may be designated as Beyond the Classroom (BTC) courses in a particular semester.
- The following courses also satisfy this requirement:
habits that will allow our graduates to lead personally enriching and

The general education requirements of the B.A., B.S., and B.S.Ed. degree programs enable students to cultivate the skills, knowledge, values, and habits that will allow our graduates to lead personally enriching and socially responsible lives as effective and informed citizens of a rapidly changing world. The General Education curriculum helps students to:

Develop core skills needed to understand, evaluate, articulate, and advance their ideas and the ideas of others

Students learn to think critically, analyze data, evaluate evidence and the arguments and theories grounded in that evidence, conduct research thoroughly and with integrity, write and speak effectively, and be in command of the technologies that define not only 21st-century communication but also the emerging tools of different disciplines.

Explore issues, solve problems, and learn through multiple methodological approaches

The wide range of general education courses challenge students to make connections across their course of study and to explore the variety of ways they can understand and apply what they learn. General education courses focus on complex problems and issues in the arts, humanities, quantitative reasoning, and natural and social sciences.

Engage knowledgeably and responsibly with a changing, complicated, and multi-dimensional world

Students must understand and appreciate global connections, differences, cultures, languages, environments, and change. These courses require students to be both individual and collaborative learners, solve problems systematically and creatively, and find opportunities to explore beyond the classroom experiences such as undergraduate research, internships, study abroad, and engagement in community and civic life.

The B.A./B.S./B.S.Ed. degree general education requirements

General education requirements and courses for these degrees fall into three categories. See the general education list (p. 32) for the courses that will meet the various requirements.

Foundations

First Year Seminar
One course designated as a first year seminar. Transfer students do not have to meet this requirement.

Written Communication
Three courses designated Writing Intensive.

Oral Communication
One course designated Speaking Intensive.

Language
Intermediate competency in a second language defined as the completion of any 201 language course. (Completion of Level IV of a language in high school will also satisfy this requirement.)

Methods of Investigation

Arts and Literature
One course focusing on visual art, performing art, and/or literature.

Humanities
One course in the humanities (including history).

After Mary Washington

One experience focused on translating the liberal arts experience for life after Mary Washington. (Not required of BLS students.) All sections in the following list of courses meet this requirement.

In addition, some sections of additional courses taught by specified approved instructors may be designated as After Mary Washington (AMW) courses in a particular semester.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSC 430</td>
<td>Software Engineering</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 460</td>
<td>Internship Seminar: Secondary, Pre-K12</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 461</td>
<td>Internship Seminar: Elementary</td>
<td>3</td>
</tr>
<tr>
<td>IDIS 191</td>
<td>Liberal Arts and World of Work</td>
<td>1</td>
</tr>
<tr>
<td>IDIS 193</td>
<td>Personal Development for Life and Career</td>
<td>1</td>
</tr>
<tr>
<td>IDIS 195</td>
<td>Life and Career after UMW</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 490</td>
<td>Music Seminar</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 499</td>
<td>Internship</td>
<td>1-6</td>
</tr>
<tr>
<td>THEA 400</td>
<td>Professional Identity and Practice</td>
<td>1</td>
</tr>
</tbody>
</table>

General Education Requirements for Bachelor of Arts/Bachelor of Science/Bachelor of Science in Education Degrees

General Education Goals and Purposes

The general education requirements of the B.A., B.S., and B.S.Ed. degree programs enable students to cultivate the skills, knowledge, values, and habits that will allow our graduates to lead personally enriching and

- Intenships (499) that have a final project/paper that is to be evaluated by the sponsoring faculty member will also meet this requirement.
- The “community service option” offered by a number of departments also fulfills this requirement (see the following sections of this Catalog for details: Biology, Psychology, and Spanish).
- The Chemistry Department’s summer research experience also fulfills this requirement (see the Chemistry section of this Catalog).
- A qualifying and approved education abroad experience may also be used to satisfy this requirement. Contact the Center for International Education in Lee Hall for details about how to secure the required pre-approval to meet this requirement via an education abroad experience/project. Note: the same education abroad experience may not be used to satisfy both the Beyond the Classroom and Diverse and Global Perspectives requirements.
General Education Requirements for Bachelor of Liberal Studies Degrees

General Education Goals and Purposes
The general education requirements of the BLS degree program enable students to cultivate the skills, knowledge, values, and habits that will allow our graduates to lead personally enriching and socially responsible lives as effective and informed citizens of a rapidly changing world. The General Education curriculum helps students to:

Develop core skills needed to understand, evaluate, articulate, and advance their ideas and the ideas of others
Students learn to think critically, analyze data, evaluate evidence and the arguments and theories grounded in that evidence, conduct research thoroughly and with integrity, write and speak effectively, and be in command of the technologies that define not only 21st-century communication but also the emerging tools of different disciplines.

Explore issues, solve problems, and learn through multiple methodological approaches
The wide range of general education courses challenge students to make connections across their course of study and to explore the variety of ways they can understand and apply what they learn. General education courses focus on complex problems and issues in the arts, humanities, quantitative reasoning, and natural and social sciences.

Engage knowledgeably and responsibly with a changing, complicated, and multi-dimensional world
Students must understand and appreciate global connections, differences, cultures, languages, environments, and change. These courses require students to be both individual and collaborative learners, solve problems systemically and creatively, and find opportunities to explore beyond the classroom experiences such as undergraduate research, internships, study abroad, and engagement in community and civic life.

The BLS degree general education requirements
The Bachelor of Liberal Studies (BLS) degree general education requirements are as follows; see the general education list (p. 32) for the courses that will meet the various requirements.

Foundations
Written Communication
Three courses designated Writing Intensive.

Oral Communication
One course designated Speaking Intensive.

Methods of Investigation
Arts and Literature
One course focusing on visual art, performing art, and/or literature.

Humanities
One course in the humanities (including history).

Natural Science
One course in the natural sciences that includes a laboratory.

Quantitative Reasoning
One course focusing on quantitative information and abstract reasoning.

Social Science
One course in the social sciences.

Additional Methods of Investigation Courses
Three additional courses taken from two different Methods of Investigation categories.

Connections
Digital Intensive
One course designated as a Digital Intensive course that is not being used to meet one of the methods of investigation requirements or to fulfill the Diverse and Global Perspectives requirement.

Diverse and Global Perspectives
One course focusing on global and/or diverse communities that is not being used to meet one of the methods of investigation requirements or to fulfill the Digital Intensive requirement.
General Education Requirements for the Bachelor of Science in Nursing (BSN) Completion Degree

General Education Credits Transferred From a Pre-licensure Nursing Program

The general education requirements address the knowledge, skills, values, and attitudes that are designed to foster the intellectual and personal growth of BSN Completion (BSN-C) students. The curriculum is organized from simple to more complex; general education courses serve as a foundation support the acquisition of cognitive, affective, and technical competencies of an engaged citizen and emerging nurse professional. The General Education curriculum helps students to:

- Incorporate knowledge from arts, humanities, and sciences in the planning and provision of safe, patient care
- Develop critical analytical skills to identify issues and evaluate evidence to make informed decisions
- Communicate effectively in oral and written forms

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sciences to include Anatomy and Physiology</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>English Composition</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Social Science</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Statistics ¹</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>30</td>
</tr>
</tbody>
</table>

¹ STAT 180 Introduction to Statistics or equivalent is a prerequisite course for NURS 410 Evidence Based Nursing Research and NURS 430 Current Nursing Issues and Trends.
MAJORS

Bachelor of Arts/Bachelor of Science Major Program Requirements

A major program within a single discipline requires at least 30, but no more than 48, credits. All must be graded credits. Students must take at least one-half of the major program at Mary Washington, earning a grade-point average of 2.00 in the courses. Many students complete two major programs to satisfy diverse personal or career interests. The maximum overlap allowed in the case of double majors is nine (9) credits. Students who intend to “double major” should also read the section titled “Second Degree or Post-Baccalaureate Major.”

Beginning in fall 2020, one Writing Intensive (WI) and one Speaking Intensive (SI) course must be taken in the major. This requirement applies to all students declaring a major, or changing to a new major, in the fall 2020 semester or thereafter.

A first time B.A./B.S. student is eligible to declare a major by submitting the Major/Minor Declaration Form to the chair of the chosen department at the end of their first year or upon the completion of 28 credits. Students are expected to have declared their major at the end of their second year. The department will assign a major advisor. The student may change to a different major simply by visiting the new academic department of interest.

In addition to majors in the traditional arts and sciences disciplines, the University offers an interdisciplinary special major program leading to a general liberal arts and studies degree (either B.A. or B.S., depending on the content of the curriculum). A student and faculty advisor may design a special major program by selecting, from two or more departments, courses that define a coherent field of concentration. Three of these interdisciplinary majors, American Studies, Interdisciplinary Science Studies, and Women and Gender Studies, have their general requirements outlined in this Catalog. In other cases, the student working with a faculty member creates the outline of an individualized special major. Examples of approved individual special majors include Biophysics, Creative Non-Fictional Writing, Criminal Justice, Linguistics, Medieval Studies, Public Affairs, and Journalism. Any student interested in developing an individual special major program must apply to the College of Arts and Sciences Curriculum Committee prior to completing five courses in the proposed special major program. The approval of the Committee is required before an individually designed special major program can be undertaken. Additional details are summarized on this list of special major requirements (https://cas.umw.edu/faculty-2/cas-faculty-governance/guidelines-for-special-majors). Majors in American Studies, Interdisciplinary Science Studies, and Women and Gender Studies may be declared through the regular major declaration process.

Bachelor of Science in Elementary Education (BSEd) Major Program Requirements

Forty-eight (48) credit hours are required. Specific major requirements are outlined on the Elementary Education major page in the catalog. One Writing Intensive (WI) and one Speaking Intensive (SI) must be taken in this major. An additional degree requirement in this program is the completion of a nine (9) credit internship.

Bachelor of Liberal Studies (BLS) Major Program Requirements

A BLS student may select from many liberal arts majors offered by the University or may choose the Leadership and Management major (p. 71), which is available only to BLS students. A BLS student may also create an approved, coherent interdisciplinary BLS Special Major (https://cas.umw.edu/bls/bls-major-programs-of-study/special-majors-for-blsl-students) from the offerings of at least two departments. At least fifteen credits in the major must be earned at the University of Mary Washington. Students must also earn a grade-point average (GPA) of at least a 2.0 in the major/concentration area. BLS students who intend to “double major” should read the section (below) titled “Second Degree or Post-Baccalaureate Major.” Beginning in fall 2020, the BLS degree program requires that one Writing Intensive (WI) and one Speaking Intensive (SI) course must be taken in the major.

Bachelor of Science in Nursing (BSN) Major Program Requirements

Thirty (30) credit hours are required. Specific major requirements are outlined on the BSN Nursing Completion Program (p. 75) page in the catalog.

Second Degree or Post-Baccalaureate Major

A student who has earned a bachelor's degree from the University of Mary Washington and wishes to pursue further undergraduate work may either complete a post-baccalaureate major and have it noted on the permanent record (with the date of completion) or earn a second degree if it is different from the first degree (for example, a subsequent B.A. or BLS, if the first degree was a B.S.).

A student who earned his or her first degree from another institution must enter Mary Washington as a transfer student, then complete the major program and general education requirements of the second degree as defined in the Academic Catalog in effect at the time of matriculation into the second degree.

Post-Baccalaureate Major

A student who has earned a degree at UMW who is completing only an additional major must complete the Major Program requirements printed in the Academic Catalog at the time of major declaration if the student has not discontinued enrollment at UMW for more than two semesters. A student returning after an absence of more than two semesters will be required to complete the major program requirements listed in the Academic Catalog in effect at the time of re-enrollment. Any B.A./B.S. student wishing to pursue a post-baccalaureate major must apply in the Office of the Registrar. A BLS student must apply in the BLS Office.

Second Degree

The student must apply for admission to the new degree program through the Office of Admissions and must earn at least 30 additional credits at Mary Washington after completion of the first degree. No more than 14 of these credits can be completed prior to matriculation for the second degree. The most appropriate 90 credits will be selected to count toward the second degree. The student must complete the major program and general education requirements in the Academic Catalog in effect at the time of matriculation into the second degree.
Accounting

**Degree:** B.S., Business Administration

The Accounting major provides students with a sound foundation to move in a broad range of professional directions in Accounting including the public, governmental, private, and not-for-profit sectors. In addition to having many UMW graduates working in these various areas, the College of Business invites many UMW accountants back to campus to interact with current students. Each September we host “Meet the Firms;” interested students are exposed to those actually in the Accounting field, many of whom are UMW alumni.

An Accounting major is required to take six (6) upper level accounting courses (in addition to Accounting 101 and 102). Taking just these six courses does NOT qualify an Accounting major to sit for the CPA examination in Virginia as CPA candidates must have successfully completed eight (8) upper level Accounting courses to take the test. Students can opt to take Accounting courses beyond what is required in order to meet the CPA candidate education requirements while an undergraduate student at UMW.

A student who has not declared a Business major is limited to taking no more than 27 hours in business or business related courses defined as those courses with the following prefixes: ACCT, BLAW, BUAD, DSCI, FINC, MKTG, MGMT, MIST, BPST, CIST, or LRSP.

Incoming students interested in pursuing a program of study in business will initially be designated as “pre-business.” Normally this designation will be held for no more than the first two years. After admission to the College of Business, a student may declare a business major.

To be admitted to the College of Business, students must have earned a cumulative grade point average of 2.0 or better after completing at least 27 college credits. Additionally, applicants will have completed the following courses for the College of Business and have earned an average GPA of 2.5 in these five courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I ¹</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Principles of Accounting II ¹</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 180</td>
<td>Introduction to Statistics (or equivalents)</td>
<td>3</td>
</tr>
</tbody>
</table>

¹ ACCT 110 Intensive Principles of Accounting may substitute for ACCT 101 Principles of Accounting I and ACCT 102 Principles of Accounting II.

In addition to the requirements above, transfer students must have earned a cumulative GPA of 2.0 in 15 semester hours taken at the University of Mary Washington and have completed 9 semester hours of required College of Business coursework with a cumulative GPA of 2.5 to be admitted to the College of Business.

The major in Business Administration is a Bachelor of Science degree. Business majors should note the degree requirements for B.S. degrees, found here (p. 28).

Additional important information is contained in the description of B.A./B.S. General Education Requirements (p. 35).

Please also note that the section of this Catalog outlining “University Academic Policies and Procedures” applies to students in the College of Business. Students with questions about general academic requirements should consult this part of the Catalog for guidance. All of the “Academic Resources” described in an earlier section of this Catalog are available as needed to students in the College of Business.

**Major Requirements**

**Required Prerequisites**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLAW 201</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>STAT 180</td>
<td>Introduction to Statistics ¹</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

¹ The following equivalent courses can be taken: ECON 361A Introductory Econometrics or PSYC 261A Introductory Statistics for Psychology.

**Common Core**

The Accounting Major is one of four majors offered within the College of Business leading to the Bachelor’s of Science degree in Business Administration. All business majors are multi-disciplinary degrees that require students master concepts from across the business disciplines: Accounting, Business Administration, Business Law, Decision Sciences, Finance, Management, Management Information Systems, and Marketing. All majors share a common core of 30 hours of business classes. This common core consists of:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I &amp; ACCT 102 Principles of Accounting II ¹</td>
<td>6</td>
</tr>
<tr>
<td>MIST 201</td>
<td>Management Information Systems and Applications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 350</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>DSCI 352</td>
<td>Analytics I: Predictive Models</td>
<td>3</td>
</tr>
<tr>
<td>DSCI 353</td>
<td>Analytics II: Optimization Models</td>
<td>3</td>
</tr>
<tr>
<td>FINC 301</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 301</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 490</td>
<td>Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 301</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

¹ ACCT 110 Intensive Principles of Accounting may be taken in place of the ACCT 101 Principles of Accounting I/ACCT 102 Principles of Accounting II sequence.

**Upper Level Electives**

Student must then complete an additional eighteen (18) credits of classes to earn a Bachelor of Science degree in Business Administration. Students may major in Accounting, Business Administration, International Business, or Marketing. Upon completion of the program, student transcripts shall state their degree (Bachelor of Science in Business Administration) and their major.
General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

American Studies

Degree: B.A., General Liberal Arts and Studies

Department of History and American Studies (https://cas.umw.edu/historyamericanstudies)

American Studies is an interdisciplinary major that enables students to explore the complex interactions of peoples, cultures, social structures, and political institutions that have shaped the experiences of peoples living in the United States. In addition to four core courses, students demonstrate the ability to transcend disciplinary boundaries by completing five (5) thematically-assembled courses from affiliated disciplines approved by an American Studies advisor and the Program Director. Example concentrations include, although are not limited to, the following: gender and sexuality, race and ethnicity, cultural expression, human rights, politics and society, and space and place.

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 201</td>
<td>Introduction to American Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one 200-level AMST course from:

| AMST 202 | Sophomore Special Topics Seminar        | 3       |
| AMST 203 | American Protest                         | 3       |
| AMST 204 | American Foodways                        | 3       |

or any other course from 205 to 210.

Select one 300-level AMST course from:

| AMST 303 | Junior Special Topics Seminar            | 3       |
| AMST 305 | American Gender and Sexuality             | 3       |
| AMST 485 | Senior Thesis                            | 3       |

Select 24 credits (eight courses) in related disciplines selected from a pre-approved list of American Studies electives as well as other courses with relevant content approved by the Program Director. ¹

Total Credits

1  Five of the eight elective courses must be assembled thematically; that is, they must be organized around a unifying line of inquiry, which must be approved by an American Studies advisor and the Program Director. Internships are encouraged, but only 3 credits can count toward the major.

The major also has a number of requirements for the eight electives: They are as follows:

- one must deal with the United States prior to 1900.
- another must deal with race and/or gender.
- The race/gender and pre-1900 requirements may be met by a single class.
- Six of the eight electives must be at the 300-level or beyond.
- To ensure breadth, no more than three of the eight elective courses may be from one of the affiliated disciplines.

Major Electives for American Studies

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 350</td>
<td>Topics in American Studies</td>
<td>3</td>
</tr>
<tr>
<td>AMST 491</td>
<td>Individual Study</td>
<td>3</td>
</tr>
<tr>
<td>AMST 499</td>
<td>Internship</td>
<td>1-12</td>
</tr>
<tr>
<td>ANTH 211</td>
<td>The Anthropology of “Race”</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 212</td>
<td>Anthropology of Gender</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 341</td>
<td>Practices of Memory</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 352A</td>
<td>American Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 354A</td>
<td>Pop Art to the Present</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 355</td>
<td>Modern Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ECON 341A</td>
<td>Public Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECON 351C</td>
<td>Poverty, Affluence, and Equality</td>
<td>3</td>
</tr>
<tr>
<td>ECON 375</td>
<td>American Economic History</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 328</td>
<td>New World Writing in the Colonial Period</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 329</td>
<td>Literature and Nation-Building in the Americas</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 330</td>
<td>Hemispheric Fiction of the Global Age</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 352</td>
<td>African American Literature Pre-1900</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 353</td>
<td>Asian-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 354</td>
<td>African American Literature Post-1900</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 355</td>
<td>American Romanticism</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 356</td>
<td>American Realism</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 357</td>
<td>Southern Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 358</td>
<td>Modern American Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 371</td>
<td>Contemporary Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 385</td>
<td>Contemporary American Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 386</td>
<td>The Graphic Novel</td>
<td>3</td>
</tr>
</tbody>
</table>

¹
in their evaluation of human differences, our courses offer opportunities
critically examine the theories that have been advanced to explain human
differences and similarities. Besides making students more aware of the
regions, we discuss the methods of cultural anthropologists; and we
focus various dimensions of cultural life or specific socio-geographic
and near-contemporary cultures and societies. Through courses that
anthropology–providing a foundation in the research methods, theories,
The Bachelor of Arts degree in Anthropology concentrates on cultural
sociologyanthropology)
apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.
Students seeking a Bachelor of Liberal Studies degree have a separate
set of BLS general education requirements (p. 36).
Electives
Elective courses are those that are not needed to fulfill a general
education requirement or major program requirement but are chosen
by the student to complete the 120 credits required for graduation with
a B.A./B.S. degree or the BLS degree. These courses may be taken
graded or pass/fail (or S/U in the case of physical education and 100-
level dance). No student in a regular B.A./B.S. program may count more
than 60 credits in a single discipline toward the 120 credits required for
graduation.

**Total Credits Required for the Degree:** 120 credits

**Anthropology**

**Degree:** B.A., Anthropology
Department of Sociology and Anthropology (https://cas.umw.edu/sociologyanthropology)

The Bachelor of Arts degree in Anthropology concentrates on cultural
anthropology—providing a foundation in the research methods, theories,
and writing practices that anthropologists use to study contemporary
and near-contemporary cultures and societies. Through courses that
focus various dimensions of cultural life or specific socio-geographic
regions, we discuss the methods of cultural anthropologists; and we
critically examine the theories that have been advanced to explain human
differences and similarities. Besides making students more aware of the
sheer complexity of what it means to be human and less ethnocentric
in their evaluation of human differences, our courses offer opportunities
for doing first-hand research in the communities of Fredericksburg and Richmond, and for those interested, elsewhere in the world as well. We also work closely with colleagues in the Department of Historic Preservation to train students interested in archaeology.

Anthropology provides an excellent background for careers in many governmental and private-sector organizations, among these museum work, publishing and journalism, advertising and market research, international business, human resources, contract archaeology, primary or secondary education, and third-world development, as well as for graduate work in anthropology and other related fields.

### Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 101</td>
<td>Introduction to Cultural and Social Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 298</td>
<td>Ethnography</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 299</td>
<td>Arguments in Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 480</td>
<td>Senior Research</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 481</td>
<td>Senior Thesis</td>
<td>3</td>
</tr>
<tr>
<td>Select 17 elective credits in anthropology</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>

1. Including up to 4 credits in ANTH 369 Field Research. Up to 6 credits in SOCG 300 - SOCG 499, HISP 207 American Archaeology, and HISP 467 Field Methods in Archaeology may be taken as electives in the major.

### General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

### Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

### Applied Physics

**Degree: B.S., Physics**

Department of Chemistry and Physics (https://cas.umw.edu/physics)

The study of physics provides the basis for understanding the fundamental laws of the physical universe. The principles of physics underlie other natural sciences and are essential to many applied sciences and technical programs. The physics program's goal is to expose students to a broad range of physical phenomena. In doing so, the program strives to meet the needs of students who will become specialists in physics, as well as numerous related fields. A secondary aim is to satisfy the interest of students who take physics to fulfill a general education requirement.

The Physics Department offers two major tracks towards a Bachelor of Science degree, Physics, and Applied Physics. Senior majors in either track may participate in undergraduate research, which could qualify as an honor thesis and/or result in a presentation at a local or national conference. The Society of Physics Students and its honorary society, Sigma Pi Sigma, have sponsored guest speakers and field trips to national laboratories and conferences.

The Applied Physics track is designed for students who have an interest and ability in the experimental and quantitative approaches to physics. This track provides a solid preparation for almost any technical career, because it teaches students how to analyze complex problems and it gives students a strong quantitative background that can be applied in any technical field. Applied Physics students work with the latest high-tech equipment and are prepared for in-demand careers in industry. UMW’s curriculum reflects that practical approach, preparing students for a seamless transition from college to industry.

Credit for only one introductory physics sequence below can be counted toward the degree requirement.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 101</td>
<td>General Physics w/Lab and General Physics w/Lab</td>
<td>8</td>
</tr>
<tr>
<td>PHYS 101 &amp; PHYS 102</td>
<td>General Physics w/Lab and General Physics w/Lab</td>
<td>7</td>
</tr>
<tr>
<td>PHYS 108</td>
<td>General Physics w/Lab and General Physics</td>
<td>7</td>
</tr>
<tr>
<td>PHYS 103A &amp; PHYS 104</td>
<td>Elementary Astronomy w/Lab and Elementary Astronomy</td>
<td>8</td>
</tr>
<tr>
<td>PHYS 105 &amp; PHYS 106</td>
<td>University Physics w/lab and University Physics w/lab</td>
<td>7</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>University Physics w/lab and University Physics</td>
<td>7</td>
</tr>
</tbody>
</table>

Select 7-8 credits of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 201</td>
<td>Thermodynamics and Statistical Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 283</td>
<td>Electronics w/Lab</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 292</td>
<td>Optics w/Lab</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 302</td>
<td>Classical Mechanics I w/Lab</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 330</td>
<td>Electricity and Magnetism I w/Lab</td>
<td>3</td>
</tr>
</tbody>
</table>

Select 3-4 credits of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 224A</td>
<td>Multivariable Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MATH 300</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 312</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 325</td>
<td>Discrete Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>
Students have access to scholarships and grants that allow students to conduct on-site research and exciting learning. Department and University resources also include JSTOR, Artstor, and other databases to support opportunities for expansive holdings in Art History and related disciplines as well as subscriptions to our research. University resources in Simpson Library include strong on student-initiated research topics and invite students to join us on research and professional activities. We work closely with students to solve problems, and think critically. Faculty are teacher-scholars engaged in research and professional activities. We work closely with students on student-initiated research topics and invite students to join us on our research. University resources in Simpson Library include strong holdings in Art History and related disciplines as well as subscriptions to JSTOR, Artstor, and other databases to support opportunities for expansive and exciting learning. Department and University resources also include scholarships and grants that allow students to conduct on-site research to look at and study art; grants have allowed our students to travel throughout the US as well as Mexico, African nations, and European countries on research.

Proximity to Washington, D.C., Richmond, Baltimore, and New York City, gives students first-hand experiences of art works. Visiting scholars and artists offer students important networking opportunities, as well as lectures on recent developments in the field. In addition, UMW Galleries bring exciting exhibitions and events to campus while advancing the educational goals of the University through the collection, exhibition, and interpretation of works of art. Students may intern with UMW Galleries as well as the University’s Belmont, Gari Melchers Home and Studio, and the James Monroe Museum and Memorial Library to gain experience as catalogers, researchers, administrative assistants, and exhibition installers. Internships allow our students to gain valuable experience and career contacts by working in museums and art institutions not only in Fredericksburg, but in Washington, D.C., Richmond, and beyond. Many of our students have gone on for graduate study in Art History at major institutions and are now employed by museums, galleries, cultural centers, and universities. Others have gone into library science, law, art therapy, publishing, retail design, and business. Our alumnae/i are generous supporters to our program and mentors to current majors.

## General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

### Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

### Total Credits Required for the Degree: 120 credits

## Art History

### Degree: B.A., Art History

Department of Art and Art History (https://cas.umw.edu/art)

The Bachelor of Arts degree in Art History provides the background for a life-long appreciation of art and the intellectual framework for conducting research in art history. Our discipline explores the cultural, philosophical, historical and global contexts of visual human expressions. Classes focus on styles, issues, media, and individuals and give a broad overview of the complexity of art. Course offerings include both historical periods and thematic approaches that demonstrate the interconnectedness as well as diversity of artistic expression and the rich history of our discipline. Art History faculty connections to UMW current and developing programs in American Studies, Asian Studies, Contemplative Studies, Disability Studies, Museum Studies, and Women’s and Gender Studies emphasize our commitment to working across disciplines and seeing Art History as central to the Liberal Arts here at UMW.

The Art History major provides a foundation for any type of career that requires a strong and developed ability to read and write, identify and solve problems, and think critically. Faculty are teacher-scholars engaged in research and professional activities. We work closely with students on student-initiated research topics and invite students to join us on our research. University resources in Simpson Library include strong holdings in Art History and related disciplines as well as subscriptions to JSTOR, Artstor, and other databases to support opportunities for expansive and exciting learning. Department and University resources also include scholarships and grants that allow students to conduct on-site research to look at and study art; grants have allowed our students to travel throughout the US as well as Mexico, African nations, and European countries on research.

### Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 114A</td>
<td>History of Western Art I</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 115A</td>
<td>History of Western Art II</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 118</td>
<td>History of Asian Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 303</td>
<td>Methods of Art History</td>
<td>3</td>
</tr>
</tbody>
</table>

Select nine (9) additional courses in Art History including:

- At least one 400-level seminar course (ARTH 460 or ARTH 470)
- One course from Asian/Global
- One course from Ancient
- Two courses from different period areas (Medieval, Renaissance, Baroque)
- One course from Modern and Contemporary
- Three additional courses in Art History

### Total Credits 39

1 ARTS 105 Design Principles may count as an elective in the major.

## General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

### Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.
Biochemistry

Degree: B.S., Chemistry
Department of Chemistry and Physics (https://cas.umw.edu/chemistry)

Chemistry, the study of the structure, properties, and reactivity of matter, has been called the "central science" because it is central to a fundamental understanding of biology, pharmacy, medicine, agriculture, geology, engineering, and physics. The Bachelor of Science in Chemistry degree program offers a modern curriculum for the study of chemistry within the general framework of a liberal arts and sciences education. It prepares a student for graduate, medical, or dental school; for employment in the chemical industry; or for secondary school teaching. In addition, several courses provide an important foundation in chemical theory and practice for the study of biology, geology, environmental science, and the health sciences. The program has been approved by the American Chemical Society (ACS) to offer certified degrees in Chemistry. In general, chemistry is a solid major program around which one can build a career-focused set of courses from other disciplines, e.g., with mathematics and computer science for chemical engineering or industrial chemistry; with economics and business administration for industrial chemistry; with biology for the health sciences; and with geology for energy or environmental research. The Biochemistry track provides students interested in this interdisciplinary subject a path to explore the chemical and molecular fundamentals that control the structures and metabolic functions of living systems.

The department has well-equipped laboratories to support and reinforce classroom instruction and to provide opportunities for research. Instrumentation for spectroscopy includes ultraviolet-visible and infrared spectrophotometers; two nuclear magnetic resonance spectrometers; and atomic absorption and emission spectrometers with both flame and inductively coupled plasma sources. Other major equipment items include a scanning probe microscope, a gas chromatograph/mass spectrometer system; several other gas and liquid chromatographs; electrochemical analyzers; and a differential scanning calorimeter.

Majors are encouraged to fulfill the general education experiential learning requirement by completing URES 197 Undergraduate Research, CHEM 491 Individual Study, CHEM 493 Chemical Outreach, or CHEM 499 Internship. Alternatively, majors may meet this requirement by participating in an approved summer research program, either the UMWB Summer Research Program (or a similar program at another college or university) or a program in an industrial laboratory. To complete the experiential learning requirement through a summer research experience, contact the department chair for more details.

During the senior year qualified students may pursue Honors in Chemistry by completing an independent research project and writing and defending a thesis. Students interested in post-graduate study or industrial careers in chemistry should pursue an ACS-certified degree. Students completing the Biochemistry track will be prepared for careers in medical, pharmaceutical, or biotechnological fields.

Biochemistry Track Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 121</td>
<td>Biological Concepts</td>
<td>4</td>
</tr>
<tr>
<td>&amp; BIOL 132</td>
<td>and Organism Function and Diversity</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 30</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 31</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 32</td>
<td>Biochemistry Laboratory I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 33</td>
<td>Biochemistry Laboratory II</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 34</td>
<td>Physical Chemistry I</td>
<td>2</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 415</td>
<td>Nutrition and Metabolism</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 440</td>
<td>Biology of Cancer</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 443</td>
<td>The Biology and Biochemistry of Proteins</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 444</td>
<td>Bioinformatics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 471</td>
<td>Topics in Biology</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits 48

1. MATH 122 Calculus II and PHYS 105 University Physics, w/lab and PHYS 106 University Physics w/Lab are prerequisites to CHEM 383A Physical Chemistry I and should be completed before the junior year.
2. Approval required

Students interested in graduate studies in biochemistry are encouraged to complete additional BIOL coursework such as BIOL 430 Molecular Biology of the Gene. Students wishing to earn an ACS-certified Biochemistry Track must complete CHEM 253 Chemical Analysis I, CHEM 254 Chemical Analysis II, CHEM 343 Inorganic Chemistry, and CHEM 345 Organic Chemistry Laboratory.

General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or SU in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Biology

Degree: B.S., Biology
Department of Biological Sciences (https://cas.umw.edu/biology)

Biology encompasses the study of all living things and their interaction with the environment. The Department faculty is dedicated to providing students with a strong undergraduate education in the fundamental principles of biology, while offering opportunities and encouraging students to pursue specialized areas of interest.

The Bachelor of Science in Biology degree prepares students for future careers in life sciences research, teaching, and biotechnology. Many graduates pursue advanced degrees in specialized areas such as cellular and molecular biology, bioinformatics, physiology, immunology, entomology, microbiology, ecology, and environmental engineering.

The biology core curriculum is designed to ensure thorough command of the scientific method and access to inquiry-based learning experiences, while providing a balanced background in cell and molecular biology, organismal biology, and ecology. Elective courses cover a wide variety of specialized topics to meet students’ particular interests in biology. An array of laboratory and field experiences further develop working knowledge of the scientific method, teach specific experimental techniques, and promote ongoing development of quantitative and analytical skills.

All of the equipment and facilities in the department are available for undergraduate student use. Collections of microscope slides, vertebrate and invertebrate specimens and a herbarium are available to enhance learning. Advanced laboratory instrumentation such as spectrophotometers, thermal cyclers, ultracentrifuges, and two electron microscopes allow students to engage in sophisticated research. The department also has appropriate field equipment for collecting biological data from the terrestrial, aquatic, and estuarine habitats surrounding campus.

Outstanding junior and senior biology majors have the opportunity to participate in the undergraduate research program. Working with a faculty mentor, the student explores the literature, defines an original research problem, and utilizes the appropriate research and analytical techniques to investigate the problem. On many occasions this work results in presentations at state, regional, and national scientific meetings. Research students who meet minimum requirements (3.0 overall GPA and a 3.25 average in biology) may pursue Honors in Biology by writing and defending a thesis on their research project. Students can also gain focused research experience via participation in the university’s undergraduate research (URES 197 Undergraduate Research) program.

The internship program also offers students an opportunity to gain valuable career related experience. Internship credits do not count towards the biology major, but many biology majors have taken advantage of this program to gain experience and to confirm their career objectives.

In addition to the “Beyond the Classroom” requirement course list (p. 35), the department has established another mechanism by which biology majors may satisfy the experiential learning general education requirement. The Biology service learning option requires students to apply knowledge and skills acquired in their formal courses and to reflect upon how such application has augmented their education.

Students will complete a service-learning contract in which they will:

1. identify the agencies for which they will conduct their service,
2. indicate the biology faculty members who will evaluate the academic component of their activities, and
3. describe the duties that they will carry out for these agencies.

Students must complete 40 hours of service within 12 months of submitting their contracts. Students completing their community service during their last semester must complete all requirements by March 1 (November 1 for those finishing in December). Contact the biology department chair for additional details.

**Major Requirements**

Students must earn a C- or better in most BIOL required courses that serve as prerequisites for other BIOL courses. Students must also earn a C- or better in the core courses (BIOL 210 Introduction to Ecology and Evolution, BIOL 260 Biostatistics and Research Design, BIOL 340 Cellular Biology, BIOL 341 General Genetics) to graduate with a degree in Biology. See also the Department of Chemistry’s minimum grade requirements for CHEM 111 General Chemistry I, CHEM 112 General Chemistry II.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 132</td>
<td>Organism Function and Diversity</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 126</td>
<td>Phage Hunters II</td>
<td></td>
</tr>
<tr>
<td>BIOL 210</td>
<td>Introduction to Ecology and Evolution</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 260</td>
<td>Biostatistics and Research Design</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 340</td>
<td>Cellular Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 341</td>
<td>General Genetics</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 451</td>
<td>Seminar</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 412</td>
<td>Endocrinology</td>
<td></td>
</tr>
<tr>
<td>BIOL 427</td>
<td>Ornithology</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Molecular Biology of the Gene</td>
<td></td>
</tr>
<tr>
<td>BIOL 432</td>
<td>Virology</td>
<td></td>
</tr>
<tr>
<td>BIOL 439</td>
<td>Developmental Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 462</td>
<td>Research Practices in Plant Ecology</td>
<td></td>
</tr>
<tr>
<td>BIOL 472</td>
<td>Research-Intensive Topics in Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 491</td>
<td>Special Problems in Biology</td>
<td></td>
</tr>
<tr>
<td>Select 2 laboratory classes (one designated Research Intensive):</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>BIOL 132</td>
<td>Organism Function and Diversity</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 126</td>
<td>Phage Hunters II</td>
<td></td>
</tr>
<tr>
<td>BIOL 210</td>
<td>Introduction to Ecology and Evolution</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 260</td>
<td>Biostatistics and Research Design</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 340</td>
<td>Cellular Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 341</td>
<td>General Genetics</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 451</td>
<td>Seminar</td>
<td>2</td>
</tr>
<tr>
<td>Select 12 additional hours of BIOL electives</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>40</td>
</tr>
</tbody>
</table>

1 These are prerequisites for various upper-level courses, and should be completed during the second year.

2 CHEM 317 Biochemistry I counts as an elective in the BIOL major.

Note: BIOL 132 Organism Function and Diversity, or BIOL 125 Phage Hunters I, BIOL 126 Phage Hunters II, and CHEM 111 General Chemistry I, CHEM 112 General Chemistry II are prerequisites for the biology major’s core curriculum and should be taken in the student’s first year.

All graduating students must participate in the assessment of the major.

**General Education Requirements**

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.
Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Biomedical Sciences

Degree: B.S., Biology
Department of Biological Sciences (https://cas.umw.edu/biology)

Biology encompasses the study of all living things and their interaction with the environment. The Department faculty is dedicated to providing students with a strong undergraduate education in the fundamental principles of biology, while offering opportunities and encouraging students to pursue specialized interests in health-related professions.

The Biomedical Sciences major is designed for students interested in pursuing careers in the health sciences. The track provides students with the knowledge and the skills to be successful candidates for graduate study in a broad range of health-related fields including medical, dental, physician’s assistant, nursing, physical therapy, and more. Students who complete all requirements earn the degree of Bachelor of Science (B.S.) in Biology with a major in Biomedical Science.

This program provides discipline-specific knowledge required for students to pursue graduate programs in the health sciences. It provides a thorough foundation in biology’s fundamental principles including organism function, cell biology, genetics, physiology and the research process. Command of these core concepts is necessary for students to understand complex biological problems and to apply their knowledge to health-related problems. Four health related natural science electives are required so that students can develop a strong understanding of the basis of human health. Additionally, students must choose one course on societal perspectives on health which will expose students to a variety of health care concerns and provide a framework for the students to understand and have empathy for their patients.

The Biomedical Sciences major also emphasizes skills that students need to be effective health care providers. The capstone experience for this track focuses on the clinical experiences that are necessary for students to gain perspective on the true nature of their chosen profession and required of all health-related graduate programs. Students can utilize their health-related internships, study abroad, or research experience to apply what they have learned and satisfy the beyond the classroom learning requirement.

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 126</td>
<td>Phage Hunters II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 132</td>
<td>Organism Function and Diversity</td>
<td></td>
</tr>
<tr>
<td>BIOL 260</td>
<td>Biostatistics and Research Design</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 340</td>
<td>Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 341</td>
<td>General Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 413</td>
<td>Human Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>

Four health related natural science electives (at least two courses must have labs) from:

- BIOL 301 Anatomy Chordates, w/lab
- or BIOL 384 Human Anatomy
- BIOL 371 Microbiology
- BIOL 406 Histology
- BIOL 410 Neurobiology
- BIOL 412 Endocrinology
- BIOL 414 Exercise Physiology
- BIOL 415 Nutrition and Metabolism
- BIOL 430 Molecular Biology of the Gene
- BIOL 432 Virology
- BIOL 439 Developmental Biology
- BIOL 440 Biology of Cancer
- BIOL 441 Immunology
- BIOL 451 Seminar
- BIOL 472 Research-Intensive Topics in Biology
- CHEM 211 Organic Chemistry I
- CHEM 317 Biochemistry I

One course on the societal perspective on health from:

- PHIL 226 Medical Ethics
- PSYC 100 General Psychology
- SOCG 334 Medical Sociology
- SOCG 335 Global Perspectives on Health and Illness

One Capstone Experience (minimum 3 credits) from:

- BIOL 491 Special Problems in Biology
- BIOL 499 Internship

Total Credits 40

1. Approved sections only.
2. Approved sections only.
3. The “Writing about Medicine” topic (202D) of ENGL 202 Writing Seminar may also be used to satisfy this requirement.
4. An approved study abroad experience or a Biology Research Intensive course may also be used to satisfy this requirement.

Business Administration

Degree: B.S., Business Administration
College of Business (https://business.umw.edu/about-the-college)

A Business Administration major prepares graduates for a variety of opportunities. In this major students can opt to focus in either Management or Management Information Systems, or can stay a generalist. The largest major in the College of Business, students like its flexibility and appreciate the opportunities it offers. Graduates with the Business Administration major work for nonprofits, governments, Fortune 500 companies, and some have started their own entrepreneurial ventures.

A student who has not declared a Business major is limited to taking no more than 27 hours in business or business related courses defined as those
Incoming students interested in pursuing a program of study in business will initially be designated as “pre-business.” Normally this designation will be held for no more than the first two years. After admission to the College of Business, a student may declare a business major.

To be admitted to the College of Business, students must have earned a cumulative grade point average of 2.0 or better after completing at least 27 college credits. Additionally, applicants will have completed the following courses for the College of Business and have earned an average GPA of 2.5 in these five courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 180</td>
<td>Introduction to Statistics (or equivalents)</td>
<td>3</td>
</tr>
</tbody>
</table>

1 ACCT 110 Intensive Principles of Accounting may substitute for ACCT 101 Principles of Accounting I and ACCT 102 Principles of Accounting II.

In addition to the requirements above, transfer students must have earned a cumulative GPA of 2.0 in 15 semester hours taken at the University of Mary Washington and have completed 9 semester hours of required College of Business coursework with a cumulative GPA of 2.5 to be admitted to the College of Business.

The major in Business Administration is a Bachelor of Science degree. Business majors should note the degree requirements for B.S. degrees, found here (p. 28).

Additional important information is contained in the description of B.A./B.S. General Education Requirements (p. 35).

Please also note that the section of this Catalog outlining “University Academic Policies and Procedures” applies to students in the College of Business. Students with questions about general academic requirements should consult this part of the Catalog for guidance. All of the “Academic Resources” described in an earlier section of this Catalog are available as needed to students in the College of Business.

**Major Requirements**

**Required Prerequisites**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLAW 201</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>STAT 180</td>
<td>Introduction to Statistics (or equivalents)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Select 18 hours of upper-level electives within the College of Business</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 30

1 Or its equivalent ECON 361A Introductory Econometrics or PSYC 261A Introductory Statistics for Psychology

2 Required prerequisites for certain courses in the major.

A maximum of three (3) credits of 499 courses may count toward the upper level elective requirement.

**Common Core**

The Business Administration Major is one of four majors offered within the College of Business leading to the Bachelor’s of Science degree in Business Administration. All business majors are multi-disciplinary degrees that require students master concepts from across the business disciplines: Accounting, Business Administration, Business Law, Decision Sciences, Finance, Management, Management and Information Systems, and Marketing. All majors share a common core of 30 hours of business classes. This common core consists of:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I</td>
<td>6</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>MIST 201</td>
<td>Management Information Systems and Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

**Upper-Division Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 350</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>DSCI 352</td>
<td>Analytics I: Predictive Models</td>
<td>3</td>
</tr>
<tr>
<td>DSCI 353</td>
<td>Analytics II: Optimization Models</td>
<td>3</td>
</tr>
<tr>
<td>FINC 301</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 301</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 490</td>
<td>Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 301</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits 30

1 ACCT 110 Intensive Principles of Accounting may be taken in place of the ACCT 101 Principles of Accounting I/ACCT 102 Principles of Accounting II sequence.

**Upper Level Electives**

Students must then complete an additional eighteen (18) credits of classes to earn a Bachelor of Science degree in Business Administration. Students may major in Business Administration, Accounting, International Business, or Marketing. Upon completion of the program, student transcripts shall state their degree (Bachelor of Science in Business Administration) and their major.

**General Education Requirements**

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

**Electives**

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.
Total Credits Required for the Degree: 120 credits

Chemistry

Degree: B.S., Chemistry
Department of Chemistry and Physics (https://cas.umw.edu/chemistry)

Chemistry, the study of the structure, properties, and reactivity of matter, has been called the "central science" because it is central to a fundamental understanding of biology, pharmacy, medicine, agriculture, geology, engineering, and physics. The Bachelor of Science in Chemistry degree program offers a modern curriculum for the study of chemistry within the general framework of a liberal arts and sciences education. It prepares a student for graduate, medical, or dental school; for employment in the chemical industry; or for secondary school teaching. In addition, several courses provide an important foundation in chemical theory and practice for the study of biology, geology, environmental science, and the health sciences. The program has been approved by the American Chemical Society (ACS) to offer certified degrees in Chemistry. In general, chemistry is a solid major program around which one can build a career-focused set of courses from other disciplines, e.g., with mathematics and computer science for chemical engineering or industrial chemistry; with economics and business administration for industrial chemistry; with biology for the health sciences; and with geology for energy or environmental research. The Biochemistry track provides students interested in this interdisciplinary subject a path to explore the chemical and molecular fundamentals that control the structures and metabolic functions of living systems.

The department has well-equipped laboratories to support and reinforce classroom instruction and to provide opportunities for research. Instrumentation for spectroscopy includes ultraviolet-visible and infrared spectrophotometers; two nuclear magnetic resonance spectrometers; and atomic absorption and emission spectrometers with both flame and inductively coupled plasma sources. Other major equipment items include a scanning probe microscope, a gas chromatograph/mass spectrometer system; several other gas and liquid chromatographs; electrochemical analyzers; and a differential scanning calorimeter.

Majors are encouraged to fulfill the general education experiential learning requirement by completing URES 197 Undergraduate Research, CHEM 491 Individual Study, CHEM 493 Chemical Outreach, or CHEM 499 Internship. Alternatively, majors may meet this requirement by participating in an approved summer research program, either the UMW Summer Research Program (or a similar program at another college or university) or a program in an industrial laboratory. To complete the experiential learning requirement through a summer research experience, contact the department chair for more details.

During the senior year qualified students may pursue Honors in Chemistry by completing an independent research project and writing and defending a thesis. Students interested in postgraduate study or industrial careers in chemistry should pursue an ACS-certified degree. Students completing the Biochemistry track will be prepared for careers in medical, pharmaceutical, or biotechnological fields.

Chemistry Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 253</td>
<td>Chemical Analysis I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 254</td>
<td>Chemical Analysis II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 257</td>
<td>Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 258</td>
<td>Biochemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 264</td>
<td>Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 265</td>
<td>Inorganic Chemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 267</td>
<td>Physical Chemistry I</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 268</td>
<td>Physical Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 423</td>
<td>Experimental Methods in Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 453</td>
<td>Seminar</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Credits: 120

ACS-certified Chemistry Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 383A</td>
<td>Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 384A</td>
<td>Physical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 387A</td>
<td>Physical Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 388A</td>
<td>Physical Chemistry Laboratory II</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 423</td>
<td>Experimental Methods in Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 453</td>
<td>Seminar</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Credits: 48

1 MATH 122 Calculus II and PHYS 105 University Physics, w/lab and PHYS 106 University Physics w/Lab or PHYS 101 General Physics w/Lab and PHYS 102 General Physics w/Lab are prerequisites to CHEM 383A Physical Chemistry I and should be completed before the junior year.

General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

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Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more...
than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Classical Archaeology

Degree: B.A., Classics
Department of Classics, Philosophy, and Religion (https://cas.umw.edu/clpr)

Classics focuses on the study of the languages, literatures, and civilizations of ancient Greece and Rome. Since many of the ideas and principles which emerged in the classical world are basic to Western culture, courses in Classics apply to the study of almost all the liberal arts and sciences.

Students pursuing a Bachelor of Arts degree in Classics may choose among three concentrations: Latin (see Latin); an interdisciplinary concentration in Classical Civilization; or an interdisciplinary concentration in Classical Archaeology. Students develop their major programs in consultation with a faculty advisor.

The concentration in Classical Archaeology offers special preparation to those students who wish to pursue museum or field work in archaeology. A concentration in Classical Archaeology joined with a related major such as anthropology, art history, historic preservation, history, or religious studies will enable a student to add depth of knowledge about the ancient world to his or her study of those disciplines.

Opportunities for study and excavation abroad are readily available to the Classics major. Mary Washington is a member of the Intercollegiate Center for Classical Studies in Rome, the American Academy in Rome, and the American School of Classical Studies in Athens. Students are welcome to consult with the Classics faculty about programs at these and other institutions. Qualified students are invited to join Eta Sigma Phi, the national honor society for Classics, and to try for departmental honors in their senior year.

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAS 103</td>
<td>Ideas and Culture: Greek Civilization</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 105</td>
<td>Ideas and Culture: Roman Civilization</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LATN 202</td>
<td>Intermediate Latin &amp; GREK 202 Intermediate Greek</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>6 credits in upper-level Latin (or, in exceptional cases and with approval, upper-level Greek) courses</td>
<td></td>
</tr>
<tr>
<td>Select 6 credits of the following:</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>CLAS/ARTH 305</td>
<td>Egyptian and Near Eastern Art and Archaeology</td>
<td></td>
</tr>
<tr>
<td>ARTH 310</td>
<td>Greek Art</td>
<td></td>
</tr>
<tr>
<td>ARTH 311</td>
<td>Roman Art</td>
<td></td>
</tr>
<tr>
<td>HIST 331A</td>
<td>History of Ancient Greece</td>
<td></td>
</tr>
<tr>
<td>HIST 332</td>
<td>History of Ancient Rome</td>
<td></td>
</tr>
<tr>
<td>Select 9 credits in approved archaeology courses, out of which at least 6 credits must be in Classics</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

Approved Archaeology Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH/CLAS 305</td>
<td>Egyptian and Near Eastern Art and Archaeology</td>
<td>1 3</td>
</tr>
<tr>
<td>CLAS 351</td>
<td>Special Studies in Classical Civilization</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 352</td>
<td>Special Studies in Classical Civilization</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 380</td>
<td>Archaeology of the Greek and Roman World</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 390</td>
<td>Ancient City</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 485</td>
<td>Guided Research</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 491</td>
<td>Individual Study</td>
<td>1-4</td>
</tr>
<tr>
<td>CLAS 492</td>
<td>Individual Study</td>
<td>1-4</td>
</tr>
<tr>
<td>CLAS 499</td>
<td>Internship</td>
<td>1-4</td>
</tr>
<tr>
<td>ARTH 315A</td>
<td>Art Museum Studies</td>
<td>3</td>
</tr>
<tr>
<td>HISP 207</td>
<td>American Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>HISP 462A</td>
<td>Laboratory Methods in Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>HISP 463</td>
<td>Laboratory in Museum Design and Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>HISP 467</td>
<td>Field Methods in Archaeology</td>
<td>3</td>
</tr>
</tbody>
</table>

1 If not already counted as fulfilling the requirement listed above.
2 With permission.

LATN 425 Latin Tutoring Practicum does not count in the major.

General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken with S/U or pass/fail (or A or C in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Classical Civilization

Degree: B.A., Classics
Department of Classics, Philosophy, and Religion (https://cas.umw.edu/clpr)

Classics focuses on the study of the languages, literatures, and civilizations of ancient Greece and Rome. Since many of the ideas and principles which emerged in the classical world are basic to Western culture, courses in Classics apply to the study of almost all the liberal arts and sciences.

Students pursuing a Bachelor of Arts degree in Classics may choose among three concentrations: Latin (see Latin); an interdisciplinary concentration in Classical Civilization; or an interdisciplinary concentration in Classical Archaeology.
concentration in Classical Archaeology. Students develop their major programs in consultation with a faculty advisor.

While some Classics majors who choose a concentration in Classical Civilization include teacher licensure in their schedule, others take a second major in a related field, such as history, philosophy, religious studies, English, business, or modern languages. With such a background, graduates have a wide range of opportunities after college, including museum work, archaeology, graduate study, teaching, and translating.

The concentration in Classical Archaeology offers special preparation to those students who wish to pursue museum or field work in archaeology. A concentration in Classical Archaeology joined with a related major such as anthropology, art history, historic preservation, history, or religion will enable a student to add depth of knowledge about the ancient world to his or her study of those disciplines.

Opportunities for study and excavation abroad are readily available to the Classics major. Mary Washington is a member of the Intercollegiate Center for Classical Studies in Rome, the American Academy in Rome, and the American School of Classical Studies in Athens. Students are welcome to consult with the Classics faculty about programs at these and other institutions. Qualified students are invited to join Eta Sigma Phi, the national honor society for Classics, and to try for departmental honors in their senior year.

Major Requirements

Thirty-three (33) credits in CLAS 103-499 and approved courses relating to Classical Civilization, including CLAS 103 Ideas and Culture: Greek Civilization and CLAS 105 Ideas and Culture: Roman Civilization, and LATN 202 Intermediate Latin, GREEK 202 Intermediate Greek, or at least 3 credits in an upper level Latin or Greek course. At least 6 of the 33 credits (in Classics and approved courses) must be at the level of 299 or above.

Approved Courses Relating to Classical Civilization are any Courses in Greek or Latin

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 114A</td>
<td>History of Western Art I</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 305</td>
<td>Egyptian and Near Eastern Art and Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 310</td>
<td>Greek Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 311</td>
<td>Roman Art</td>
<td>3</td>
</tr>
<tr>
<td>CPRD 299</td>
<td>Mysterium humanum Studies¹</td>
<td>3</td>
</tr>
<tr>
<td>CPRD 301</td>
<td>Studies in Ancient Languages¹</td>
<td>3</td>
</tr>
<tr>
<td>CPRD 302</td>
<td>Studies in Ancient Languages¹</td>
<td>3</td>
</tr>
<tr>
<td>CPRD 331</td>
<td>Cross-disciplinary Topics in Classics, Philosophy, and Religion¹</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 319</td>
<td>Shakespeare: The Early Plays</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 320</td>
<td>Shakespeare: Later Plays</td>
<td>3</td>
</tr>
<tr>
<td>HIST 331A</td>
<td>History of Ancient Greece</td>
<td>3</td>
</tr>
<tr>
<td>HIST 332</td>
<td>History of Ancient Rome</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 395</td>
<td>Italian Literature in Translation: Dante’s Divine Comedy</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 396</td>
<td>Italian Literature in Translation: Masterpieces of the Renaissance</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 201</td>
<td>Ancient Greek Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 310</td>
<td>Plato</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELG 206A</td>
<td>Christian Beginnings</td>
<td>3</td>
</tr>
<tr>
<td>RELG 211</td>
<td>Greek and Roman Religion</td>
<td>3</td>
</tr>
<tr>
<td>RELG 231</td>
<td>Special Studies in Religion¹</td>
<td>3</td>
</tr>
<tr>
<td>RELG 331</td>
<td>Special Studies in Religion¹</td>
<td>3</td>
</tr>
<tr>
<td>RELG 341</td>
<td>Major Religious Thinkers¹</td>
<td>3</td>
</tr>
</tbody>
</table>

¹ With Permission.

LATN 425 Latin Tutoring Practicum does not count in the major.

General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Communication and Digital Studies

Degree: B.A., Communication and Digital Studies

Department of Communication and Digital Studies (https://cas.umw.edu/els)

Communication courses enhance understanding of and skill in oral communication by introducing students to communication theories and by providing opportunities to practice communication in a variety of settings. Courses on the 200-level are performance courses, kept small to allow for individualized instruction.

Courses on the 300-level offer a historical and theoretical approach to the study of human communication behavior and examine how communication activities affect society. Students interested in more intensive training in persuasive speaking can join the University debate team and receive academic credit for participating in regional and national tournaments.

Students who pursue the Communication and Digital Studies major will develop the critical tools to study and use digital technology to effectively communicate in a dynamic new media environment. The interdisciplinary major, which leads to a general liberal arts and studies degree (Bachelor of Arts), provides students with the means to navigate the rapidly changing nature of both communication networks and the world they live in. The course work in this major focuses on new theoretical directions in the field of digital studies, and provides students with a dynamic understanding of how communication practices currently work through digital means and how those practices can be adapted to meet their future needs.
## Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication Core</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 205</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>COMM 206</td>
<td>Small Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 340</td>
<td>Introduction to Rhetoric and Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 341</td>
<td>Communication Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>COMM 460</td>
<td>Seminar in Digital Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td><strong>Digital Studies Core</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ARTS 104</td>
<td>Digital Approaches to Fine Art</td>
<td></td>
</tr>
<tr>
<td>CPSC 106</td>
<td>Digital Storytelling</td>
<td></td>
</tr>
<tr>
<td>CPSC 110</td>
<td>Introduction to Computer Science</td>
<td></td>
</tr>
<tr>
<td>DGST 101</td>
<td>Introduction to Digital Studies</td>
<td>3</td>
</tr>
<tr>
<td>DGST 395</td>
<td>Applied Digital Studies</td>
<td>3</td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Select four of the following, with at least two at the 300 or 400 level:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTS 219</td>
<td>Digital Video Production</td>
<td></td>
</tr>
<tr>
<td>ARTS 226</td>
<td>Animation</td>
<td></td>
</tr>
<tr>
<td>ARTS 316</td>
<td>Experimental Documentary</td>
<td></td>
</tr>
<tr>
<td>ARTS 341</td>
<td>Multiple Imaging</td>
<td></td>
</tr>
<tr>
<td>ARTS 454</td>
<td>Approaches to Video Art</td>
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<tr>
<td>COMM 209</td>
<td>Argumentation</td>
<td></td>
</tr>
<tr>
<td>COMM 353</td>
<td>Visual Rhetoric</td>
<td></td>
</tr>
<tr>
<td>COMM 357</td>
<td>Social Media</td>
<td></td>
</tr>
<tr>
<td>COMM 370</td>
<td>Topics in Speech Communication</td>
<td></td>
</tr>
<tr>
<td>COMM 375</td>
<td>Not-For-Profit Communication Campaigns</td>
<td></td>
</tr>
<tr>
<td>COMM 376</td>
<td>Gender and Communication</td>
<td></td>
</tr>
<tr>
<td>COMM 491</td>
<td>Individual Study</td>
<td></td>
</tr>
<tr>
<td>COMM 499</td>
<td>Internship</td>
<td></td>
</tr>
<tr>
<td>DGST 201</td>
<td>Tinkering, Hacking, and Making</td>
<td></td>
</tr>
<tr>
<td>DGST 301</td>
<td>Special Topics in Digital Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL 203</td>
<td>Writing with Digital Media</td>
<td></td>
</tr>
<tr>
<td>ENGL 245</td>
<td>Introduction to Cinema Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL 252</td>
<td>Literature and Adaptation</td>
<td></td>
</tr>
<tr>
<td>ENGL 253</td>
<td>Games and Culture</td>
<td></td>
</tr>
<tr>
<td>ENGL 300</td>
<td>Investigative Journalism</td>
<td></td>
</tr>
<tr>
<td>ENGL 301</td>
<td>Magazine Journalism</td>
<td></td>
</tr>
<tr>
<td>ENGL 314</td>
<td>The Literary Journal: Professional Practice in Publishing and Editing</td>
<td></td>
</tr>
<tr>
<td>ENGL 345</td>
<td>Film, Text, and Culture</td>
<td></td>
</tr>
<tr>
<td>ENGL 350</td>
<td>Electronic Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 359</td>
<td>Transmedia Fiction</td>
<td></td>
</tr>
<tr>
<td>ENGL 386</td>
<td>The Graphic Novel</td>
<td></td>
</tr>
<tr>
<td>ENGL 451</td>
<td>Seminar in New Media</td>
<td></td>
</tr>
<tr>
<td>HISP 303A</td>
<td>Archives and Society</td>
<td></td>
</tr>
<tr>
<td>HIST 325</td>
<td>Technology and Culture</td>
<td></td>
</tr>
<tr>
<td>HIST 427</td>
<td>History of the Information Age</td>
<td></td>
</tr>
<tr>
<td>HIST 428</td>
<td>Digital History</td>
<td></td>
</tr>
<tr>
<td>MUTC 100</td>
<td>Technology for Musicians</td>
<td></td>
</tr>
<tr>
<td>MUTC 170</td>
<td>MIDI Composition</td>
<td></td>
</tr>
<tr>
<td>MUTC 320</td>
<td>Audio Recording</td>
<td></td>
</tr>
<tr>
<td>MUTC 330</td>
<td>Audio Production</td>
<td></td>
</tr>
<tr>
<td>MUTC 370</td>
<td>Electroacoustic Techniques</td>
<td></td>
</tr>
<tr>
<td>PSCI 363</td>
<td>Mass Media Politics</td>
<td></td>
</tr>
<tr>
<td>PSCI 450</td>
<td>US Political Film</td>
<td></td>
</tr>
<tr>
<td>SPAN 413</td>
<td>Advanced Writing</td>
<td></td>
</tr>
<tr>
<td>ARTS 104</td>
<td>Digital Approaches to Fine Art</td>
<td>1</td>
</tr>
<tr>
<td>CPSC 106</td>
<td>Digital Storytelling</td>
<td>1</td>
</tr>
<tr>
<td>CPSC 110</td>
<td>Introduction to Computer Science</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Credits: 36

1 May be taken as electives if not used in the Digital Studies Core.

## General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

## Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

**Total Credits Required for the Degree:** 120 credits

## Computer Science

**Degree: B.S., Computer Science**

Department of Computer Science (https://cas.umw.edu/computerscience)

The Bachelor of Science degree in Computer Science provides the kind of dynamic, interactive work environment few fields can match. Software developers and analysts invariably work in teams to tackle cutting-edge projects. We join forces with scientists, doctors, military commanders, social psychologists, and others to produce solutions that are bigger than the sum of their parts. We enjoy the satisfaction of working with our peers to make a common vision become reality.

Computer software is probably the most malleable medium invented for human artistry. Unlike the gadgets of the industrial revolution, which were hardwired to a single purpose, computer software essentially mimics the fluidity of the human mind, making it extensible in any direction the author sees fit. Because of this, in Computer Science, we don’t just study what “is,” but we define what is. Our goal is to invent, create, and solve problems in exciting new ways.

The major is tailor-made for a challenging and practical course of study and paves the way for a dynamic career path and advanced study in the computing and related fields. We also offer a minor in Computer Science for students majoring in other disciplines, and offer courses in support of the interdisciplinary Data Science minor and the Cybersecurity minor. Students have opportunities for individual study, undergraduate
research, and internships at technical firms, government offices, or software development agencies.

Students who are considering a career in IT or project management or who are interested in pursuing an MBA should pursue the Computer Science major and a minor in Business Administration.

Students who are interested in a career in Geospatial Systems should consider completing the requirements for Computer Science major and the Geographic Information Science certificate.

### Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSC 220</td>
<td>Computer Programming and Problem Solving</td>
<td>4</td>
</tr>
<tr>
<td>CPSC 225</td>
<td>Software Development Tools</td>
<td>1</td>
</tr>
<tr>
<td>CPSC 240</td>
<td>Object-oriented Analysis and Design</td>
<td>4</td>
</tr>
<tr>
<td>CPSC 305</td>
<td>Computer Systems and Architecture</td>
<td>4</td>
</tr>
<tr>
<td>CPSC 326</td>
<td>Theoretical Foundations of Computing</td>
<td>4</td>
</tr>
<tr>
<td>CPSC 340</td>
<td>Data Structures and Algorithms</td>
<td>4</td>
</tr>
<tr>
<td>CPSC 350</td>
<td>Applications of Databases</td>
<td>4</td>
</tr>
<tr>
<td>CPSC 405</td>
<td>Operating Systems and Systems Programming</td>
<td>4</td>
</tr>
<tr>
<td>CPSC 430</td>
<td>Software Engineering</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>4-6</td>
</tr>
<tr>
<td>CPSC 284</td>
<td>Applied Discrete Mathematics</td>
<td></td>
</tr>
<tr>
<td>MATH 201</td>
<td>Introduction to Discrete Mathematics &amp; MATH 300</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select two courses, minimum 3 credits each, in CPSC numbered 400 or higher that were not used to satisfy any of the preceding requirements ¹</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Select one course, minimum 3 credits, in CPSC or MATH numbered 300 or higher ²</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits Required for the Degree:** 46-48

¹ Except CPSC 499 Internship. CPSC 491 Individual Study in Computer Science fulfills this requirement if said course is at least three credits.

² Including CPSC 391 Special Projects in Computer Science, CPSC 491 Individual Study in Computer Science, or CPSC 499 Internship provided the course is at least 3 credits.

A maximum of 3 credits of CPSC 499 Internship can be counted toward the Computer Science major.

### General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

### Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

**Conservation Biology**

**Degree: B.S., Biology**

Department of Biological Sciences (https://cas.umw.edu/biology)

Biology encompasses the study of all living things and their interaction with the environment. The Department faculty is dedicated to providing students with a strong undergraduate education in the fundamental principles of biology, while offering opportunities and encouraging students to pursue specialized interests in ecology and conservation.

The Conservation Biology major is designed for students interested in public or private-sector careers in fields such as endangered species protection and recovery, habitat conservation, conservation biology education, and fisheries and wildlife management. Additionally, it prepares students for graduate study in conservation biology in cases where graduate degrees are required for particular careers. Students who complete all requirements earn the degree of Bachelor of Science (B.S.) in Biology with a major in Conservation Biology.

The core curriculum is designed to ensure thorough command of the scientific method and access to inquiry-based learning experiences, while providing a balanced background in cell and molecular biology, organismal biology, and ecology. Elective courses cover a wide variety of specialized topics to meet students' particular interests in biology. An array of laboratory and field experiences further develop working knowledge of the scientific method, teach specific experimental techniques, and promote ongoing development of quantitative and analytical skills.

All of the equipment and facilities in the department are available for undergraduate student use. Collections of microscope slides, vertebrate and invertebrate specimens and a herbarium are available to enhance learning. Advanced laboratory instrumentation such as spectrophotometers, thermalcyclers, ultracentrifuges, and two electron microscopes allow students to engage in sophisticated research.

Outstanding junior and senior biology majors have the opportunity to participate in the undergraduate research program. Working with a faculty mentor, the student explores the literature, defines an original research problem, and utilizes the appropriate research and analytical techniques to investigate the problem. On many occasions this work results in presentations at state, regional, and national scientific meetings. Research students who meet minimum requirements (3.0 overall GPA and a 3.25 average in biology) may pursue Honors in Biology by writing and defending a thesis on their research project. Students can also gain focused research experience via participation in the UMW Summer Science Institute. Financial support for student research is available. Additionally, biology faculty offer research opportunities through the university’s undergraduate research (URES 197 Undergraduate Research) program.

The internship program also offers students an opportunity to gain valuable career related experience. Internship credits do not count towards the biology major, but many biology majors have taken advantage of this program to gain experience and to confirm their career objectives.
In addition to the “Beyond the Classroom” requirement course list (p. 32), the department has established another mechanism by which biology majors may satisfy the experiential learning general education requirement. The **Biology service learning option** requires students to apply knowledge and skills acquired in their formal courses and to reflect upon how such application has augmented their education.

Students will complete a service-learning contract in which they will:

1. identify the agencies for which they will conduct their service,
2. indicate the biology faculty members who will evaluate the academic component of their activities, and
3. describe the duties that they will carry out for these agencies.

Students must complete 40 hours of service within 12 months of submitting their contracts. Students completing their community service during their last semester must complete all requirements by March 1 (November 1 for those finishing in December). Contact the biology department chair for additional details.

**Major Requirements**

**Students must earn a C- or better in most BIOL required courses that serve as prerequisites for other BIOL courses. Students must also earn a C- or better in the core courses (BIOL 210 Introduction to Ecology and Evolution, BIOL 260 Biostatistics and Research Design, BIOL 340 Cellular Biology, BIOL 341 General Genetics) to graduate with a degree in Biology. See also the Department of Chemistry's minimum grade requirements for CHEM 111 General Chemistry I, CHEM 112 General Chemistry II.

A minimum of 40 credits from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 132</td>
<td>Organization Function and Diversity</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 126</td>
<td>Phage Hunters II</td>
<td></td>
</tr>
<tr>
<td>BIOL 210</td>
<td>Introduction to Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 260</td>
<td>Biostatistics and Research Design</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 341</td>
<td>General Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 428</td>
<td>Conservation Biology</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
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<td>4</td>
</tr>
<tr>
<td>GISC 200</td>
<td>Introduction to GIS</td>
<td></td>
</tr>
<tr>
<td>GESC 250</td>
<td>Introduction to Geographic Information Systems and Cartography</td>
<td></td>
</tr>
<tr>
<td>EESC 205</td>
<td>GIS Applications in Environmental Science and Geology with Lab</td>
<td></td>
</tr>
<tr>
<td>Select two of the following diversity courses:</td>
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<td>8</td>
</tr>
<tr>
<td>BIOL 231</td>
<td>Plant Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 321</td>
<td>Invertebrate Zoology</td>
<td></td>
</tr>
<tr>
<td>BIOL 323</td>
<td>Entomology</td>
<td></td>
</tr>
<tr>
<td>BIOL 425</td>
<td>Vertebrate Zoology</td>
<td></td>
</tr>
<tr>
<td>BIOL 426</td>
<td>Biology of Fishes</td>
<td></td>
</tr>
<tr>
<td>BIOL 427</td>
<td>Ornithology</td>
<td></td>
</tr>
<tr>
<td>Select one upper-level ecology course:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>BIOL 311</td>
<td>Plant Ecology</td>
<td></td>
</tr>
<tr>
<td>BIOL 322</td>
<td>Animal Ecology</td>
<td></td>
</tr>
<tr>
<td>BIOL 424</td>
<td>Tropical Ecology</td>
<td></td>
</tr>
<tr>
<td>Select one public policy, economic, and cultural perspectives course:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ANTH 365</td>
<td>Environment and Development Narratives</td>
<td></td>
</tr>
</tbody>
</table>

**Electives**

Select one upper-level ecology course:

- BIOL 311 Plant Ecology
- BIOL 322 Animal Ecology
- BIOL 424 Tropical Ecology

**Total Credits Required for the Degree:** 120 credits

**Cybersecurity**

**Degree: B.S., Computer Science**

Department of Computer Science (https://cas.umw.edu/computerscience)

Cybersecurity is a critical interdisciplinary field which seeks to mitigate the ever growing number of cyber threats that we all face in an increasingly connected world. Whether defending government systems from intrusion, developing more secure software, managing a corporation's network security, analyzing new forms of malicious software, exploring new software vulnerabilities, managing user security,
or implementing new cryptographic methods, there is a wealth of different areas in cybersecurity in need of talented professionals that can not only handle the tasks of today but innovate and tackle the security challenges of tomorrow.

The Cybersecurity major, which leads to a Bachelor of Science degree in Computer Science, provides students with a rigorous and up to date foundation in cybersecurity. The program starts with a solid foundation in Computer Science and moves on to cover a technical and broad program in cybersecurity. The major also builds in flexibility allowing the student to use elective credits to focus on an area of cybersecurity that they are the most passionate about.

### Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSC 220</td>
<td>Computer Programming and Problem Solving</td>
<td>4</td>
</tr>
<tr>
<td>CPSC 225</td>
<td>Software Development Tools</td>
<td>1</td>
</tr>
<tr>
<td>CPSC 240</td>
<td>Object-oriented Analysis and Design</td>
<td>4</td>
</tr>
<tr>
<td>CPSC 318</td>
<td>System and Network Administration</td>
<td>4</td>
</tr>
<tr>
<td>CPSC 340</td>
<td>Data Structures and Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 414</td>
<td>Network Principles &amp; Applicatn</td>
<td>3</td>
</tr>
<tr>
<td>BLAW 300</td>
<td>Cybersecurity Law</td>
<td>3</td>
</tr>
<tr>
<td>MATH 253</td>
<td>Introduction to Cryptography</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 284</td>
<td>Applied Discrete Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 201</td>
<td>Introduction to Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 225</td>
<td>Practical Ethics</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 345</td>
<td>Introduction to Computer Security</td>
<td>3</td>
</tr>
<tr>
<td>or MIST 411</td>
<td>Information Security</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 435</td>
<td>Advanced Cybersecurity</td>
<td>3</td>
</tr>
<tr>
<td>or MIST 444</td>
<td>Ethical Hacking</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two of the following (minimum of 3 credits each): 6

- CPSC 445  Software Security
- CPSC 491  Individual Study in Computer Science
- CPSC 499  Internship
- Other course approved by the program director

Total Credits: 45

1. A maximum of 3 credits of CYBR 499 Internship in Cybersecurity may count towards the major.
2. A maximum of 6 credits of CYBR 491 Individual Study in Cybersecurity may count towards the major.

### General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

### Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

### Total Credits Required for the Degree: 120 credits

#### Economics

**Degree: B.S., Economics**

Department of Economics (https://cas.umw.edu/economics)

Economics is a method of analyzing human behavior in any environment subject to scarcity. As such, it provides insight into a wide range of social problems and issues, including unemployment, inflation, poverty, discrimination, international trade, the environment, and the role of government in society.

The Bachelor of Science degree in Economics offers a contemporary curriculum in economics within the framework of the liberal arts. With an emphasis on writing, speaking, computing, quantitative methods, and other research skills, graduates of our program are equipped with a general education to lead productive lives in the twenty-first century. The University’s proximity to Washington, D.C., and a supportive local business community create stimulating internship opportunities. Economics majors regularly present original research at professional meetings, and co-edit the journal of undergraduate research in economics, Issues in Political Economy. Students with superior academic records who complete an original research project are eligible for honors.

Two organizations that promote the study of economics are associated with the department. The Economics Club encourages discussion of current issues, sponsors speakers and social events, and kindles interaction among students and faculty. It is open to all students. Omicron Delta Epsilon is a national economics honor society for students with superior academic records.

Each year, the department bestows five awards. The Henry W. Hewetson Award is presented to a graduating senior to honor academic achievement and service to the department. The other awards are scholarships to promote study in economics. The James Harvey Dodd Award is given to a junior economics major based on financial need and academic achievement. The Adam Smith Award is given to a graduating senior based on potential for graduate study. The Fred E. Miller Memorial Scholarship is awarded annually to a rising junior or senior who is double-majoring in Economics and Business Administration. The Richard George Allgaier Scholarship is awarded to economics and accounting majors.

The recommended introductory courses are ECON 201B Principles of Macroeconomics and ECON 202B Principles of Microeconomics. ECON 300 Introduction to Economic Analysis introduces students to the methods of economic analysis and should be taken as early as possible in the student’s curriculum. These three courses prepare students for 300 and 400-level courses on a variety of theoretical and applied topics. ECON 490 Experiential Learning, ECON 491 Individual Study in Economics, and ECON 499 Internship are department courses that expose students to the economics profession through experiential learning in the discipline.
Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 300</td>
<td>Introduction to Economic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 303</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 304</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 361A</td>
<td>Introductory Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 375</td>
<td>American Economic History</td>
<td>3</td>
</tr>
<tr>
<td>ECON 462</td>
<td>Advanced Economic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 490</td>
<td>Experiential Learning</td>
<td>3</td>
</tr>
<tr>
<td>Select 12 additional credits in upper-level economics courses</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>39</td>
</tr>
</tbody>
</table>

1. No more than nine (9) hours in experiential learning courses (ECON 490 Experiential Learning, ECON 491 Individual Study in Economics, and ECON 499 Internship) may count toward the major.

General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Education

Degree: BSEd, Elementary Education

College of Education (https://education.umw.edu)

The College of Education offers several programs to meet requirements for licensure as a teacher. Throughout the programs, students gain experiences and skills in monitoring their own professional growth through research, reflection, and problem solving.

Requirements for the elementary licensure program are described below. Students interested in the undergraduate licensure in special education (general curriculum) or in secondary or PreK-12 licensure options should review program requirements as outlined on the Courses of Study page in the College of Education section of the Undergraduate Catalog.

All students who gain admission to the program are eligible to join the Student Education Association. Juniors and seniors with high academic achievement are invited to become members of the Nu Xi Chapter of Kappa Delta Pi, an international honor society in education. Awards are given each year to students who excel in their internship, academic achievement, and leadership. Students in the Teacher Education Programs have the opportunity to apply for a variety of scholarships.

Undergraduate Elementary Licensure Program

Those students who are pursuing licensure at the elementary (preK-6) level enter the BSEd in Elementary Education degree program. Students major in education and take general education requirements and electives as part of the degree program. Students complete multiple field-based experiences during the program. In the spring of their senior year, students complete a full-time teaching internship.

Any student in the teacher education programs may also opt to enroll in an additional semester to do their teaching internship.

All students seeking to earn an BSEd degree in Elementary Education or B.A. or B.S. degree with a secondary licensure area must complete EDUC 499 (https://umw-preview.courseleaf.com/search/?p=EDUC %20499) Internship.

College of Education students have access to all the Academic Resources outlined in that section of this Catalog.

Admission to the Teacher Education Programs is by application directly to the College of Education. Admission is competitive and is based on academic achievement and on other indications of potential in meeting the program goals. Students are strongly advised to attend a Group Information Session on the Initial Licensure Programs. Group Information Sessions are offered throughout the academic year. At these sessions, students are informed of the features and requirements of the program. Students are advised of the required Minimum Performance Standards and are asked to apprise the department of requests for accommodations. Current UMW students and prospective transfer students who are interested in the Initial Licensure Programs should attend one of these Group Information Sessions.

Admission, continuation, and program completion

Admission, continuation, and program completion requirements are defined within a three-stage procedure:

1. Admission to UMW,
2. Admission to the College of Education, and
3. Successful Completion of the Program and Recommendation for Licensure.

Detailed descriptions of the program requirements are explained on the College of Education website.

Undergraduate Admission

For permission to take the first education courses in Phase I of the program, EDUC 206 Foundations of Education and EDUC 207 Development of the Learner and Instructional Practices, students must have attained a 2.5 GPA or better on at least 12 UMW credits. Transfer students must have a 3.25 GPA to be able to take EDUC 206 and EDUC 207.

To be fully admitted to the COE, students apply during Phase I of the program. Students must have earned a B or better in EDUC 206 and EDUC 207 and have passing scores for:

1. the Praxis Core, or
2. passing scores for the SAT or ACT Reading and Writing, plus a passing score on the Math Praxis Core, SAT, or ACT.
3. Passing scores for the Praxis Core Math, SAT or ACT Math plus a passing score on the VCLA.

Continuation
To continue in the program students must do the following:
1. maintain good academic standing with an overall cumulative GPA of 2.5 or better;
2. achieve a GPA of 3.0 or better in all education courses;
3. demonstrate satisfactory progress on all Professional Competencies; and
4. achieve satisfactory evaluations in all field experiences.

A student who receives more than one C (including C+, C, and C-) in an education course will be dismissed from the program.

Completion
Successful completion of the program and recommendation for licensure to the Virginia Department of Education are contingent upon:
1. completion of all degree requirements;
2. a grade of B (including B+, B, or B-) or better in EDUC 499: Internship; minimum 3.0 (B) or higher overall cumulative GPA in all education coursework; and
3. achieving passing scores on all licensure examination and the Child Abuse Recognition Intervention Module; certification or training in emergency first aid, CPR and use of the automated external defibrillators; and completion of the Dyslexia Awareness Training course as required by the Virginia State Board of Education.

BSEd in Elementary Education Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 206</td>
<td>Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 207</td>
<td>Development of the Learner and Instructional Practices</td>
<td>3</td>
</tr>
<tr>
<td>Phase II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDSE 250</td>
<td>Survey of Special Education: Characteristics and Legal Issues</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 290</td>
<td>Teaching Linguistically and Culturally Diverse Students</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 291</td>
<td>Practicum in Language and Learning Diversity</td>
<td>1</td>
</tr>
<tr>
<td>Phase III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 351A</td>
<td>Instructional Design and Assessment</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 388</td>
<td>Managing the Elementary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>Phase IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 311</td>
<td>Literature and the Arts in the Elementary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 371</td>
<td>Language Development and Literacy Instruction: Primary</td>
<td>3</td>
</tr>
<tr>
<td>MATH 204</td>
<td>Mathematical Concepts and Methods I</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 303</td>
<td>Scientific Inquiry and Instructional Technology</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 305</td>
<td>Mathematical Concepts and Methods II</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 373</td>
<td>Language Development and Literacy Instruction: Intermediate</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 386</td>
<td>Elementary Social Studies Methods</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 451</td>
<td>Teaching Lab: Elementary</td>
<td>1</td>
</tr>
</tbody>
</table>

EDUC 461 | Internship Seminar: Elementary                               | 3       |

Total Credits 46

General Education Requirements
The general education requirements for Bachelor of Arts/Bachelor of Science/Bachelor of Science in Education degrees apply to all students who are seeking to earn a BSEd degree in Elementary Education or B.A. or B.S. degree with a secondary licensure area.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements.

Several specific courses, which are eligible to meet specified general education requirements, must be taken by students in the Bachelor of Science in Education degree program. Those courses are: LING 101B Introduction to Linguistics, HIST 131 American History to 1865, STAT 180 Introduction to Statistics, and GEOG 101 World Regional Geography.

Internship
All students seeking to earn an BSEd degree in Elementary Education or B.A. or B.S. degree with a secondary licensure area must complete EDUC 499 Internship.

Electives
Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

If any of these courses were not taken to meet general elective requirements, they should be included among elective courses taken: LING 101B Introduction to Linguistics, HIST 131 American History to 1865, STAT 180 Introduction to Statistics, and GEOG 101 World Regional Geography.

Total Credits Required for the Degree: 120 credits

English

Degree: B.A., English
Department of English and Linguistics (https://cas.umw.edu/elc)

English faculty strive to inspire in students a love for literature and for writing, to help students develop analytical and critical skills, and to guide students in improving their writing.

The Bachelor of Arts degree in English offers courses appropriate to students at all levels. Except for ENGL 295 Methods of Advanced Literary Studies, courses on the 200-level are designed for students from all disciplines. Courses on the 300-level may also appeal to a diverse audience but require a more sophisticated study of texts and more advanced writing. Courses on the 400-level offer a seminar experience in which students study a topic or theme in depth, frequently take charge of class discussions, and produce a major paper or project. To facilitate discussion and individual attention, the department limits enrollment in many classes to 15 to 25 students.
Students who pursue a major in English become familiar with the language, with literary theory, and with a variety of literatures in the language, including works outside the recognized canons. They practice literary and linguistic analysis, and they develop as writers of different modes and genres.

Many juniors and seniors enroll in internships to test classroom knowledge in the outside world and to explore career interests. Juniors and seniors with appropriate academic standing may also elect to pursue individual studies. An increasing number of students choose to study abroad.

### Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 101B</td>
<td>Introduction to Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 295</td>
<td>Methods of Advanced Literary Studies</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select six 300-level literature courses ¹</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Select one 300-level linguistics course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one 300-level writing course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one 400-level seminar in literature, composition, or theory</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENGL 200 News Journalism</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Any 300- and 400-level English and linguistics courses, including department-sponsored internships and individual studies.</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 36

¹ Must include at least: two courses in pre-1900 literature, at least one of which must be in pre-1800 literature; one course in post-1900 literature; and one course in literature of the historically marginalized groups.

### General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

### Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

**Total Credits Required for the Degree:** 120 credits

### English: Creative Writing

**Degree:** B.A., English  
Department of English and Linguistics (https://cas.umw.edu/elc)

English faculty strive to inspire in students a love for literature and for writing, to help students develop analytical and critical skills, and to guide students in improving their writing.

The Bachelor of Arts degree in English offers courses appropriate to students at all levels. Except for ENGL 295 Methods of Advanced Literary Studies, courses on the 200-level are designed for students from all disciplines. Courses on the 300-level may also appeal to a diverse audience but require a more sophisticated study of texts and more advanced writing. Courses on the 400-level offer a seminar experience in which students study a topic or theme in depth, frequently take charge of class discussions, and produce a major paper or project. To facilitate discussion and individual attention, the department limits enrollment in many classes to 15 to 25 students.

Students who pursue a major in English become familiar with the language, with literary theory, and with a variety of literatures in the language, including works outside the recognized canons. They practice literary and linguistic analysis, and they develop as writers of different modes and genres.

Many juniors and seniors enroll in internships to test classroom knowledge in the outside world and to explore career interests. Juniors and seniors with appropriate academic standing may also elect to pursue individual studies. An increasing number of students choose to study abroad.

### Major Requirements

#### Creative Writing Concentration

The Creative Writing Concentration offers students the opportunity to focus on the craft and art of writing, editing, and analyzing their own original work, the work of established writers, and peer writers.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 101B</td>
<td>Introduction to Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 295</td>
<td>Methods of Advanced Literary Studies</td>
<td>3</td>
</tr>
<tr>
<td>Select five creative writing courses ¹</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Select one 300-level linguistics course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select three 300-level literature courses ²</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 200 News Journalism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any 300- or 400-level English and linguistics courses, including department-sponsored internships and individual studies.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 36

¹ Including ENGL 302A Introduction to Creative Writing, ENGL 314 The Literary Journal: Professional Practice in Publishing and Editing, and ENGL 470 Seminar in Creative Writing.

² Must include at least: one course in pre-1900 literature, one course in post-1900 literature, and one course in literature of historically marginalized groups.

### General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

### Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen...
by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Environmental Geology

Degree: B.S., Environmental Science and Geology

Department of Earth and Environmental Sciences (http://publications.umw.edu/undergraduatetcatalog/colleges/cas/college-of-arts-and-sciences-faculty/earth-and-environmental-sciences-department)

Geology is the scientific study of the Earth, including its composition, dynamics, surface processes, and history. The environmental geology major (Bachelor of Science degree in Environmental Sciences and Geology) is designed for students with a specific interest in Earth's surficial processes, especially as they relate to human interaction with the landscape and environment. Environmental geology, therefore, examines topics such as hydrogeology, soil and water chemistry, and geomorphology that lie at the interfaces of the lithosphere, the hydrosphere, and climate system.

The Department has modern laboratories in the Jepson Science Center equipped with advanced analytical instruments to support classroom instruction and to provide opportunities for research. Equipment for ecological studies in terrestrial, fresh water, and marine environments includes live animal traps, plankton and insect nets, seines, dissolved oxygen, conductivity, and pH meters, and fresh and salt water aquaria. Major laboratory equipment includes petrographic microscopes, a magnetic susceptibility instrument, and dedicated lab facilities for paleontology, sedimentology, and geochemistry. The Jepson Science Center has a variable pressure scanning electron microscope with chemical capabilities that is shared by the science disciplines. For environmental and geological fieldwork, the department has GPS equipment, a small fleet of research boats (including one equipped for trawling, coring, and dredging), coring and surveying equipment, and for classroom study, an extensive collection of rocks, minerals, and fossils. The department also maintains a computer lab/classroom equipped with the latest Geographic Information Systems (GIS) software.

Majors in all of our programs are encouraged to do independent study and/or research during their senior year. Financial support for student research is available. Qualified students may also choose to do an internship with a professional organization during either their junior or senior year. Students with a 3.00 overall grade-point average and a 3.25 grade-point average in the major may pursue Honors in Environmental Science, Geology, or Environmental Geology by completing an independent research project and writing and defending a thesis.

All of our majors are encouraged to fulfill the general education experiential learning requirement by completing Undergraduate Research URES 197 Undergraduate Research, Earth and Environmental Science EESC 481 Readings, EESC 491 Individual Study, EESC 493 Honors Research, or EESC 499 Internship. Alternatively, majors may meet this requirement by participating in an approved supervised on-campus or off-campus summer research experience developed in consultation with the department (such as the UMV Summer Science Research Program or a similar program at another college or university). To complete the experiential learning requirement through a summer research experience, contact the department chair for more details.

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC 111</td>
<td>Our Dynamic Earth</td>
<td>4</td>
</tr>
<tr>
<td>EESC 112</td>
<td>Evolution of Earth</td>
<td>4</td>
</tr>
<tr>
<td>EESC 240</td>
<td>Field Methods in Environmental Science and Geology</td>
<td>4</td>
</tr>
<tr>
<td>EESC 301</td>
<td>Mineralogy</td>
<td>4</td>
</tr>
<tr>
<td>EESC 307</td>
<td>Environmental Soil Science</td>
<td>3</td>
</tr>
<tr>
<td>EESC 311</td>
<td>Sedimentation and Stratigraphy</td>
<td>4</td>
</tr>
<tr>
<td>EESC 315</td>
<td>Hydrogeology</td>
<td>4</td>
</tr>
<tr>
<td>EESC 412</td>
<td>Structural Geology</td>
<td>4</td>
</tr>
<tr>
<td>EESC 205</td>
<td>GIS Applications in Environmental Science and Geology with Lab</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 250</td>
<td>Introduction to Geographic Information Systems and Cartography</td>
<td></td>
</tr>
<tr>
<td>GISC 200</td>
<td>Introduction to GIS</td>
<td></td>
</tr>
</tbody>
</table>

Select at least two courses from the Environmental Geology electives list, below (minimum of 6 credits):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC 121</td>
<td>Oceanography</td>
<td>4</td>
</tr>
<tr>
<td>EESC 313</td>
<td>Fluvial Geomorphology</td>
<td>4</td>
</tr>
<tr>
<td>EESC 325</td>
<td>Environmental Geochemistry</td>
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<td>EESC 330</td>
<td>Environmental Regulations</td>
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<td>EESC 340</td>
<td>Energy Resources and Technology</td>
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<td>EESC 360</td>
<td>Environmental Exploration</td>
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<td>EESC 421</td>
<td>Special Topics</td>
<td>2-4</td>
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<tr>
<td>EESC 481</td>
<td>Readings</td>
<td>1-2</td>
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<td>Individual Study</td>
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<td>Honors Research</td>
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</tr>
<tr>
<td>EESC 499</td>
<td>Internship</td>
<td>1-12</td>
</tr>
</tbody>
</table>

1 A maximum of 3 credits may count toward the major requirements.

Prerequisite Courses

CHEM 111 General Chemistry I and CHEM 112 General Chemistry II are prerequisites to courses in the Environmental Geology major. Students expecting to major in a geology program should consider taking the introductory chemistry sequence as general education requirements or as electives.

General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).
Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Environmental Science: Natural Science Concentration

Degree: B.S., Environmental Science and Geology
Department of Earth and Environmental Sciences (https://cas.umw.edu/
ees)

The Environmental Science and Geology degree (Bachelor of Science) promotes the study of our environment and the impact that human activities have on natural systems. Environmental Science majors choose either a natural science or a social science perspective according to their interests. Both tracks provide a strong background for advanced study or allow placement directly in a variety of career areas.

The Natural Science track provides a background in biology, chemistry, and geology. Analytical skills acquired in this program, coupled with an appreciation of socioeconomic considerations, will prepare the student to evaluate environmental problems and work on solutions with the limits of societal resources in mind.

The interdisciplinary nature of the Environmental Science program permits students to select classes from a wide range of course offerings in multiple departments in order to best prepare for personal career goals.

The Department has modern laboratories in the Jepson Science Center equipped with advanced analytical instruments to support classroom instruction and to provide opportunities for research. Equipment for ecological studies in terrestrial, fresh water, and marine environments includes live animal traps, plankton and insect nets, seines, dissolved oxygen, conductivity, and pH meters, and fresh and salt water aquaria. Major laboratory equipment includes petrographic microscopes, a magnetic susceptibility instrument, and dedicated lab facilities for paleontology, sedimentology, and geochemistry. The Jepson Science Center has a variable pressure scanning electron microscope with chemical capabilities that is shared by the science disciplines. For environmental and geological fieldwork, the department has GPS equipment, a small fleet of research boats (including one equipped for trawling, coring, and dredging), coring and surveying equipment, and for classroom study, an extensive collection of rocks, minerals, and fossils. The department also maintains a computer lab/classroom equipped with the latest Geographic Information Systems (GIS) software.

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Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tr>
<td>EESC 110</td>
<td>Environmental and Ecological Systems</td>
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<tr>
<td>EESC 111</td>
<td>Our Dynamic Earth</td>
<td>4</td>
</tr>
<tr>
<td>EESC 120</td>
<td>Principles of Environmental Sustainability</td>
<td>4</td>
</tr>
<tr>
<td>EESC 315</td>
<td>Hydrogeology</td>
<td>4</td>
</tr>
<tr>
<td>EESC 460</td>
<td>Environmental Science Seminar</td>
<td>2</td>
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<td>Select one of the following:</td>
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</tr>
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<td>GEOG 250</td>
<td>Introduction to Geographic Information Systems and Cartography</td>
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<td>BIOL 311</td>
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<tr>
<td>BIOL 322</td>
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<tr>
<td>CHEM 211</td>
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</tr>
<tr>
<td>CHEM 253</td>
<td>Chemical Analysis I</td>
<td></td>
</tr>
<tr>
<td>CHEM 254</td>
<td>Chemical Analysis II</td>
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<tr>
<td>CHEM 331</td>
<td>Environmental Chemistry</td>
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</tr>
<tr>
<td>&amp; CHEM 332</td>
<td>and Environmental Chemistry Laboratory</td>
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<tr>
<td>Select 12 credits from courses in the Natural Sciences Elective Track List</td>
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Total Credits

Major Electives for the Natural Sciences Concentration

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<td>BIOL 311</td>
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<td>BIOL 321</td>
<td>Invertebrate Zoology</td>
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<td>BIOL 322</td>
<td>Animal Ecology</td>
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<td>Entomology</td>
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<td>BIOL 340</td>
<td>Cellular Biology</td>
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<td>BIOL 341</td>
<td>General Genetics</td>
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<tr>
<td>BIOL 371</td>
<td>Microbiology</td>
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<td>BIOL 372</td>
<td>Parasitology</td>
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<td>BIOL 401</td>
<td>Animal Behavior</td>
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### Geography Courses

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<td>BIOL 425</td>
<td>Vertebrate Zoology</td>
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<tr>
<td>BIOL 426</td>
<td>Biology of Fishes</td>
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<td>BIOL 427</td>
<td>Ornithology</td>
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<td>BIOL 428</td>
<td>Conservation Biology</td>
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<td>BIOL 434</td>
<td>Physiological Adaptations</td>
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<td>BIOL 435</td>
<td>Plant Physiology</td>
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### Chemistry Courses

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<td>CHEM 212</td>
<td>Organic Chemistry II</td>
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<td>CHEM 253</td>
<td>Chemical Analysis I</td>
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<td>CHEM 317</td>
<td>Biochemistry I</td>
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<td>Biochemistry Laboratory II</td>
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<td>CHEM 331</td>
<td>Environmental Chemistry</td>
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<tr>
<td>CHEM 332</td>
<td>Environmental Chemistry Laboratory ¹</td>
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<td>Inorganic Chemistry</td>
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<td>CHEM 345</td>
<td>Inorganic Chemistry Laboratory</td>
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<td>CHEM 423</td>
<td>Experimental Methods in Chemistry</td>
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### Economics Courses

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<td>ECON 331A</td>
<td>Environmental and Resource Economics</td>
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### Earth and Environmental Science Courses

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<tbody>
<tr>
<td>EESC 121</td>
<td>Oceanography</td>
<td>4</td>
</tr>
<tr>
<td>EESC 230</td>
<td>Global Environmental Problems</td>
<td>3</td>
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<tr>
<td>EESC 240</td>
<td>Field Methods in Environmental Science and Geology</td>
<td>4</td>
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<td>EESC 301</td>
<td>Mineralogy</td>
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<tr>
<td>EESC 307</td>
<td>Environmental Soil Science</td>
<td>3</td>
</tr>
<tr>
<td>EESC 311</td>
<td>Sedimentation and Stratigraphy</td>
<td>4</td>
</tr>
<tr>
<td>EESC 313</td>
<td>Fluvial Geomorphology</td>
<td>4</td>
</tr>
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<td>EESC 325</td>
<td>Environmental Geochemistry</td>
<td>4</td>
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<td>EESC 326</td>
<td>Pollution Prevention Planning</td>
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<tr>
<td>EESC 330</td>
<td>Environmental Regulations</td>
<td>3</td>
</tr>
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<td>EESC 340</td>
<td>Energy Resources and Technology</td>
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</tr>
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<td>EESC 355</td>
<td>Icehouse-Greenhouse Earth</td>
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<td>EESC 360</td>
<td>Environmental Exploration</td>
<td>2-4</td>
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<td>EESC 421</td>
<td>Special Topics</td>
<td>2-4</td>
</tr>
<tr>
<td>EESC 481</td>
<td>Readings</td>
<td>1-2</td>
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<td>Individual Study</td>
<td>1-4</td>
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<tr>
<td>EESC 493</td>
<td>Honors Research</td>
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<tr>
<td>EESC 499</td>
<td>Internship ²</td>
<td>1-12</td>
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### Prerequisite Courses

#### Natural Science Concentration

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<tbody>
<tr>
<td>BIOL 121</td>
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<tr>
<td>BIOL 125</td>
<td>Phage Hunters I</td>
<td></td>
</tr>
<tr>
<td>BIOL 126</td>
<td>and Phage Hunters II</td>
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</tr>
<tr>
<td>BIOL 210</td>
<td>Introduction to Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II</td>
<td>4</td>
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</tbody>
</table>

### General Education Requirements

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Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

### Electives

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### Total Credits Required for the Degree: 120 credits

### Environmental Science: Social Science Concentration

#### Degree: B.S., Environmental Science and Geology

Department of Earth and Environmental Sciences [https://cas.umw.edu/ees](https://cas.umw.edu/ees)

The Environmental Science and Geology degree (Bachelor of Science) promotes the study of our environment and the impact that human activities have on natural systems. Environmental Science majors choose either a natural science or a social science perspective according to their interests. Both tracks provide a strong background for advanced study or allow placement directly in a variety of career areas.

The Social Science concentration focuses on the economic, political, and sociological impact of humans on the environment. This program, coupled with an appreciation of the biotic and physical parameters of the environment, prepares students to evaluate government, industry, and environmentalist positions on environmental issues.
The interdisciplinary nature of the Environmental Science program permits students to select classes from a wide range of course offerings in multiple departments in order to best prepare for personal career goals.

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**Major Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EESC 110</td>
<td>Environmental and Ecological Systems</td>
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</tr>
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<td>EESC 111</td>
<td>Our Dynamic Earth</td>
<td>4</td>
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<td>EESC 120</td>
<td>Principles of Environmental Sustainability</td>
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<td>GEOG 250</td>
<td>Introduction to Geographic Information Systems and Cartography</td>
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<td>GISC 200</td>
<td>Introduction to GIS</td>
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</tr>
<tr>
<td>BIOL 210</td>
<td>Introduction to Ecology and Evolution</td>
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<tr>
<td>CHEM 211</td>
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<td>CHEM 253</td>
<td>Chemical Analysis I</td>
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<td>CHEM 254</td>
<td>Chemical Analysis II</td>
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**Major Electives for the Social Sciences Concentration**

<table>
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<tr>
<th>Code</th>
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<tbody>
<tr>
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<tr>
<td>EESC 325</td>
<td>Environmental Geochemistry</td>
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<tr>
<td>ECON 331A</td>
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<tr>
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**Total Credits**: 39

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>GISC 121</td>
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<td>EESC 230</td>
<td>Global Environmental Problems</td>
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<td>EESC 240</td>
<td>Field Methods in Environmental Science and Geology</td>
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<td>EESC 307</td>
<td>Environmental Soil Science</td>
<td>3</td>
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<td>EESC 313</td>
<td>Fluvial Geomorphology</td>
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<td>EESC 315</td>
<td>Hydrogeology</td>
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<tr>
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<td>EESC 326</td>
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<td>EESC 340</td>
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<td>Icehouse-Greenhouse Earth</td>
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**Geography Courses**

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<tbody>
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<td>GEOG 231</td>
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<td>GEOG 236</td>
<td>Globalization and Local Development</td>
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<td>GEOG 245</td>
<td>Environment and Society</td>
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<td>GEOG 337</td>
<td>The Nature of Cities</td>
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<td>GEOG 339A</td>
<td>Geography and Development</td>
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<td>GEOG 340B</td>
<td>Remote Sensing and Air Photo Interpretation</td>
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<td>GEOG 351A</td>
<td>Spatial Analysis</td>
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**Geographic Information Science Course**
French

Degree: B.A., Modern Foreign Languages

Department of Modern Languages and Literatures (https://cas.umw.edu/modernlanguages)

The French major leads to a Bachelor of Arts degree in Modern Foreign Languages. Through courses in French, students gain linguistic proficiency, as well as understanding of the literatures and cultures of the French-speaking world. Laboratory facilities are used extensively to supplement classroom instruction. Classes are conducted in French.

Double majors are possible, and non-majors may also take advantage of the language program. Students have the opportunity to reside in a campus residence area in which French is spoken and which sponsors various intercultural programs each year. The resident language director of this area is a native speaker of French.

The Department of Modern Languages and Literature cooperates with a variety of overseas study programs, advises and encourages students wishing to study abroad, and helps in planning their foreign study programs. Credits can be accepted from abroad to fulfill major requirements. The French program runs a 3-week (3 credit) and 6-week (6 credit) UMW faculty-led summer study abroad programs in Aix-en-Provence, followed by an optional sightseeing week in Paris.

In addition, French majors can take advantage of a number of internship opportunities in businesses, government offices, and non-profit agencies located in the Fredericksburg and Washington, D.C. area.

Graduates in French may pursue careers in government or in private fields in which the knowledge of this language and culture is essential, including interpreting, translating, research, social services, education, or international business.

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

French

Degree: B.A., Modern Foreign Languages

Department of Modern Languages and Literatures (https://cas.umw.edu/modernlanguages)

The French major leads to a Bachelor of Arts degree in Modern Foreign Languages. Through courses in French, students gain linguistic proficiency, as well as understanding of the literatures and cultures of the French-speaking world. Laboratory facilities are used extensively to supplement classroom instruction. Classes are conducted in French.

Double majors are possible, and non-majors may also take advantage of the language program. Students have the opportunity to reside in a campus residence area in which French is spoken and which sponsors various intercultural programs each year. The resident language director of this area is a native speaker of French.

The Department of Modern Languages and Literature cooperates with a variety of overseas study programs, advises and encourages students wishing to study abroad, and helps in planning their foreign study programs. Credits can be accepted from abroad to fulfill major requirements. The French program runs a 3-week (3 credit) and 6-week (6 credit) UMW faculty-led summer study abroad programs in Aix-en-Provence, followed by an optional sightseeing week in Paris.

In addition, French majors can take advantage of a number of internship opportunities in businesses, government offices, and non-profit agencies located in the Fredericksburg and Washington, D.C. area.

Graduates in French may pursue careers in government or in private fields in which the knowledge of this language and culture is essential, including interpreting, translating, research, social services, education, or international business.

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.
Total Credits Required for the Degree: 120 credits

Geography

Degree: B.A., Geography
Department of Geography (https://cas.umw.edu/geography)

The Geography Department hosts two programs, a traditional degree program and a certificate program in Geographic Information Science. In the Bachelor of Arts degree program, students study the interactions between people and their environments, both human and natural. Geographers examine the places and regions resulting from such interactions and analyze the spatial characteristics of all manner of natural, cultural, economic, and political processes and relationships. The Geography program at Mary Washington has three areas of emphasis:

Community, Development, and Culture
A focus on how people living in specific places and regions experience and affect social, cultural, economic, and environmental processes. Includes course work in planning and urban geography, local and international development, race and place, human-environment relationships, and regional geographies.

Globalization
A focus on the geographies of globalization and its political, cultural, and economic dimensions. Includes course work in geopolitics, economic and cultural globalization, international development, migration, and regional geographies.

Nature and Society
A focus on the physical and social processes that shape the natural environmental and affect human life. Includes course work in landforms, climatology, human-environment relationships and regional geographies.

All geography majors acquire spatial thinking skills by studying research methods appropriate for their area of emphasis. These include: geographic information systems (GIS), cartography, remote sensing, field methods, quantitative, and qualitative methods. Majors are also encouraged to engage in internships, study abroad programs, and undergraduate research.

The facilities for geographic studies at Mary Washington include well-equipped laboratories for the study and practice of physical geography, GIS, cartography, and remote sensing. The department hosts a chapter of Gamma Theta Upsilon, the International Geography Honorary Society.

Major Requirements
A minimum of 35 credits in Geography, Geographic Information Science, and related disciplines, including no more than two courses not designated GEOG or GISC.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 101</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>or GEOG 102</td>
<td>Introduction to Human Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 110</td>
<td>Introduction to Weather and Climate</td>
<td>8</td>
</tr>
<tr>
<td>&amp; GEOG 111</td>
<td>and Landform Processes</td>
<td></td>
</tr>
</tbody>
</table>

Intermediate Courses
Select one course in geography (3 credits) chosen from GEOG 200 – GEOG 249 2

Research Methods

Select two of the following: 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 250</td>
<td>Introduction to Geographic Information Systems and Cartography</td>
<td>6-8</td>
</tr>
<tr>
<td>GEOG 252</td>
<td>Introduction to Quantitative Methods in Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 340B</td>
<td>Remote Sensing and Air Photo Interpretation</td>
<td></td>
</tr>
<tr>
<td>GEOG 351A</td>
<td>Spatial Analysis</td>
<td></td>
</tr>
<tr>
<td>GEOG 355</td>
<td>Mobile Geographic Information Systems and Global Positioning Systems</td>
<td></td>
</tr>
<tr>
<td>GEOG 363</td>
<td>Qualitative Methods in Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 365</td>
<td>Field Methods</td>
<td></td>
</tr>
<tr>
<td>GISC 200</td>
<td>Introduction to GIS</td>
<td></td>
</tr>
<tr>
<td>GISC 351</td>
<td>Spatial Analysis</td>
<td></td>
</tr>
<tr>
<td>ANTH 298</td>
<td>Ethnography</td>
<td></td>
</tr>
<tr>
<td>SOCG 364</td>
<td>Quantitative Research Methods and Analysis</td>
<td></td>
</tr>
<tr>
<td>SOCG 365</td>
<td>Qualitative Research Methods and Analysis</td>
<td></td>
</tr>
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</table>

Advanced Courses
Select two courses from the following: 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>GEOG 300-339</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>GEOG 360</td>
<td>Geographic Study Abroad</td>
<td></td>
</tr>
<tr>
<td>GEOG 361</td>
<td>Grassroots Development in Guatemala</td>
<td></td>
</tr>
<tr>
<td>GEOG 410</td>
<td>Advanced Topics in Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 485</td>
<td>Readings in Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 491A</td>
<td>Individual Study in Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 494</td>
<td>Community Engaged Study in Geography</td>
<td></td>
</tr>
</tbody>
</table>

Senior Seminar
GEOG 490 | Senior Seminar in Geography | 4 |

Electives
Select two additional courses, one of which must be at the 300- or 400-level. Any geography course or approved course in related fields fulfills this requirement. 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits
35-39

1 EESC 112 Evolution of Earth can substitute for GEOG 111 Landform Processes.
2 These will be chosen by the student in consultation with her/his academic advisor to reflect the student’s area of emphasis.
3 At least one of which must be either a GEOG or GISC course, and at least one of which must be at the 300 level.
4 Usually taken during the Fall semester of the senior year, is the required capstone to the major.

Certificate in Geographic Information Science can be found by using this link (p. 98).

Master of Science in Geospatial Analysis Accelerated Degree Program – see Undergraduate-Graduate Program in Geography/MSGA (p. 108)

General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).
Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Geology

Degree: B.S., Environmental Science and Geology

Department of Earth and Environmental Sciences (http://publications.umw.edu/undergraduatecatalog/colleges/cas/college-of-arts-and-sciences-faculty/earth-and-environmental-sciences-department)

Geology is the scientific study of the Earth, including its composition, dynamics, surface processes, and history. The geology major (Bachelor of Science degree in Environmental Sciences and Geology) provides broad training in a diverse range of courses appropriate for students interested in pursuing a professional career or graduate studies in the earth sciences and related fields. The program also provides part of the necessary background for teaching the earth sciences. Because geology is an interdisciplinary science, students are encouraged to add courses from other fields. For example, students interested in paleontology are advised to take appropriate biology classes, whereas courses in chemistry and physics are important in disciplines such as seismology, geochemistry, hydrology, and studies of energy and mineral resources.

The Department has modern laboratories in the Jepson Science Center equipped with advanced analytical instruments to support classroom instruction and to provide opportunities for research. Equipment for ecological studies in terrestrial, fresh water, and marine environments includes live animal traps, plankton and insect nets, seines, dissolved oxygen, conductivity, and pH meters, and fresh and salt water aquaria. Major laboratory equipment includes petrographic microscopes, a magnetic susceptibility instrument, and dedicated lab facilities for paleontology, sedimentology, and geochemistry. The Jepson Science Center has a variable pressure scanning electron microscope with chemical capabilities that is shared by the science disciplines. For environmental and geological fieldwork, the department has GPS equipment, a small fleet of research boats (including one equipped for trawling, coring, and dredging), coring and surveying equipment, and for classroom study, an extensive collection of rocks, minerals, and fossils. The department also maintains a computer lab/classroom equipped with the latest Geographic Information Systems (GIS) software.

Majors in all of our programs are encouraged to do independent study and/or research during their senior year. Financial support for student research is available. Qualified students may also choose to do an internship with a professional organization during either their junior or senior year. Students with a 3.00 overall grade-point average and a 3.25 grade-point average in the major may pursue Honors in Environmental Science, Geology, or Environmental Geology by completing an independent research project and writing and defending a thesis.

All of our majors are encouraged to fulfill the general education experiential learning requirement by completing Undergraduate Research URES 197 Undergraduate Research, Earth and Environmental Science

EESC 481 Readings, EESC 491 Individual Study, EESC 493 Honors Research, or EESC 499 Internship. Alternatively, majors may meet this requirement by participating in an approved supervised on-campus or off-campus summer research experience developed in consultation with the department (such as the UMW Summer Science Research Program or a similar program at another college or university). To complete the experiential learning requirement through a summer research experience, contact the department chair for more details.

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC 111</td>
<td>Our Dynamic Earth</td>
<td>4</td>
</tr>
<tr>
<td>EESC 112</td>
<td>Evolution of Earth</td>
<td>4</td>
</tr>
<tr>
<td>EESC 240</td>
<td>Field Methods in Environmental Science and Geology</td>
<td>4</td>
</tr>
<tr>
<td>EESC 301</td>
<td>Mineralogy</td>
<td>4</td>
</tr>
<tr>
<td>EESC 302</td>
<td>Petrology</td>
<td>4</td>
</tr>
<tr>
<td>EESC 311</td>
<td>Sedimentation and Stratigraphy</td>
<td>4</td>
</tr>
<tr>
<td>EESC 412</td>
<td>Structural Geology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>EESC 205</td>
<td>GIS Applications in Environmental Science and Geology with Lab</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 250</td>
<td>Introduction to Geographic Information Systems and Cartography</td>
<td>4</td>
</tr>
<tr>
<td>GISC 200</td>
<td>Introduction to GIS</td>
<td>4</td>
</tr>
</tbody>
</table>

Select at least 10 credits from the list of Geology major electives below.  

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EESC 121</td>
<td>Oceanography</td>
<td>4</td>
</tr>
<tr>
<td>EESC 201</td>
<td>Paleontology</td>
<td>4</td>
</tr>
<tr>
<td>EESC 307</td>
<td>Environmental Soil Science</td>
<td>3</td>
</tr>
<tr>
<td>EESC 313</td>
<td>Fluvial Geomorphology</td>
<td>4</td>
</tr>
<tr>
<td>EESC 315</td>
<td>Hydrogeology</td>
<td>4</td>
</tr>
<tr>
<td>EESC 325</td>
<td>Environmental Geochemistry</td>
<td>4</td>
</tr>
<tr>
<td>EESC 335</td>
<td>Plate Tectonics</td>
<td>4</td>
</tr>
<tr>
<td>EESC 340</td>
<td>Energy Resources and Technology</td>
<td>3</td>
</tr>
<tr>
<td>EESC 355</td>
<td>Icehouse-Greenhouse Earth</td>
<td>3</td>
</tr>
<tr>
<td>EESC 360</td>
<td>Environmental Exploration</td>
<td>2-4</td>
</tr>
<tr>
<td>EESC 421</td>
<td>Special Topics</td>
<td>2-4</td>
</tr>
<tr>
<td>EESC 481</td>
<td>Readings</td>
<td>1-2</td>
</tr>
<tr>
<td>EESC 491</td>
<td>Individual Study</td>
<td>1-4</td>
</tr>
<tr>
<td>EESC 493</td>
<td>Honors Research</td>
<td>4</td>
</tr>
<tr>
<td>EESC 499</td>
<td>Internship</td>
<td>1-12</td>
</tr>
</tbody>
</table>

CHEM 331 Environmental Chemistry or CHEM 332 Environmental Chemistry Laboratory may be substituted for up to four (4) of these credits.

A maximum of 3 credits may count toward the major requirements.

Prerequisite Courses

CHEM 111 General Chemistry I and CHEM 112 General Chemistry II are prerequisites to courses in the Geology major. Students expecting to
major in a geology program should consider taking the introductory chemistry sequence as general education requirements or as electives.

**General Education Requirements**

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

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**Total Credits Required for the Degree:** 120 credits

**German**

**Degree: B.A., Modern Foreign Languages**

Department of Modern Languages and Literatures (https://cas.umw.edu/modernlanguages)

The German major leads to a Bachelor of Arts degree in Modern Foreign Languages. Through courses in German, students gain linguistic proficiency, as well as understanding of the literatures and cultures of the German-speaking world. Electronic resources are used extensively to supplement classroom instruction. Upper-level classes are conducted in German.

Double majors are possible, and non majors may also take advantage of the language program. The resident program director of this area is a native speaker of German and sponsors various inter-cultural programs.

The Department of Modern Languages and Literatures cooperates with a variety of overseas study programs, advises and encourages students wishing to study abroad, and helps in planning their foreign study programs. Credits can be accepted from abroad to fulfill major requirements. UMW offers programs in German-speaking countries of varying lengths, making it possible for students to study during spring break, summer or for a semester or year there.

Graduates in German may pursue careers in government or in private fields in which the knowledge of this language and culture is essential, including interpreting, translating, research, social services, education, or international business.

**Major Requirements**

Thirty-two (32) credits in German including:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 202A</td>
<td>Intermediate German II</td>
<td>3</td>
</tr>
<tr>
<td>GERM 330</td>
<td>Methods Seminar: Analyzing Text and Culture</td>
<td>4</td>
</tr>
</tbody>
</table>

Select at least two of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 302</td>
<td>Oral Communication</td>
<td>8</td>
</tr>
<tr>
<td>GERM 303</td>
<td>Advanced Composition</td>
<td>15</td>
</tr>
<tr>
<td>GERM 304</td>
<td>Communication through Film</td>
<td></td>
</tr>
</tbody>
</table>

Select additional German courses at the 300- or 400-level

**Total Credits**

15

1 With approval of the department IDIS 350 Study Abroad may count as an elective in the major.

**General Education Requirements**

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

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**Electives**

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**Total Credits Required for the Degree:** 120 credits

**Historic Preservation**

**Degree: B.A., Historic Preservation**

Department of Historic Preservation (https://cas.umw.edu/hisp)

Historic Preservation focuses on the maintenance, conservation, advocacy, and interpretation of historic sites and structures and on cultural resource management. Historic Preservation provides opportunities for students to gain a deeper and richer understanding of America's cultural and ethnic diversity and the ramifications of technological innovation and social change on people's quality of life.

Mary Washington was one of the first academic institutions in America to establish an undergraduate curriculum in historic preservation and the first to establish an independent Department of Historic Preservation – now one of the largest undergraduate program of its kind in the nation. The department offers an interdisciplinary Bachelor of Arts degree in Historic Preservation that acquaints students with a broad range of activities, methods, and theoretical perspectives. Students in the program may emphasize historic architecture, building forensics, archaeology, preservation planning, material culture, or museums in their course work.

Historic Preservation majors explore the theoretical, ethical, and philosophical issues that surround preservation practice. The acquisition of research and analytical skills is stressed and substantial fieldwork, laboratory, or research assignments are woven into most courses. The academic program of the department is strongly enhanced by the research and public education programs of the UMW Center for Historic Preservation.

The historic preservation program benefits by the location of the University in Fredericksburg, a city with an exceptionally rich history. Intellectual and professional skills are developed through intensive, hands-on involvement in preservation activities in the area, and
opportunities exist for similar experience abroad. Students design and
fabricate museum exhibits, carry out archaeology projects, conduct
architectural surveys, and prepare diagnostic reports for local historic
sites, structures and districts. Students interact with the local and
University community through the activities of the student-organized
Preservation Club. Special financial assistance is available for historic
preservation students through a number of scholarships which are
described within the Department’s website (http://cas.umw.edu/hisp).

Major Requirements

Thirty-six (36) credits including:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>HISP 100</td>
<td>Introduction to Historic Preservation</td>
<td>3</td>
</tr>
<tr>
<td>HISP 105</td>
<td>The American Built Environment</td>
<td>3</td>
</tr>
<tr>
<td>HISP 200</td>
<td>Introduction to Museum Studies</td>
<td>3</td>
</tr>
<tr>
<td>HISP 205</td>
<td>Documentation and Field Work</td>
<td>3</td>
</tr>
<tr>
<td>HISP 207</td>
<td>American Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>HISP 209</td>
<td>Planning History and Practice</td>
<td>3</td>
</tr>
<tr>
<td>HISP 305A</td>
<td>Historic Building Technologies</td>
<td>3</td>
</tr>
<tr>
<td>HISP 320</td>
<td>Material Culture</td>
<td>3</td>
</tr>
<tr>
<td>HISP 405C</td>
<td>Advanced Methods in Historic Preservation</td>
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Select 3 credits of the following:

<table>
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>HISP 461A</td>
<td>Lab in Building Forensics</td>
<td>3</td>
</tr>
<tr>
<td>HISP 462A</td>
<td>Laboratory Methods in Archaeology</td>
<td></td>
</tr>
<tr>
<td>HISP 463</td>
<td>Laboratory in Museum Design and Interpretation</td>
<td></td>
</tr>
<tr>
<td>HISP 469</td>
<td>Laboratory in Preservation Planning</td>
<td></td>
</tr>
</tbody>
</table>

Select 6 credits of following:

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HISP 206</td>
<td>Introduction to American Folklore</td>
<td></td>
</tr>
<tr>
<td>HISP 208</td>
<td>Introduction to Conservation</td>
<td></td>
</tr>
<tr>
<td>HISP 302</td>
<td>Preservation Law</td>
<td></td>
</tr>
<tr>
<td>HISP 303A</td>
<td>Archives and Society</td>
<td></td>
</tr>
<tr>
<td>HISP 308</td>
<td>Cultural Resource Management</td>
<td></td>
</tr>
<tr>
<td>HISP 313</td>
<td>Museum Education</td>
<td></td>
</tr>
<tr>
<td>HISP 323</td>
<td>Heritage Tourism</td>
<td></td>
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<tr>
<td>HISP 324</td>
<td>Urban Design</td>
<td></td>
</tr>
<tr>
<td>HISP 325</td>
<td>Vernacular Architecture in America</td>
<td></td>
</tr>
<tr>
<td>HISP 327</td>
<td>Analytical Archaeology</td>
<td></td>
</tr>
<tr>
<td>HISP 345</td>
<td>Computer Applications in Historic Preservation</td>
<td></td>
</tr>
<tr>
<td>HISP 360</td>
<td>International Preservation</td>
<td></td>
</tr>
<tr>
<td>HISP 467</td>
<td>Field Methods in Archaeology</td>
<td></td>
</tr>
<tr>
<td>HISP 470</td>
<td>Historic Preservation Abroad</td>
<td></td>
</tr>
<tr>
<td>HISP 471</td>
<td>Special Studies in Historic Preservation</td>
<td></td>
</tr>
<tr>
<td>HISP 491</td>
<td>Individual Study in Historic Preservation</td>
<td></td>
</tr>
<tr>
<td>GEOG 250</td>
<td>Introduction to Geographic Information Systems and Cartography</td>
<td></td>
</tr>
</tbody>
</table>

| Total Credits | 36 |

HISP 499 Internship in Historic Preservation is strongly recommended
but does not count toward requirements for the major.

General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of
Science degrees (p. 35) apply to all students who are seeking to earn an
undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate
set of BLS general education requirements (p. 36).

Electives

Elective courses are those that are not needed to fulfill a general
education requirement or major program requirement but are chosen
by the student to complete the 120 credits required for graduation with
a B.A./B.S. degree or the BLS degree. These courses may be taken
graded or pass/fail (or S/U in the case of physical education and 100-
level dance). No student in a regular B.A./B.S. program may count more
than 60 credits in a single discipline toward the 120 credits required for
graduation.

Total Credits Required for the Degree: 120 credits

History

Degree: B.A., History
Department of History and American Studies (https://cas.umw.edu/
historyamericanstudies)

The History curriculum is widely diversified by topic and by approach
and offers an extensive range of courses from ancient to modern times
in American, Asian, European, and Latin American. The Bachelor of Arts
degree in History itself is distinctive for four courses that are particularly
germane to student development of independent, critical judgment based
on historical skills. The First-Year Seminars offer incoming students,
particularly those who have completed AP courses, the opportunity
to move quickly into the history major during their first year. The two-
semester History Colloquium and Practicum are seminars typically
completed during the sophomore or junior year that prepare majors in
the critical evaluation of historical arguments, research and analysis
of historical data, and historical writing. These courses are essential
preparation for upper-level lecture courses and seminars and for the
senior course Historical Research. This capstone course provides an
opportunity to complete a historical research project working one-on-one
with a member of the history faculty.

An internship option enhances the program by granting credit for history-
related, career-oriented work outside the classroom. The goal of the
History program is to produce graduates with a command of factual and
conceptual knowledge of the past; the analytical methods that historians
use to recover, research, and write about the past; the tools to create and
produce materials in a digital age; and well-honed writing and speaking
skills. Graduates of the History program go on to a wide range of careers
in which the ability to understand and solve historical problems, and
in which skills of independent, critical judgment based on historical
knowledge, are useful. Because the practice of history requires the ability
to analyze and communicate ideas clearly as well as to retain factual
information, it is an ideal preparation for law school and for careers in
business, public policy, government, and journalism.

Honors in History at Graduation requires a 3.5 grade-point average in the
major and superior work in HIST 485 Historical Research, or HIST 486
Historical Research Abroad.
Phi Alpha Theta, the national history honorary society, enriches the quality of the History program and offers opportunities to participate in social and educational activities.

**Major Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 121 &amp; HIST 122</td>
<td>Western Civilization I and Western Civilization II</td>
<td>6</td>
</tr>
<tr>
<td>HIST 131 &amp; HIST 132</td>
<td>American History to 1865 and American History Since 1865</td>
<td>6</td>
</tr>
<tr>
<td>HIST 141 &amp; HIST 142</td>
<td>Asian Civilization I and Asian Civilization II</td>
<td>6</td>
</tr>
<tr>
<td>HIST 297</td>
<td>History Colloquium</td>
<td>3</td>
</tr>
<tr>
<td>HIST 298</td>
<td>History Practicum</td>
<td>3</td>
</tr>
<tr>
<td>Select 15 elective credits at the 200-level and beyond</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Select 9 credits at the 400-level</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

1. Three credits must be HIST 485 Historical Research or HIST 486 Historical Research Abroad and 3 credits of which may be HIST 491 Individual Study.

AMST 202 Sophomore Special Topics Seminar Sophomore Special Topics Seminar or AMST 303 Junior Special Topics Seminar (3 credits total) may count as an elective in the History major with permission from the Department Chair.

Internships (HIST 499B Internship) are encouraged, but count as electives in the major only with permission from the Department Chair.

**General Education Requirements**

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

**Electives**

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

**Total Credits Required for the Degree:** 120 credits

**Interdisciplinary Science Studies**

**Degree:** B.S., General Liberal Arts and Studies

Department of Earth and Environmental Sciences (http://publications.umw.edu/undergraduatecatalog/colleges/cas/college-of-arts-and-sciences-faculty/earth-and-environmental-sciences-department)

Interdisciplinary Science Studies is an interdisciplinary major leading to a general liberal arts and sciences (Bachelor of Arts) degree. This major is designed with the idea of creating a program of study that will best prepare a student to become a science educator. While this has been developed for students preparing to enter the teaching profession at the elementary level, it will also provide excellent preparation for those who might be interested in becoming science educators for museums, nature centers, aquariums, zoos, and a number of other fields as well. (Methods, approaches, and practices involved in teaching elementary age children science are provided through Education coursework.) The major, which leads to a general liberal arts and studies (Bachelor of Arts) degree, has been developed to provide students with an in-depth exposure to one area of science, broad exposure to at least one additional area of science, a strong background in mathematics, and exposure to other areas that will strengthen their pedagogy (e.g. engineering/design, museum studies, digital storytelling).

**Major Requirements**

Course requirements include twenty-one (21) hours from Earth and Environmental Sciences, an eleven (11) or twelve (12) hour, three course building sequence from a second science area (Biology, Chemistry, Physics, Geology, or Computer Science). Additional required courses include MATH 120 Quantitative Reasoning for Decision-Making, IDIS 307 How Things Work: Engineering and the Design Process and IDIS 407 Field Project in STEM Education, and CPSC 106 Digital Storytelling.

Students enrolled in the Interdisciplinary Science Studies major will also take the undergraduate Education coursework required for students enrolled in the 5-year, Master of Science (M.S.) in Elementary Education program.

**Interdisciplinary Science Studies Required Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC 110</td>
<td>Environmental and Ecological Systems</td>
<td>3</td>
</tr>
<tr>
<td>EESC 111</td>
<td>Our Dynamic Earth</td>
<td>4</td>
</tr>
<tr>
<td>or EESC 201</td>
<td>Oceanography</td>
<td>4</td>
</tr>
<tr>
<td>EESC 230</td>
<td>Global Environmental Problems</td>
<td>3</td>
</tr>
<tr>
<td>EESC 240</td>
<td>Field Methods in Environmental Science and Geology</td>
<td>4</td>
</tr>
<tr>
<td>EESC 340</td>
<td>Energy Resources and Technology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 120</td>
<td>Quantitative Reasoning for Decision-Making</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 106</td>
<td>Digital Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>IDIS 307</td>
<td>How Things Work: Engineering and the Design Process</td>
<td>3</td>
</tr>
<tr>
<td>IDIS 407</td>
<td>Field Project in STEM Education</td>
<td>4</td>
</tr>
</tbody>
</table>

A three-course, building sequence from a second science area (Biology, Chemistry, Environmental Science, Geology, Physics, or Computer Science) 11-12

**Total Credits** 45-46

**Links to Course Descriptions for Disciplines in the Major**

Earth and Environmental Sciences (EESC) (https://catalog.umw.edu/undergraduate/course-descriptions/earth-environmental-science)

Interdisciplinary (IDIS) (https://catalog.umw.edu/undergraduate/course-descriptions/interdisciplinary)
Biology (BIOL)  
Chemistry (CHEM)  
Computer Science (CPSC)  
Mathematics (MATH)  
Physics (PHYS)

General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

International Affairs

Degree: B.A., International Affairs

Department of Political Science and International Affairs (https://cas.umw.edu/polisci)

The interdisciplinary Bachelor of Arts degree in International Affairs is designed to provide the student with a broad knowledge of the contemporary international system as well as with specific expertise in a given geographic area and/or academic discipline. To this end, the major combines required courses that examine international affairs from a variety of disciplinary perspectives (i.e., economics, geography, history, and political science) with related field courses that permit students to pursue in depth their particular geographical and/or disciplinary interests. Students majoring in International Affairs have ample opportunities to pursue internships with the numerous governmental agencies and private “think tanks” located in Washington, D.C., which focus on different aspects of contemporary international economic, political, and social issues.

Career opportunities for the major in International Affairs range from such traditional areas as work with government or private agencies engaged in research on foreign policy or intelligence issues to such new and rapidly expanding areas as employment with multinational corporations or international banking institutions.

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 321A</td>
<td>Theories of International Relations</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 350B</td>
<td>Politics of Developing Countries</td>
<td>3</td>
</tr>
<tr>
<td>or PSCI 351</td>
<td>International Political Economy</td>
<td></td>
</tr>
<tr>
<td>PSCI 356</td>
<td>American Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>ECON 382</td>
<td>International Trade</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 384</td>
<td>Economic Development</td>
<td></td>
</tr>
<tr>
<td>HIST 371</td>
<td>European Diplomatic History I</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 372</td>
<td>European Diplomatic History II</td>
<td></td>
</tr>
<tr>
<td>GEOG 338</td>
<td>Geopolitics</td>
<td>3</td>
</tr>
<tr>
<td>or GEOG 339A</td>
<td>Geography and Development</td>
<td></td>
</tr>
<tr>
<td>Additional 21 credits</td>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

Choose one of the following foreign language requirement options:

| Option A - Completion of two languages through the intermediate level |  |
| Option B - At least six credits in one language at the advance level |  |

Total Credits: 39

1. Chosen by student and advisor from among, but not limited to, the following disciplines: Economics, French, Geography, German, History, Italian, Political Science, Spanish.
2. Except Latin or Greek

General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

International Business

Degree: B.S., Business Administration

College of Business (https://business.umw.edu/about-the-college)

A major in International Business will help prepare students for jobs with multinational firms, domestic firms that import or export goods and services, public institutions such as the federal government and its myriad agencies, international charitable agencies, and environmental organizations. By carefully selecting course electives and experiences, students may find international careers in a host of fields, including traditional business paths (accounting, finance, logistics, management, MIS, marketing, and purchasing) or unique professions determined by the desires of individual students. For example, a student may pursue a
degree in International Business along with a minor in art with a goal of managing an art museum. International Business students must be able to understand the importance and influence of culture on how people make decisions.

A student who has not declared a Business major is limited to taking no more than 27 hours in business or business related courses defined as those courses with the following prefixes: ACCT, BLAW, BUAD, DSCI, FINC, MKTG, MIST, MIST, BPST, CIST, or LRSP.

Incoming students interested in pursuing a program of study in business will initially be designated as “pre-business.” Normally this designation will be held for no more than the first two years. After admission to the College of Business, a student may declare a business major.

To be admitted to the College of Business, students must have earned a cumulative grade point average of 2.0 or better after completing at least 27 college credits. Additionally, applicants will have completed the following courses for the College of Business and have earned an average GPA of 2.5 in these five courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 180</td>
<td>Introduction to Statistics (or equivalents)</td>
<td>3</td>
</tr>
</tbody>
</table>

1 ACCT 110 Intensive Principles of Accounting may substitute for ACCT 101 Principles of Accounting I and ACCT 102 Principles of Accounting II.

In addition to the requirements above, transfer students must have earned a cumulative GPA of 2.0 in 15 semester hours taken at the University of Mary Washington and have completed 9 semester hours of required College of Business coursework with a cumulative GPA of 2.5 to be admitted to the College of Business.

The major in Business Administration is a Bachelor of Science degree. Business majors should note the degree requirements for B.S. degrees, found here (p. 28). Additional important information is contained in the description of B.A./B.S. General Education Requirements (p. 35).

Please also note that the section of this Catalog outlining “University Academic Policies and Procedures” applies to students in the College of Business. Students with questions about general academic requirements should consult this part of the Catalog for guidance. All of the “Academic Resources” described in an earlier section of this Catalog are available as needed to students in the College of Business.

## Major Requirements

### Required Prerequisites

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLAW 201</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>STAT 180</td>
<td>Introduction to Statistics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

1 Or its equivalent (ECON 361A Introductory Econometrics, or PSYC 261A Introductory Statistics for Psychology)

### Common Core

The International Business Major is one of four majors offered within the College of Business leading to the Bachelor’s of Science degree in Business Administration. All business majors are multi-disciplinary degrees that require students master concepts from across the business disciplines: Accounting, Business Administration, Business Law, Decision Sciences, Finance, Management, Management and Information Systems, and Marketing. All majors share a common core of 30 hours of business classes. This common core consists of:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I</td>
<td>6</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>FINC 301</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 301</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 490</td>
<td>Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 301</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

1 ACCT 110 Intensive Principles of Accounting may be taken in place of the ACCT 101 Principles of Accounting I/ACCT 102 Principles of Accounting II sequence.

### Upper Level Electives

Students must then complete an additional eighteen (18) credits of classes to earn a Bachelor of Science degree in Business Administration. Students may major in Business Administration, Accounting, International Business, or Marketing. Upon completion of the program, student transcripts shall state their degree (Bachelor of Science in Business Administration) and their major.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 473A</td>
<td>Environment of International Business Seminar</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 460</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 472</td>
<td>Business Administration Seminar Abroad</td>
<td>3</td>
</tr>
<tr>
<td>ECON 382</td>
<td>International Trade</td>
<td>3</td>
</tr>
<tr>
<td>Select 6 credits of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any additional upper-level College of Business electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FREN 313</td>
<td>Business French</td>
<td>2</td>
</tr>
<tr>
<td>GERM 313</td>
<td>German for Professional Use</td>
<td>2</td>
</tr>
<tr>
<td>SPAN 393</td>
<td>Business Spanish</td>
<td>2</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>
The study of Latin is an appropriate complement to any major in the liberal arts or sciences, and any student may use Latin to satisfy the College's general education requirement for proficiency in a foreign language. Students wishing to major may choose a concentration in Latin within the Bachelor of Arts in Classics degree program. Mary Washington is a member of the Intercollegiate Center for Classical Studies in Rome and the American Academy in Rome, and students who major in Latin are encouraged to apply to their programs.

While some majors include teacher licensure in their schedule, others combine their concentration in Latin with a second major in a related field such as history, philosophy, religion, English, business, or modern languages. With such a background, graduates have a wide range of opportunities after college, including museum work, archaeology, graduate study, teaching, and translating. In recent years, Latin majors have been unusually successful in obtaining high school teaching positions and in gaining admission to graduate and professional schools.

Latin Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAS 103</td>
<td>Ideas and Culture: Greek Civilization</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 105</td>
<td>Ideas and Culture: Roman Civilization</td>
<td>3</td>
</tr>
<tr>
<td>LATN 430A</td>
<td>Advanced Latin Grammar and Composition</td>
<td>3</td>
</tr>
<tr>
<td>Select at least 15 additional credits in Latin courses beyond the intermediate level</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Select at least 9 credits in approved courses relating to Classical Civilization</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

Approved Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin Courses</td>
<td>Any upper-level Latin course, except:</td>
<td>3</td>
</tr>
<tr>
<td>LATN 425</td>
<td>Latin Tutoring Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

Greek Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Greek course.</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Classics Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 114A</td>
<td>History of Western Art I</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 305</td>
<td>Egyptian and Near Eastern Art and Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 310</td>
<td>Greek Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 311</td>
<td>Roman Art</td>
<td>3</td>
</tr>
<tr>
<td>CPRD 299</td>
<td>Mysterium Humanum Studies</td>
<td>3</td>
</tr>
<tr>
<td>CPRD 301</td>
<td>Studies in Ancient Languages ¹</td>
<td>3</td>
</tr>
<tr>
<td>CPRD 302</td>
<td>Studies in Ancient Languages ¹</td>
<td>3</td>
</tr>
<tr>
<td>CPRD 331</td>
<td>Cross-disciplinary Topics in Classics, Philosophy, and Religion ¹</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 319</td>
<td>Shakespeare: The Early Plays</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 320</td>
<td>Shakespeare: Later Plays</td>
<td>3</td>
</tr>
<tr>
<td>HIST 331A</td>
<td>History of Ancient Greece</td>
<td>3</td>
</tr>
<tr>
<td>HIST 332</td>
<td>History of Ancient Rome</td>
<td>3</td>
</tr>
</tbody>
</table>
Managerial choices. Organization and Government allows the student to gain knowledge about the structures of private and public systems. Leadership and Communication guides the student’s skills in the communication and understanding of those systems. Through courses in Leadership and Diversity students learn about the populations that managers must engage and to which they must communicate effectively.

A capstone course encourages students to conduct research through an individual study experience guided by a faculty mentor and/or to complete an internship in a subject appropriate to the major and under the guidance and direction of a faculty advisor and an agency supervisor.

Major Requirements
Thirty-three (33) credits to include the following (consult the relevant sections of this Catalog for course titles and descriptions).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPST 314</td>
<td>Business Legal Environment</td>
<td>3</td>
</tr>
<tr>
<td>or BLAW 201</td>
<td>Legal Environment of Business</td>
<td></td>
</tr>
<tr>
<td>CIST 301</td>
<td>Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>LRSP 201</td>
<td>Accounting for Managers</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 102</td>
<td>Principles of Accounting II</td>
<td></td>
</tr>
<tr>
<td>LRSP 311</td>
<td>The Management Process</td>
<td>3</td>
</tr>
<tr>
<td>or MGMT 301</td>
<td>Principles of Management</td>
<td></td>
</tr>
<tr>
<td>LRSP 316</td>
<td>Quantitative Methods and Statistics Modules</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 180</td>
<td>Introduction to Statistics</td>
<td></td>
</tr>
<tr>
<td>LRSP 344</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>LRSP 412</td>
<td>Marketing for Managers</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LRSP 460</td>
<td>Leadership Strategy and Policy</td>
<td>3</td>
</tr>
<tr>
<td>BLST 491</td>
<td>Individual Study</td>
<td></td>
</tr>
<tr>
<td>BLST 499</td>
<td>Internship (Capstone)</td>
<td></td>
</tr>
<tr>
<td>Select one course from each of the following categories:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethics and Diversity</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Organization and Government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership and Communication</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits
33

Electives
Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Leadership and Management Studies (BLS Only)

Degree: BLS, Bachelor of Liberal Studies
Bachelor of Liberal Studies Program (https://cas.umw.edu/bls)

Leadership and Management is a multidisciplinary major open only to students in the Bachelor of Liberal Studies Program. Students pursuing a B.A. or B.S. degree may not declare this major.

The major in Leadership and Management, leading to a Bachelor of Liberal Studies degree, provides students with basic management skills. The course of study is organized to produce effective and intellectually agile leaders. Students gain advanced critical thinking skills, firm ethical reasoning abilities, and a readiness to participate productively in the workplace and the community.

Business administration courses within the Leadership and Management major introduce students to central theoretical issues regarding management organization and processes within business, industrial, and governmental environments. Additional courses are grounded in liberal arts disciplines recognized by employers as crucial to career growth.

The category of courses in ethical issues helps guide students in decision making and requires them to evaluate the consequences of managerial choices. Organization and Government allows the student to gain knowledge about the structures of private and public systems. Leadership and Communication guides the student’s skills in the communication and understanding of those systems. Through courses in Leadership and Diversity students learn about the populations that managers must engage and to which they must communicate effectively.

A capstone course encourages students to conduct research through an individual study experience guided by a faculty mentor and/or to complete an internship in a subject appropriate to the major and under the guidance and direction of a faculty advisor and an agency supervisor.

Major Requirements
Thirty-three (33) credits to include the following (consult the relevant sections of this Catalog for course titles and descriptions).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPST 314</td>
<td>Business Legal Environment</td>
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<tr>
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<td>3</td>
</tr>
<tr>
<td>LRSP 201</td>
<td>Accounting for Managers</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 102</td>
<td>Principles of Accounting II</td>
<td></td>
</tr>
<tr>
<td>LRSP 311</td>
<td>The Management Process</td>
<td>3</td>
</tr>
<tr>
<td>or MGMT 301</td>
<td>Principles of Management</td>
<td></td>
</tr>
<tr>
<td>LRSP 316</td>
<td>Quantitative Methods and Statistics Modules</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 180</td>
<td>Introduction to Statistics</td>
<td></td>
</tr>
<tr>
<td>LRSP 344</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>LRSP 412</td>
<td>Marketing for Managers</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LRSP 460</td>
<td>Leadership Strategy and Policy</td>
<td>3</td>
</tr>
<tr>
<td>BLST 491</td>
<td>Individual Study</td>
<td></td>
</tr>
<tr>
<td>BLST 499</td>
<td>Internship (Capstone)</td>
<td></td>
</tr>
<tr>
<td>Select one course from each of the following categories:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethics and Diversity</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Organization and Government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership and Communication</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits
33

Ethics and Diversity Category

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSC 302</td>
<td>Computer Ethics</td>
<td></td>
</tr>
<tr>
<td>ECON 351C</td>
<td>Poverty, Affluence, and Equality</td>
<td></td>
</tr>
<tr>
<td>ECON 352</td>
<td>Labor Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 354A</td>
<td>Urban and Regional Economics</td>
<td></td>
</tr>
<tr>
<td>ENGL 206A</td>
<td>Global Issues in Literature</td>
<td></td>
</tr>
<tr>
<td>GEOG 331</td>
<td>Race and Place in America</td>
<td></td>
</tr>
<tr>
<td>HIST 313</td>
<td>African American History through 1865</td>
<td></td>
</tr>
<tr>
<td>HIST 314</td>
<td>African American History since Slavery</td>
<td></td>
</tr>
<tr>
<td>HIST 315</td>
<td>U.S. Immigration History</td>
<td></td>
</tr>
<tr>
<td>HIST 327</td>
<td>US Women’s History to 1870</td>
<td></td>
</tr>
<tr>
<td>HIST 328</td>
<td>US Women’s Hist Since 1870</td>
<td></td>
</tr>
<tr>
<td>PHIL 160</td>
<td>Introduction to Ethics</td>
<td></td>
</tr>
<tr>
<td>PHIL 225</td>
<td>Practical Ethics</td>
<td></td>
</tr>
<tr>
<td>PSYC 233</td>
<td>Psychology of Aging</td>
<td></td>
</tr>
<tr>
<td>PSYC 350</td>
<td>Psychology of Women</td>
<td></td>
</tr>
<tr>
<td>RELG 101</td>
<td>Introduction to World Religions</td>
<td></td>
</tr>
</tbody>
</table>
Organization and Government Category

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELG 277</td>
<td>Religion in America Before the Civil War</td>
<td></td>
</tr>
<tr>
<td>RELG 278</td>
<td>Religion in America After the Civil War</td>
<td></td>
</tr>
<tr>
<td>RELG 305</td>
<td>Religion and Politics in the United States</td>
<td></td>
</tr>
<tr>
<td>SOC 304</td>
<td>Social Stratification</td>
<td></td>
</tr>
<tr>
<td>SOC 315A</td>
<td>Gender and Society</td>
<td></td>
</tr>
<tr>
<td>SOC 341</td>
<td>American Society</td>
<td></td>
</tr>
<tr>
<td>SOC 421B</td>
<td>Racial and Ethnic Relations</td>
<td></td>
</tr>
</tbody>
</table>

Leadership and Communication Category

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 311B</td>
<td>Industrial Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 312</td>
<td>Government and Business</td>
<td></td>
</tr>
<tr>
<td>EESC 330</td>
<td>Environmental Regulations</td>
<td></td>
</tr>
<tr>
<td>FREN 313</td>
<td>Business French</td>
<td></td>
</tr>
<tr>
<td>GEOG 338</td>
<td>Geopolitics</td>
<td></td>
</tr>
<tr>
<td>GERM 313</td>
<td>German for Professional Use I</td>
<td></td>
</tr>
<tr>
<td>PHIL 100</td>
<td>Individual and Community</td>
<td></td>
</tr>
<tr>
<td>PHIL 210</td>
<td>Social and Political Philosophy</td>
<td></td>
</tr>
<tr>
<td>PSCI 201</td>
<td>American Government</td>
<td></td>
</tr>
<tr>
<td>PSCI 202A</td>
<td>American Public Policy</td>
<td></td>
</tr>
<tr>
<td>PSCI 311A</td>
<td>Congress and the Political Process</td>
<td></td>
</tr>
<tr>
<td>PSCI 312A</td>
<td>The American Presidency</td>
<td></td>
</tr>
<tr>
<td>PSYC 201</td>
<td>Social Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 385</td>
<td>Organizational Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 386</td>
<td>Human Resources Management</td>
<td></td>
</tr>
<tr>
<td>PSYC 387</td>
<td>Organizational Development and Change</td>
<td></td>
</tr>
<tr>
<td>SPAN 393</td>
<td>Business Spanish</td>
<td></td>
</tr>
</tbody>
</table>

General Education Requirements

The general education requirements for Bachelor of Liberal Studies (p. 36) apply to all students who are seeking to earn an undergraduate B.L.S. degree.

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Marketing

Degree: B.S., Business Administration

College of Business (https://business.umw.edu/about-the-college)

A major in Marketing will help prepare students for jobs in virtually all industries. In today's world of evolving technologies and media fragmentation there is great demand for those that are able to successfully identify, understand, and reach consumers. The tools that one learns in marketing enables students to work for Fortune 500 companies, non-government organizations, or as entrepreneurs who start their own business. Students are able to gain strong quantitative skills allowing them to pursue careers in market research, policy research, pricing, and supply chain management. The ability to think critically and creatively is also developed so that students are able to pursue careers in promotion (advertising, publicity, public relations), product or service design. Many graduates also choose a professional sales job for their entry into the workforce.

A student who has not declared a Business major is limited to taking no more than 27 hours in business or business related courses defined as those courses with the following prefixes: ACCT, BLAW, BUAD, DSCI, FINC, MKTG, MGMT, MIST, BPST, CIST, or LRSP.

Incoming students interested in pursuing a program of study in business will initially be designated as “pre-business.” Normally this designation will be held for no more than the first two years. After admission to the College of Business, a student may declare a business major.
To be admitted to the College of Business, students must have earned a cumulative grade point average of 2.0 or better after completing at least 27 college credits. Additionally, applicants will have completed the following courses for the College of Business and have earned an average GPA of 2.5 in these five courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I ¹</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Principles of Accounting II ¹</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 180</td>
<td>Introduction to Statistics (or equivalents)</td>
<td>3</td>
</tr>
</tbody>
</table>

¹ ACCT 110 Intensive Principles of Accounting may substitute for ACCT 101 Principles of Accounting I and ACCT 102 Principles of Accounting II.

In addition to the requirements above, transfer students must have earned a cumulative GPA of 2.0 in 15 semester hours taken at the University of Mary Washington and have completed 9 semester hours of required College of Business coursework with a cumulative GPA of 2.5 to be admitted to the College of Business.

The major in Business Administration is a Bachelor of Science degree. Business majors should note the degree requirements for B.S. degrees, found here (p. 28).

Additional important information is contained in the description of B.A./B.S. General Education Requirements (p. 35).

Please also note that the section of this Catalog outlining "University Academic Policies and Procedures" applies to students in the College of Business. Students with questions about general academic requirements should consult this part of the Catalog for guidance. All of the "Academic Resources" described in an earlier section of this Catalog are available as needed to students in the College of Business.

**Major Requirements**

**Required Prerequisites**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLAW 201</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>STAT 180</td>
<td>Introduction to Statistics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

¹ Or its equivalent (ECON 361A Introductory Econometrics, or PSYC 261A Introductory Statistics for Psychology).

² Required prerequisites for certain courses in the major.

**Common Core**

The Marketing Major is one of four majors offered within the College of Business leading to the Bachelor’s of Science degree in Business Administration. All business majors are multi-disciplinary degrees that require students master concepts from across the business disciplines: Accounting, Business Administration, Business Law, Decision Sciences, Finance, Management, Management and Information Systems, and Marketing. All majors share a common core of 30 hours of business classes. This common core consists of:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I ¹</td>
<td>3</td>
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<td>ACCT 102</td>
<td>Principles of Accounting II ¹</td>
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<td>Principles of Macroeconomics</td>
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</tr>
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</tr>
</tbody>
</table>

¹ ACCT 110 Intensive Principles of Accounting may substitute for ACCT 101 Principles of Accounting I and ACCT 102 Principles of Accounting II.

**Additional Requirements**

Student must then complete an additional eighteen (18) credits of classes to earn a Bachelor of Science degree in Business Administration. Students may major in Business Administration, Accounting, International Business, or Marketing. Upon completion of the program, student transcripts shall state their degree (Bachelor of Science in Business Administration) and their major.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 411</td>
<td>Marketing Research</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 450</td>
<td>Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 490</td>
<td>Marketing Strategy</td>
<td>3</td>
</tr>
<tr>
<td>Select 9 credits from any additional upper-level MKTG courses or</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>GISC 200</td>
<td>Introduction to GIS</td>
<td></td>
</tr>
<tr>
<td>GEOG 250</td>
<td>Introduction to Geographic Information Systems and Cartography</td>
<td></td>
</tr>
<tr>
<td>EESC 205</td>
<td>GIS Applications in Environmental Science and Geology with Lab</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

¹ A maximum of three (3) credits of 499 courses may count toward the upper level elective requirement.

**General Education Requirements**

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

**Electives**

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken...
graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

**Total Credits Required for the Degree:** 120 credits

# Mathematics

**Degree:** B.S., Mathematics  
Department of Mathematics (https://cas.umw.edu/math)

The interests and expertise of the mathematics faculty cover a broad range of mathematical areas, including algebra, analysis, topology, discrete mathematics, number theory, statistics, and applied mathematics. With this spectrum of faculty knowledge, the student is afforded an opportunity to learn the contemporary view of mathematics. Inside the classroom, student comprehension is the main concern of the faculty. Outside the classroom, the faculty offers opportunities for independent study, undergraduate research, and internship supervision.

Courses in mathematics vary from the theoretical to the applied. Thus, a Bachelor of Science degree in Mathematics can be a foundation for a career in industry, government, teaching, or the pursuit of a higher degree in graduate school. The department faculty encourages double majors, giving students entrance to a wide variety of fields upon graduation. Majors in other disciplines can be enhanced with one of our minors in mathematics, applied mathematics, actuarial science, or applied statistics.

The University of Mary Washington hosts a chapter of Pi Mu Epsilon, a national honorary mathematics society, and a chapter of the Mathematical Association of America. The Oscar Schultz Award in Mathematics represents the department’s top academic honor and is given annually to a junior or senior in the department. Four additional scholarships are available. The recipients of the Meredith C. Loughran ’94 Scholarship are selected based on their meritorious academic record, citizenship and leadership in public service. The Merrilyn Sawyer Dodson/ class of 1968 Scholarship and the Mary Farley Talley ’66 Scholarship each recognize the scholastic achievements of mathematics majors, while the Louise W. Robertson, M.D. ’56 Scholarship is awarded to a student majoring in mathematics or a health field.

Qualified mathematics majors having at least a 3.5 GPA in mathematics courses and an overall GPA of at least 3.0 may graduate with Honors in Mathematics by completing a directed study or undergraduate research which culminates in an approved Honors thesis.

Majors are encouraged to fulfill the general education experiential learning requirement by completing URES 197 Undergraduate Research, MATH 491B Directed Study, MATH 492A Directed Study, or MATH 499 Internship. Alternatively, majors may meet this requirement by participating in an approved supervised on-campus or off-campus experiential learning activity developed in consultation with the department (such as the UMW Summer Science Institute or a similar program at another college or university). To complete the experiential learning requirement through a summer research experience, contact the department chair for more details.

## Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 122</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 224A</td>
<td>Multivariable Calculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH 300</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 330</td>
<td>Foundations of Advanced Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 431</td>
<td>Abstract Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 471</td>
<td>Real Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 432</td>
<td>Abstract Algebra</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 472</td>
<td>Real Analysis</td>
<td></td>
</tr>
</tbody>
</table>

Select an additional 12 credits from MATH or STAT courses at the 300-/400-level with at least three credits from 400-level MATH or STAT courses

Select 3 additional credits from MATH or STAT courses numbered 207 or above; computer science (CPSC) courses numbered 220 or above; physics (PHYS) courses numbered 105 or above  

| Total Credits | 38 |

1 except CPSC 284 Applied Discrete Mathematics and CPSC 302 Computer Ethics; except PHYS 108 General Physics

Mathematics majors must meet the department’s computer programming requirement by taking one of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 351A</td>
<td>Numerical Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 421</td>
<td>Applied Partial Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 110</td>
<td>Introduction to Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 219</td>
<td>Foundations for Data Science</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 220</td>
<td>Computer Programming and Problem Solving</td>
<td>4</td>
</tr>
</tbody>
</table>

Courses used to satisfy the programming requirement may also be used elsewhere in the major.

At most six (6) credits of directed study (MATH 491B Directed Study / MATH 492A Directed Study or STAT 491 Directed Study/STAT 492 Directed Study) will count for the major.

No internship (MATH 499 Internship or STAT 499 Internship) credits will count for the major.

## General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

## Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.
**Total Credits Required for the Degree: 120 credits**

**Music**

**Degree: B.A., Music**

Department of Music (https://cas.umw.edu/music)

The Department of Music functions as one component of the liberal arts institution. Cognizant of its mission the department offers a Bachelor of Arts degree in Music that allows students to focus the major with elective courses. Students might use these electives to develop a specialization in composition, history, performance, technology, or theory. Additionally, students may pursue licensure to teach music through the College of Education. The music minor offers structure for students seeking a formalized music education to supplement another major. A number of ensembles offer performance opportunities for the University as well as community musicians. The department also serves the community at large through its offerings of cultural events — lectures, workshops, and concerts. This liberal arts orientation defines the goal of the major program — to allow students to pursue a specialized interest in music beyond a specific core of courses.

The objectives of the major program in music involve preparing students for graduate study as well as for careers in the performing arts, public school teaching, and many other areas. The music department’s Pollard Hall includes a small recital hall, a class piano laboratory, practice and rehearsal facilities as well as a recording studio, electronic music lab and media collection. Nearby duPont Hall houses the department’s music production lab.

The department presents a wide variety of public musical performances throughout the academic year. Students and faculty appear in general recitals, senior and faculty recitals, and chamber programs. The department and the University also sponsor visiting performers, composers, and lecturers in recitals, concerts, and master classes. The music department offers individual instruction in all traditional wind, string, and keyboard instruments and voice based on competitive auditions. A maximum of 12 credits in individual instruction and 10 credits in performing ensembles may be counted toward the minimum 120 credits required for a degree.

Students should balance their total program before exceeding these limits. Students planning to major in music should take MUTH 191 Diatonic Music Theory and MUTH 192 Diatonic Music Theory Skills in the first year. Prospective majors also should audition for admission to individual study in their performance area and to a musical ensemble. Incoming majors also should audition in the winter months for the Aurelia B. Walford and the Henry and Grace Spicer Scholarships, awarded to outstanding performers.

**Major Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUTH 191</td>
<td>Diatonic Music Theory</td>
<td>3</td>
</tr>
<tr>
<td>MUTH 192</td>
<td>Diatonic Music Theory Skills</td>
<td>1</td>
</tr>
<tr>
<td>MUTH 291</td>
<td>Chromatic Music Theory</td>
<td>3</td>
</tr>
<tr>
<td>MUTH 292</td>
<td>Chromatic Music Theory Skills</td>
<td>1</td>
</tr>
<tr>
<td>MUTH 391</td>
<td>Post-Tonal Music Theory</td>
<td>3</td>
</tr>
<tr>
<td>MUTH 392</td>
<td>Post-Tonal Music Theory Skills</td>
<td>1</td>
</tr>
<tr>
<td>MUHL 375</td>
<td>Music Hist. I: Genre and Form</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 376</td>
<td>Music History II: Narratives and Ideologies</td>
<td>3</td>
</tr>
</tbody>
</table>

MUTC 100 Technology for Musicians 3
Capstone (take in final year) 1
MUSC 490 Music Seminar (take in final year) or EDUC 499 Internship

Demonstrate functional keyboard skills by passing a piano proficiency exam 2
Select four semesters of studio lessons 4
Select four semesters of ensembles 4
Select an additional 8 credits 8

Total Credits 40

1 Refer to College of Education program information (p. 191) for details about music licensure.
2 Students may prepare for the piano proficiency exam by taking MUPR 205A Class Piano I, MUPR 206 Class Piano II, MUPR 207A Class Piano III, MUPR 305A Private Piano, and/or MUPR 405 Private Piano.

**General Education Requirements**

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

**Electives**

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

**Total Credits Required for the Degree: 120 credits**

**Nursing (BSN Completion Program)**

**Degree: BSN, Nursing**

Nursing Program (https://cas.umw.edu/nursing)

The BSN Completion Program is a post-licensure degree program administered by the College of Arts and Sciences. The program’s mission combines the University’s mission with the recommendations contained within the Essentials of Baccalaureate Education for Professional Nursing Practice by the American Association of Colleges of Nursing (AACN). Along with seven higher-level nursing courses, the program will continue the UMW tradition of liberal arts education by including three liberal arts courses. The program will enhance the writing, critical thinking, and speaking skills of RNs whose focus is the delivery of direct patient care and prepare them for lifelong learning and professional creativity.

Students are mentored by university faculty and nursing leaders in the community to identify and improve the delivery of patient care through the use of nursing research and evidenced-based practice.

The overarching goals of the program is to prepare nurses to be able to:
1. Practice nursing within a complex healthcare system and assume the roles of care provider, designer, manager, and coordinator of care.
2. Transition to health promotion and disease prevention healthcare provided in the community.
3. Continue their nursing education to the graduate level.

**The UMW BSN Completion Program Curriculum**

The BSN Completion Program’s curriculum is designed for RNs. All applicants are required to have completed either an accredited associate degree program or a diploma program prior to being admitted to the program. All entering students must hold a current, unencumbered RN license which permits them to practice nursing in the Commonwealth of Virginia.

The BSN Completion Program teaches RNs professionalism; the importance of inter-professional teams; healthcare policy, finance and regulation; patient-centered care; cultural sensitivity; health promotion and disease prevention; the impact of genetics on health risks; the use of evidenced-based practice, leadership principles and knowledge gained from a liberal education for clinical decision making, patient safety, and quality improvement; the use of technology and informatics in healthcare; life-long learning and practice across the lifespan.

**The UMW BSN Completion Program Expected Graduates Outcomes are:**

1. Examine the concepts of professionalism and fundamental beliefs to nursing, which include the inherent values of altruism, autonomy, human dignity, integrity, social justice, and ethics.
2. Create intra- and inter-professional partnerships, characterized by teamwork, collaboration, and oral and written communication to deliver high-quality, safe patient care.
3. Evaluate healthcare policy and finance and regulatory practices to influence the allocation of health resources in order to reduce health disparities.
4. Utilize the nursing process when practicing caring, competent, holistic, and patient-centered nursing care with individuals, families, groups, communities, and populations from diverse backgrounds in a variety of settings across the lifespan.
5. Evaluate nursing research to determine best practices and translate current evidence into professional nursing practice.
6. Formulate plans of care which promote health and prevent disease for individuals, families, groups, populations, and communities in complex situations.
7. Synthesize a liberal arts education, knowledge of nursing science, and critical thinking skills to support inter-professional partnerships which focus on health promotion and disease prevention.
8. Compare and contrast leadership knowledge, skills, and attitudes to promote safe, high-quality care with a focus on continued evaluation and improvement within a variety of health care settings.
9. Utilize information management knowledge and skills by employing technology and information systems to create safe patient care and enhanced decision-making in a variety of health care settings.

**Accreditation**

The baccalaureate degree in nursing at the University of Mary Washington is accredited by the Commission on Collegiate Nursing Education. See www.ccneaccreditation.org.

**University of Mary Washington and Germanna Community College Nursing Programs Academic Partnership**

The University of Mary Washington (UMW) and Germanna Community College (GCC) recognized the need for registered nurses (RNs) to achieve baccalaureate degrees in nursing through an improved education system which promotes seamless academic progression. Therefore the two nursing programs created an Academic Partnership and adopted two plans which lead to a BSN.

**BSN Concurrent Enrollment Plan (BSN-CE)**

This Agreement is for non-residential UMW students who are interested in earning a pre-licensure Associate of Applied Science (AAS) degree in nursing from GCC and a post-licensure BSN from UMW. This Agreement permits GCC nursing students to be concurrently enrolled in the BSN Completion Program while completing an Associate of Applied Science (A.A.S.) degree in nursing. When students are accepted into the GCC Nursing Program, they, upon student request, will be granted admission into the BSN Completion Program as Pre-Nursing (3+1) students if they complete a Letter of Intent and have a GPA of 2.5 on a 4-point scale. Concurrently enrolled UMW/GCC nursing students may complete the three liberal arts courses included in the BSN Completion Program during summer sessions. Students may begin taking UMW courses that begin with the NURS prefix after presenting a current and valid unencumbered RN license to practice nursing in the Commonwealth of Virginia. Students will receive 41 credits upon presenting current and valid unencumbered RN license to practice nursing in the Commonwealth of Virginia to the BSN Completion Program office and complete a major declaration form. Both documents are submitted to the Office of the Registrar.

**Second Degree**

A student who has earned a bachelor’s degree from the University of Mary Washington and wishes to pursue further undergraduate work may either complete a post-baccalaureate major and have it noted on the permanent record (with the date of completion) or earn a second degree if it is different from the first degree (for example, a subsequent BSN if the first degree was a B.A., for example).

The student must apply for admission to the new degree program through the Office of Admissions and must earn at least 30 additional credits at Mary Washington after completion of the first degree. No more than 14 of these credits can be completed prior to matriculation for the second degree. The most appropriate 90 credits will be selected to count toward the second degree. The student must complete the degree program requirements in the Academic Catalog in effect at the time of matriculation into the second degree.

A student who earned his or her first degree from another institution must enter Mary Washington as a transfer student, then complete the requirements of the second degree as defined in the Academic Catalog in effect at the time of matriculation into the second degree.

**Transfer Credit**

The transfer credit total for the BSN degree cannot exceed 90 semester credits. At least 30 credits must be taken at the University of Mary
Washington after admission to the program. The holder of an associate’s degree may receive up to 49 credits, in addition to the 41 credits for R.N. licensure, toward the BSN degree based on transcript evaluation. The holder of a Nursing Diploma may receive additional credits beyond the 41 credits based on evaluation of his or her transcript.

Credit by Examination
The University accepts many of the College Level Examination Program (CLEP) and DANTES Subject Standardized tests as undergraduate transfer credit. Students may earn credit by meeting the minimum required score on selected CLEP or DANTES tests; these credits may be used to fulfill general education, prerequisite requirements or as elective credits; they may not be used to fulfill NURS course requirements. A maximum of 30 credits by examination may be counted toward the degree. Students should consult the BSN Completion Program Office for information on specific CLEP or DANTES exams that are accepted by the University. CLEP tests are administered at local universities. DANTES exams are offered only on military installations.

Academic Resources, Policies, and Regulations for BSN students
BSN completion students have access to all the academic resources outlined in the section Academic Resources (https://catalog.umw.edu/undergraduate/academic-resources) and Academic Policies (p. 11) sections of this Catalog.

BSN Degree Requirements
As for other UMW undergraduate programs, 120 credits are required for the degree. In addition, a minimum of 30 credits need to be completed at UMW. A cumulative GPA of 2.00 on all UMW work is required. The BSN degree credits are distributed in the following requirement categories.

Credit by Examination
The University accepts many of the College Level Examination Program (CLEP) and DANTES Subject Standardized tests as undergraduate transfer credit. Students may earn credit by meeting the minimum required score on selected CLEP or DANTES tests; these credits may be used to fulfill general education, prerequisite requirements or as elective credits; they may not be used to fulfill NURS course requirements. A maximum of 30 credits by examination may be counted toward the degree. Students should consult the BSN Completion Program Office for information on specific CLEP or DANTES exams that are accepted by the University. CLEP tests are administered at local universities. DANTES exams are offered only on military installations.

Academic Resources, Policies, and Regulations for BSN students
BSN completion students have access to all the academic resources outlined in the section Academic Resources (https://catalog.umw.edu/undergraduate/academic-resources) and Academic Policies (p. 11) sections of this Catalog.

BSN Degree Requirements
As for other UMW undergraduate programs, 120 credits are required for the degree. In addition, a minimum of 30 credits need to be completed at UMW. A cumulative GPA of 2.00 on all UMW work is required. The BSN degree credits are distributed in the following requirement categories.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 308</td>
<td>Writing Studies and Healing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 310</td>
<td>The Role of the Professional Nurse</td>
<td>3</td>
</tr>
<tr>
<td>NURS 320</td>
<td>Holistic Health Assessment for the Professional Nurse</td>
<td>3</td>
</tr>
<tr>
<td>NURS 410</td>
<td>Evidence Based Nursing Research</td>
<td>3</td>
</tr>
<tr>
<td>NURS 430</td>
<td>Current Nursing Issues and Trends</td>
<td>3</td>
</tr>
<tr>
<td>NURS 440</td>
<td>Community and Population Health</td>
<td>3</td>
</tr>
<tr>
<td>NURS 490</td>
<td>Practicum</td>
<td>3</td>
</tr>
<tr>
<td>NURS 540</td>
<td>Informatics and Healthcare Technologies</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 226</td>
<td>Medical Ethics</td>
<td>3</td>
</tr>
<tr>
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<td></td>
<td>3</td>
</tr>
<tr>
<td>ANTH 211</td>
<td>The Anthropology of “Race”</td>
<td></td>
</tr>
<tr>
<td>ANTH 212</td>
<td>Anthropology of Gender</td>
<td></td>
</tr>
<tr>
<td>SOCG 304</td>
<td>Social Stratification</td>
<td></td>
</tr>
<tr>
<td>PSYC 201</td>
<td>Social Psychology</td>
<td></td>
</tr>
<tr>
<td>SOCG 315A</td>
<td>Gender and Society</td>
<td></td>
</tr>
<tr>
<td>SOCG 331</td>
<td>The Family</td>
<td></td>
</tr>
<tr>
<td>SOCG 334</td>
<td>Medical Sociology</td>
<td></td>
</tr>
<tr>
<td>SOCG 335</td>
<td>Global Perspectives on Health and Illness</td>
<td></td>
</tr>
<tr>
<td>SOCG 355</td>
<td>Death and Society</td>
<td></td>
</tr>
<tr>
<td>SOCG 400</td>
<td>Sociology of the Body</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits Required for the Degree: 120 credits

Dual Nursing Degrees Plan (1+2+1)
Commonly referred to as the 1 + 2 + 1 BSN Plan, this agreement is designed for students who are interested in earning a pre-licensure Associate of Applied Science (A.A.S.) degree in nursing from GCC and a post-licensure Bachelor of Science in nursing from UMW if all degree requirements are met. (see Requirements for the BSN Degree section (p. 37).) Students will be admitted to UMW as Pre-Nursing (1+2+1) students. Students also need to apply to GCC as an Allied Health Certificate student. The following is a general description of each year. If a student needs to repeat a course, or submits an application to the GCC Nursing Program for a later term, the student’s progression will be delayed and the two degrees will not be completed in the “1+2+1” timeframe.

This plan is only available to incoming residential freshman and is limited to eighteen students. The plan does not accept transfer students. Students who are interested in the program complete the freshman student application process. In addition, students declare their intended major as “pre-nursing”. To be considered for the pre-nursing program, students must have earned a “B” or above in high school algebra, biology and chemistry. In addition, students must present SAT or ACT scores which exempt them from the Virginia Community College (VCCS) English and math placement exams. Once all admitting requirements are met, preference is given to students who apply under the Early Decision (binding) or Early Action (non-binding) application processes.
Accepted and paid pre-nursing students will be advised by the BSN Completion Program office starting in May of the student’s senior year in High School. Pre-nursing student will be guided through the process of applying and registering at GCC’s as a Pre-BSN student to complete the required nursing prerequisite courses during their first year. In addition, students will be enrolled at UMW as pre-nursing students to complete liberal arts coursework.

The following is a general description of each year.

**Year 1**
During the freshman year students will complete required nursing prerequisite courses at UMW and GCC as needed. Students must earn a “C” or above in all courses taken to be transferable to UMW between the two schools. Students must provide their own transportation to GCC throughout the program to include prerequisite courses, nursing courses, nursing labs and clinical assignments; therefore students will be allowed to have a car on campus as a freshman student. Students will apply for a second admission to the GCC Nursing Program. GCC Nursing Program application deadline is April 1. Students must meet all published procedures and deadlines for application to the GCC Nursing Program. Pre-licensure nursing programs are competitive and there is NO guaranteed acceptance to the GCC Nursing Program. Nursing is a caring profession. GCC and UMW reserve the right to deny or revoke admission to the GCC Nursing Program and/or the BSN Completion Program to students who have been suspended or dismissed from any institution of higher education or convicted of a felony, use of illegal substances, or on charges related to physical abuse towards others.

**Years 2 & 3**
Students who are admitted to the GCC Nursing Program will attend GCC’s Nursing Program and earn an A.A.S. degree in nursing. Students will be concurrently enrolled in UMW and complete the three liberal art courses which are part of the BSN Completion Program.

**Year 4**
Students will return to UMW to finish the BSN Completion Program. Students begin taking UMW courses with the NURS prefix after they present their RN license following graduation from GCC. NUR courses from GCC do not transfer in the Registrar and each licensed student will receive 41 credits for the major declaration form. Both documents are submitted to the Office of their licensure to the BSN Completion Program office and complete a current and valid unencumbered license to practice nursing. Students submit a copy of their license to the BSN Completion Program office starting in May of the student’s senior year in High School. Pre-nursing student will be guided through the process of applying and registering at GCC’s as a Pre-BSN student to complete the required nursing prerequisite courses during their first year. In addition, students will be enrolled at UMW as pre-nursing students to complete liberal arts coursework.

**UMW 1+2+1 BSN Plan Degree Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN License</td>
<td>GCC NSG courses do not transfer into UMW. Students will earn 41 credits when they present their RN license following graduation from GCC.</td>
<td>41</td>
</tr>
<tr>
<td>GCC NSG Prerequisite &amp; General Education Courses</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Transferred from GCC to UMW</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Trasferred from UMU to GCC</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>STAT 180</td>
<td>Introduction to Statistics (or equivalent)</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>
Philosophy

Degree: B.A., Philosophy and Religious Studies
Department of Classics, Philosophy, and Religion (https://cas.umw.edu/clpr)

The discipline of philosophy has been shaped by an intellectual and historical tradition that began some 2500 years ago in Greek culture. "Philosophy" literally means "love of wisdom." It is the systematic study of ideas and issues, a reasoned pursuit of fundamental truths, a quest for a comprehensive understanding of the world, a study of principles of conduct, and much more.

The problems and materials of philosophy are drawn from every aspect of our lives and experience, and its deliberations extend to every subject admitting of disciplined reflection. Students majoring in philosophy will develop knowledge of the history and current state of Western philosophy, critical areas of Asian philosophy, a grasp of representative philosophical issues and ways of dealing with them, a capacity to apply philosophical methods to intellectual problems, and a sense of how philosophy bears on other disciplines and on human life more generally. A philosophy major, leading to a Bachelor of Arts degree in Philosophy and Religious Studies, develops a critical mind, a balance of analytic and interpretive abilities, and a capacity for the imaginative development of abstract formulations and their concrete applications. These virtues make philosophy especially good preparation for responsible citizenship and positions of leadership.

Major Requirements

Students wishing to major in Philosophy may choose from two concentrations: the Philosophy major, or the Pre-Law Concentration in Philosophy, which offers special preparation for students considering a career in law or related fields.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 151B</td>
<td>Introductory Logic</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 201</td>
<td>Ancient Greek Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 202</td>
<td>Early Modern Philosophy</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<td></td>
</tr>
<tr>
<td>PHIL 301</td>
<td>Medieval Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 302</td>
<td>Hume And Kant</td>
<td></td>
</tr>
<tr>
<td>PHIL 303</td>
<td>Hegel, Marx, and Nietzsche</td>
<td></td>
</tr>
<tr>
<td>Select one Continental Philosophy course of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 260</td>
<td>Freud's Greatest Hits</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 342</td>
<td>Phenomenology</td>
<td></td>
</tr>
<tr>
<td>PHIL 343</td>
<td>Existentialism</td>
<td></td>
</tr>
<tr>
<td>PHIL 344</td>
<td>Critical Theory</td>
<td></td>
</tr>
<tr>
<td>PHIL 450</td>
<td>Seminar in Twentieth Century Philosophy</td>
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</tr>
<tr>
<td>Select one course from one of the following sets:</td>
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<td></td>
</tr>
<tr>
<td>PHIL 100</td>
<td>Individual and Community</td>
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</tr>
<tr>
<td>PHIL 210</td>
<td>Social and Political Philosophy</td>
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</tr>
</tbody>
</table>

Total Credits Required for the Degree: 120 credits

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Philosophy: Pre-Law

Degree: B.A., Philosophy and Religious Studies
Department of Classics, Philosophy, and Religion (https://cas.umw.edu/clpr)

The discipline of philosophy has been shaped by an intellectual and historical tradition that began some 2500 years ago in Greek culture. "Philosophy" literally means "love of wisdom." It is the systematic study of ideas and issues, a reasoned pursuit of fundamental truths, a quest for a comprehensive understanding of the world, a study of principles of conduct, and much more.
The problems and materials of philosophy are drawn from every aspect of our lives and experience, and its deliberations extend to every subject admitting of disciplined reflection. Students majoring in philosophy will develop knowledge of the history and current state of Western philosophy, critical areas of Asian philosophy, a grasp of representative philosophical issues and ways of dealing with them, a capacity to apply philosophical methods to intellectual problems, and a sense of how philosophy bears on other disciplines and on human life more generally. A philosophy major, leading to a Bachelor of Arts degree in Philosophy and Religious Studies, develops a critical mind, a balance of analytic and interpretive abilities, and a capacity for the imaginative development of abstract formulations and their concrete applications. These virtues make philosophy especially good preparation for responsible citizenship and positions of leadership.

Major Requirements

Students wishing to major in Philosophy may choose from two concentrations: the Philosophy major, or the Pre-Law Concentration in Philosophy, which offers special preparation for students considering a career in law or related fields.

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</tr>
<tr>
<td>PHIL 202</td>
<td>Early Modern Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 320</td>
<td>Philosophy of Law I</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 325</td>
<td>Philosophy of Law II</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHIL 301</td>
<td>Medieval Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHIL 302</td>
<td>Hume And Kant</td>
<td></td>
</tr>
<tr>
<td>PHIL 303</td>
<td>Hegel, Marx, and Nietzsche</td>
<td></td>
</tr>
<tr>
<td>Select one Ethics course of the following:</td>
<td>3</td>
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</tr>
<tr>
<td>PHIL 160</td>
<td>Introduction to Ethics</td>
<td></td>
</tr>
<tr>
<td>PHIL 225</td>
<td>Practical Ethics</td>
<td></td>
</tr>
<tr>
<td>PHIL 226</td>
<td>Medical Ethics</td>
<td></td>
</tr>
<tr>
<td>PHIL 330</td>
<td>Environmental Ethics</td>
<td></td>
</tr>
<tr>
<td>PHIL 335</td>
<td>Ethical Theory</td>
<td></td>
</tr>
<tr>
<td>Select one Continental Philosophy course of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHIL 260</td>
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<td>PHIL 344</td>
<td>Critical Theory</td>
<td></td>
</tr>
<tr>
<td>PHIL 450</td>
<td>Seminar in Twentieth Century Philosophy</td>
<td></td>
</tr>
<tr>
<td>Select one non-Western course of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHIL 283</td>
<td>Hinduism</td>
<td></td>
</tr>
<tr>
<td>PHIL 284</td>
<td>Buddhism</td>
<td></td>
</tr>
<tr>
<td>PHIL 383</td>
<td>Yoga in Theory, History, and Contemporary Society</td>
<td></td>
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<tr>
<td>PHIL 440</td>
<td>Studies in Asian and Comparative Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHIL 485</td>
<td>Research in Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHIL 499</td>
<td>Internship</td>
<td></td>
</tr>
<tr>
<td>BLAW 201</td>
<td>Legal Environment of Business</td>
<td></td>
</tr>
<tr>
<td>ECON 342</td>
<td>Law and Economics</td>
<td></td>
</tr>
<tr>
<td>HIST 416</td>
<td>American Legal History</td>
<td></td>
</tr>
<tr>
<td>PHIL 110</td>
<td>Introduction to Law and Legal Writing</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 422</td>
<td>American Civil Liberties</td>
<td></td>
</tr>
<tr>
<td>RELG 305</td>
<td>Religion and Politics in the United States</td>
<td></td>
</tr>
<tr>
<td>SOCG 415</td>
<td>The Sociology of Law</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 33

Majors in Philosophy with an interest in graduate studies should take courses beyond the minimum required for the major, and they are especially urged to achieve competence in Greek, Latin, French or German. Students with a 3.5 GPA in Philosophy (and 3.25 overall) are eligible for Honors contingent on a grade of A in PHIL 485 Research in Philosophy and successful oral defense.

General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Physics

Degree: B.S., Physics

Department of Chemistry and Physics (https://cas.umw.edu/physics)

The study of physics provides the basis for understanding the fundamental laws of the physical universe. The principles of physics underlie other natural sciences and are essential to many applied sciences and technical programs. The physics program’s goal is to expose students to a broad range of physical phenomena. In doing so, the program strives to meet the needs of students who will become specialists in physics, as well as numerous related fields. A secondary aim is to satisfy the interest of students who take physics to fulfill a general education requirement.

The Physics Department offers two major tracks towards a Bachelor of Science degree, Physics, and Applied Physics. Senior majors in either track may participate in undergraduate research, which could qualify as an honor thesis and/or result in a presentation at a local or national conference. The Society of Physics Students and its honorary society, Sigma Pi Sigma, have sponsored guest speakers and field trips to national laboratories and conferences.

The Physics track is for students interested in challenging, exciting, and productive careers in fields such as: acoustics, astronomy, astrophysics, atomic physics, biophysics, chemical physics, fluid dynamics, geophysics, low-temperature physics, medical physics, materials science, nuclear physics, optics, particle physics, physics education, plasma physics, solid state physics, spectroscopy and
vacuum physics. Graduates have gone on to successful careers as researchers, educators, engineers, and many other technical fields.

Credit for only one introductory physics sequence below can be counted toward the degree requirement.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PHYS 101</td>
<td>General Physics w/Lab</td>
<td>8</td>
</tr>
<tr>
<td>PHYS 102 &amp; PHYS 103</td>
<td>and General Physics w/Lab</td>
<td>7</td>
</tr>
<tr>
<td>PHYS 104</td>
<td>General Physics w/Lab</td>
<td>7</td>
</tr>
<tr>
<td>PHYS 108</td>
<td>and General Physics</td>
<td>7</td>
</tr>
<tr>
<td>PHYS 103A</td>
<td>Elementary Astronomy w/Lab</td>
<td>7</td>
</tr>
<tr>
<td>PHYS 104</td>
<td>and Elementary Astronomy</td>
<td>7</td>
</tr>
<tr>
<td>PHYS 105</td>
<td>University Physics, w/lab</td>
<td>8</td>
</tr>
<tr>
<td>PHYS 106 &amp; PHYS 107</td>
<td>and University Physics w/Lab</td>
<td>7</td>
</tr>
<tr>
<td>PHYS 107</td>
<td>University Physics, w/lab</td>
<td>7</td>
</tr>
<tr>
<td>PHYS 108 &amp; PHYS 109</td>
<td>and University Physics</td>
<td>7</td>
</tr>
<tr>
<td>PHYS 109</td>
<td>University Physics</td>
<td>7</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>University Physics</td>
<td>7</td>
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</table>

**Major Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 105</td>
<td>University Physics, w/lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 106</td>
<td>University Physics w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 211</td>
<td>Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 317</td>
<td>Methods of Mathematical Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 320</td>
<td>Classical Mechanics I w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 330</td>
<td>Electricity and Magnetism I w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 384</td>
<td>Advanced Physics Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 410</td>
<td>Quantum Mechanics I w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 482</td>
<td>Physics Seminar</td>
<td>2</td>
</tr>
</tbody>
</table>

Select 9 credits of the following:

- PHYS 201 Thermodynamics and Statistical Mechanics
- PHYS 210 Nuclear Physics
- PHYS 283 Electronics w/Lab
- PHYS 292 Optics w/Lab
- PHYS 471 Selected Topics in Physics
- PHYS 472 Solid State Physics

Total Credits: 41

**General Education Requirements**

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**Total Credits Required for the Degree:** 120 credits

**Political Science**

**Degree: B.A., Political Science**

Department of Political Science and International Affairs (https://cas.umw.edu/polisci)

Political Science, the study of how various political systems work, is a Bachelor of Arts degree program. Courses ranging from urban politics and government to international politics are offered. The department also provides many outlets through which students can gain practical knowledge of the field, including visits to Virginia’s state capital and to Washington, D.C., internships in governmental offices, and involvement in major political events, such as the United Nations’ student conference. Political Science is a good background for a career in law, urban planning, teaching, government, and private enterprise; it also lends itself to further study in graduate school.

**Major Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PSCI 101A</td>
<td>Introduction to Political Science 1</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 102A</td>
<td>Introduction to International Relations 1</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 201</td>
<td>American Government</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one political science class 2

Select one course each to be chosen by faculty advisor and student from each of the following subfields: American Politics; Comparative Politics; International Relations; Political Theory

Select 15 additional credits in political science

Total Credits: 36

1. PSCI 101A Introduction to Political Science and PSCI 102A Introduction to International Relations is a prerequisite to all Political Science courses, except PSCI 201 American Government.

2. May also be used to fulfill other political science major requirements, designated as “Writing Intensive.”

**General Education Requirements**

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**Electives**

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**Total Credits Required for the Degree:** 120 credits

**Psychology**

**Degree: B.S., Psychology**
Department of Psychological Science (https://cas.umw.edu/psychology)

The Bachelor of Science in Psychology degree program provides students with a sound introduction to psychology as a scientific discipline, including both traditional areas and more recent trends and theoretical developments. Psychology majors receive extensive training in methodology and statistics. The study of psychology emphasizes critical thinking and the development of writing, oral communication, and research skills.

Students are exposed to the variety of subject areas that define the field of psychology and are given the opportunity for hands-on, empirical work. Many students work on research teams and do year-long research projects under the direction of an individual faculty member. Many of these students present their research at national conferences and publish their work in peer-reviewed journals. A variety of internships are offered at local businesses and social service agencies.

Course sequences prepare students for either graduate work or employment immediately after graduation. Employment options include research in various business settings; social work; human resource management; computer applications; and counseling and case management in social service and mental health settings like probation and parole, intellectual disabilities, substance abuse, and adolescent/adult group homes. The curriculum also provides an excellent preparation for professional school and graduate study in psychology. Courses offered in collaboration with Business Administration explore the application of psychological principles and research methods to various work environments for students interested in careers in management, human resources, organizational behavior, organizational development, and industrial/organizational psychology.

The department sponsors a chapter of Psi Chi, the national honorary society in psychology, which annually sponsors an undergraduate research symposium at which students present both course and team research projects. Students are encouraged to be members of the Virginia Association for Psychological Science and present their research at meetings of the Association. Each year the department awards over $20,000 in scholarships specifically to Psychology majors. These scholarships include the J. Christopher Bill Scholarship, the Minnie Rob Phaup Scholarship, the Emily Cella Scholarship, the Burney Lynch Parkinson Scholarship, the James and Deborah Llewellyn Scholarship, and the C. Jarrett and Hazel Small Wilkins Scholarship. The department also presents the Outstanding Senior Psychology Award to a graduating major.

Department facilities include computer laboratories suitable for both general student use and specialized work in cognition, sensation and perception, and physiological psychology; an animal laboratory complete with a vivarium, surgery, shop, and computerized experimental controls; a computerized video laboratory for studying social, developmental, and group processes; a number of rooms and a variety of equipment suitable for conducting empirical research with human participants; facilities for psychological testing; and computerized physiographs and an eye tracker for use in experimental and clinical applications.

The UMW Psychology and NECC Collaboration

UMW students may enroll in a semester long program in Boston at The New England Center for Children working with children with autism spectrum disorders and other disabilities. Students must have completed 12 hours in Psychology, and either PSYC 253 Fundamentals of Learning and Motivation or PSYC 320 Psychology of Exceptional Children and Youth, to be eligible for this program. Students will enroll in two courses that will count as electives in the UMW Psychology major (PSYC 401 Behavior Assessment, PSYC 402 Principle of Behavior Analysis, PSYC 403 Behavioral Interventions, PSYC 404 Methods of Evaluation, PSYC 405 Evidence-based Teaching, or PSYC 406 Autism and Related Disabilities), and spend about 30 hours each week gaining hands-on experience as student teachers. This experience will result in six internship credits and six course credits for the semester.

Students will enroll at UMW and pay for full-time tuition and fees (in state or out of state as appropriate), as well as the current cost of double occupancy housing. NECC will provide housing in close proximity to the Center; the student is responsible for the cost of their own food.

To obtain more information about this program, please see the Psychological Science Department chairperson, or the Psychology website (https://cas.umw.edu/psychology).

Major Requirements

Thirty-seven (37) credits in Psychology (PSYC) courses, including:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PSYC 100</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 261A</td>
<td>Introductory Statistics for Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 360A</td>
<td>Advanced Statistics for Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 362</td>
<td>Research Methods for Psychology</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one course from each of the following Core areas:

- Abnormal, Personality and Social Psychology
  - PSYC 201 Social Psychology                       | 3       |
  - PSYC 211 Abnormal Psychology                     |         |
  - PSYC 242 Psychology of Personality               |         |

- Biological Psychology
  - PSYC 274 Biological Psychology                  | 3       |
  - PSYC 305 Cognitive Neuroscience ¹                 |         |
  - PSYC 372 Sensation and Perception ¹              |         |
  - PSYC 394 Psychopharmacology                      |         |

- Cognition and Learning
  - PSYC 253 Fundamentals of Learning and Motivation | 3       |
  - PSYC 273 Cognitive Psychology                   |         |
  - PSYC 305 Cognitive Neuroscience ²               |         |
  - PSYC 372 Sensation and Perception ²             |         |

- Developmental Psychology
  - PSYC 231 Developmental Psychology: The Infant and Child | 3       |
  - PSYC 232 Developmental Psychology: The Adolescent and Adult |         |
  - PSYC 233 Psychology of Aging                    |         |

- Research in Psychology
  - PSYC 411 Research Seminar in Abnormal, Personality, or Social Psychology | 3     |
  - PSYC 412 Research Seminar in Biological Psychology |         |
  - PSYC 413 Research Seminar in Cognition or Learning |         |
  - PSYC 414 Research Seminar in Developmental Psychology |         |
  - PSYC 492 Individual Research ³                   |         |

Select one of the following required Out-of-Class Experiences: ⁴ ³ ⁵ 3

Community Service Learning
The academic discipline of the study of religion investigates the religious dimension of human experience throughout history, across cultures, and around the world. Courses in religious studies acquaint students with the world’s major traditions, texts, and figures. Students learn the methodologies of religious studies and engage in critical discussion of diverse themes, issues, and theories related to the study of these traditions. Leading to a Bachelor of Arts degree in Philosophy and Religious Studies, the major in religion offers close faculty guidance and a high degree of flexibility such that individual interests are both encouraged and supported. Well-trained in the tools of a liberal arts education necessary for many careers, graduates of the major enter the world beyond college with a broad cultural awareness that appreciates the challenges of diversity and the ability to engage in dialogue skillfully. They are trained to conduct research, to think critically, and to write and express ideas persuasively. Religious studies majors have pursued careers in fields such as public relations, journalism, teaching, library science, service organizations, business, and the arts. The Religious Studies major also prepares students for graduate or divinity school in the study of religion, as well as for graduate study in other fields such as law and social work.

Honors are awarded in Religious Studies on the basis of excellence both in coursework for the major and in a final project for RELG 401 Guided Research. Only students who complete 401 are eligible for Honors. Internships are available to qualified students.

Courses in other disciplines are accepted towards the Religious Studies major, which allows students to have an interdisciplinary approach in the formation of their major. Various religious studies offerings also complement work in American studies, anthropology, classics, drama, English, history, international affairs, philosophy, and psychology, among other disciplines. The Religious Studies program contributes to several minors, including Contemplative Studies and Asian Studies, as well as to the American Studies Program.

**Major Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>RELG 101 &amp; RELG 102</td>
<td>Introduction to World Religions and Introduction to the Study of Religion</td>
<td>6</td>
</tr>
<tr>
<td>RELG 103</td>
<td>The Abrahamic Religions</td>
<td>3</td>
</tr>
<tr>
<td>RELG 117</td>
<td>Introduction to Christian Theology</td>
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<tr>
<td>RELG 205</td>
<td>Hebrew Bible</td>
<td></td>
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<tr>
<td>RELG 206A</td>
<td>Christian Beginnings</td>
<td></td>
</tr>
<tr>
<td>RELG 208</td>
<td>Christianity After the New Testament</td>
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<tr>
<td>RELG 210</td>
<td>Islam</td>
<td></td>
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<tr>
<td>RELG 252</td>
<td>Religion and Politics in Islam</td>
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<tr>
<td>RELG 253</td>
<td>Muhammad and the Qur’an</td>
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<tr>
<td>RELG 251</td>
<td>Native American Religions</td>
<td>3</td>
</tr>
<tr>
<td>RELG 283</td>
<td>Hinduism</td>
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<tr>
<td>RELG 284</td>
<td>Buddhism</td>
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<tr>
<td>RELG 383</td>
<td>Yoga In Theory, History, and Contemporary Society</td>
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<tr>
<td>RELG 384</td>
<td>Death and Rebirth in Tibetan Buddhism</td>
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</tr>
<tr>
<td>RELG 401</td>
<td>Guided Research</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits** 30

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**General Education Requirements**

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

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**Total Credits Required for the Degree:** 120 credits

**Religious Studies**

**Degree: B.A., Philosophy and Religious Studies**

Department of Classics, Philosophy, and Religion (https://cas.umw.edu/clpr)
The Bachelor of Arts in Sociology degree program offers a strong foundation in sociological theory and methods of research. In addition, additional courses (such as Special Topics in other disciplines) may count as electives towards the major with the approval of the Chair.

General Education Requirements

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Total Credits Required for the Degree: 120 credits

Sociology

Degree: B.A., Sociology
Department of Sociology and Anthropology (https://cas.umw.edu/sociologyanthropology)

Sociology systematically investigates human society and social interaction, seeking to understand patterns of organization and change in a variety of settings.

The Bachelor of Arts in Sociology degree program offers a strong foundation in sociological theory and methods of research. In addition, students take courses to deepen their understanding of socialization, culture, social organization, social change, differentiation, and inequality. Courses focus on such topics as ethnic and racial relations, family, gender, medicine, occupations and professions, organizations, politics and the state, popular culture, population, religion, urban life, aging, juvenile delinquency and criminology.

Special readings and individual study and research offer students the opportunity to pursue areas of special interest. Supervised internships are also available.

The program of study is designed to provide sociology majors with a strong foundation for graduate work in the social sciences, as well as for a variety of careers, including elementary and secondary teaching, social services, public policy formulation, public administration, urban planning, and research in both public and private agencies, including private industry and the allied health professions.

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCG 105</td>
<td>The Social World</td>
<td>3</td>
</tr>
<tr>
<td>SOCG 364</td>
<td>Quantitative Research Methods and Analysis 1</td>
<td>4</td>
</tr>
<tr>
<td>SOCG 365</td>
<td>Qualitative Research Methods and Analysis</td>
<td>4</td>
</tr>
<tr>
<td>SOCG 471</td>
<td>History of Social Theory</td>
<td>3</td>
</tr>
<tr>
<td>or SOCG 472</td>
<td>Contemporary Sociological Theories</td>
<td></td>
</tr>
<tr>
<td>Select 18 additional Sociology credits excluding internships 2</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 32

1. Statistics 180 (Introduction to Statistics) is a prerequisite for SOCG 364 Quantitative Research Methods and Analysis and must be taken prior to enrolling in this course.
2. One of these courses may be a lower-level sociology course other than SOCG 105 The Social World; at least five must be courses at the 300-400 level. A maximum of six upper-level anthropology credits, excluding individual study (ANTH 491 Individual Study and Research, ANTH 492 Individual Study & Research) and internships (Anthropology 499) may be substituted for upper-level sociology courses.

General Education Requirements

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Total Credits Required for the Degree: 120 credits

Spanish

Degree: B.A., Modern Foreign Languages
Department of Modern Languages and Literatures (https://cas.umw.edu/modernlanguages)

The Spanish major leads to a Bachelor of Arts degree in Modern Foreign Languages. Through courses in Spanish, students gain proficiency in understanding, reading, writing, and speaking the language. Classes are conducted in Spanish from the beginning levels. Through classroom instruction, individual research, and department-sponsored organizations, students come to know the varied Hispanic cultures around the world. Experiential learning through individual study, internships, study abroad, and service learning offers students valuable experience outside the classroom. Internships are available to juniors and seniors in local and regional agencies and organizations and in Washington D.C.

Students wishing to major may select from courses in language, literature, linguistics, and culture of Spain, Latin America, and U.S.
Latinos. The Spanish program hosts a Language Coordinator from the Universidad de Deusto who spends a year in residence teaching, leading conversation hours, and scheduling special events that promote the Spanish language and Hispanic culture.

UMW has a well-established study abroad program in Bilbao, Spain with the Universidad de Deusto. Students may choose from summer, semester, or year-long courses of study in language, culture, and literature as well as courses in business, economics, and international affairs. Additionally, the university cooperates with a variety of other overseas study programs in Latin America.

The program also offers courses for students with an interest in environmental studies, business, women and gender studies, digital studies, and in creative writing.

Graduates in Spanish may pursue careers in government or in private fields in which the knowledge of Spanish language and Hispanic culture is essential. Careers that attract language students include education, business, interpreting and translating, research, social services, law and law enforcement, health, and international affairs.

### Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reading</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPAN 312</td>
<td>Introduction to Literary Studies in Spanish</td>
<td>3</td>
</tr>
<tr>
<td>Select two of the following:</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>SPAN 323</td>
<td>Introduction to Spanish Literature</td>
<td></td>
</tr>
<tr>
<td>SPAN 324A</td>
<td>Intro to Spanish Literature</td>
<td></td>
</tr>
<tr>
<td>SPAN 327A</td>
<td>Introduction to Latin American Literature</td>
<td></td>
</tr>
<tr>
<td>SPAN 328A</td>
<td>Introduction to Latin American Literature</td>
<td></td>
</tr>
<tr>
<td><strong>Writing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select two of the following:</td>
<td>6</td>
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</tr>
<tr>
<td>SPAN 306</td>
<td>Composition and Grammar</td>
<td></td>
</tr>
<tr>
<td>SPAN 413</td>
<td>Advanced Writing</td>
<td></td>
</tr>
<tr>
<td>SPAN 414</td>
<td>Spanish for Translation</td>
<td></td>
</tr>
<tr>
<td><strong>Speaking</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select two of the following:</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>SPAN 305</td>
<td>Conversation and Grammar</td>
<td></td>
</tr>
<tr>
<td>SPAN 314</td>
<td>The Sounds of Spanish, Theory and Practice</td>
<td></td>
</tr>
<tr>
<td>SPAN 415</td>
<td>Advanced Conversation</td>
<td></td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select three electives in culture, language or literature</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>Capstone</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SPAN 481</td>
<td>Spanish Seminar</td>
<td></td>
</tr>
<tr>
<td>SPAN 483</td>
<td>Topics in Spanish Linguistics</td>
<td></td>
</tr>
<tr>
<td>SPAN 485</td>
<td>Spanish American Seminar</td>
<td></td>
</tr>
<tr>
<td>SPAN 492</td>
<td>Individual Study</td>
<td></td>
</tr>
<tr>
<td><strong>Experiential Learning</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>2</td>
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</tr>
<tr>
<td>SPAN 491</td>
<td>Individual Study</td>
<td></td>
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<tr>
<td>SPAN 492</td>
<td>Individual Study</td>
<td></td>
</tr>
<tr>
<td>SPAN 499</td>
<td>Internship</td>
<td></td>
</tr>
</tbody>
</table>

### General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

### Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

**Total Credits Required for the Degree:** 120 credits

### Studio Art

**Degree:** B.A., Studio Art  
Department of Art and Art History (https://cas.umw.edu/art)

The Studio Art major, leading to a bachelor of arts degree in Studio Art, fosters artistic and scholarly connections through creative inquiry and analytical problem solving. Exploration fuels the creative mind and our studio “incubators” provide technical expertise while embracing risk-taking and conceptual development. Students learn and work in well-equipped studios that focus on a variety of disciplines, including Digital Media, Ceramics, Drawing, Painting, Photography, Printmaking, and Sculpture. Faculty members who are actively exhibiting artists, researchers and dedicated teachers lead each discipline, and our flexible curriculum supports a more interdisciplinary approach to thinking about and making art.

UMW’s location between Washington D.C. and Richmond, Virginia provides students with ample resources to experience top quality artwork in person, and to undertake optional internships and apprenticeships in the field. Visiting artist lectures and field trips support our commitment to visual and cultural literacy and our faculty members work closely with students to better understand the impact of art and technology in the professional world. The UMW Galleries bring exciting exhibitions and events to campus while advancing the educational goals of the University through the collection, exhibition, and interpretation of works of art. The course of study culminates in a student-organized senior exhibition (or...
A degree in Studio Art at UMW prepares students to become active artists, creative thinkers, and engaged citizens. Our graduates are successful professional artists, teachers, university professors, gallery owners and graphic designers. Many earn MFA degrees at competitive institutions. Others go on to apply what they have learned to careers in film, art therapy, furniture design, and arts management to name a few. The studio art major provides a foundation of creative problem solving, idea generation, studio technique and critical discourse that prepares students for success in whatever field they pursue.

**Electives**

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

**General Education Requirements**

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

**Major Requirements**

Thirty-three (33) credits including:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 131</td>
<td>Technical Production</td>
<td>4</td>
</tr>
<tr>
<td>THEA 321</td>
<td>Acting</td>
<td>4</td>
</tr>
<tr>
<td>THEA 361</td>
<td>Theatre History and Literature</td>
<td>3</td>
</tr>
<tr>
<td>THEA 362</td>
<td>Theatre History and Literature</td>
<td>3</td>
</tr>
<tr>
<td>THEA 400</td>
<td>Professional Identity and Practice</td>
<td>1</td>
</tr>
<tr>
<td>THEA 482</td>
<td>Senior Project</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 433</td>
<td>Lighting Design</td>
<td></td>
</tr>
<tr>
<td>THEA 434</td>
<td>Scene Design</td>
<td></td>
</tr>
<tr>
<td>THEA 436</td>
<td>Costume Design</td>
<td></td>
</tr>
</tbody>
</table>

Select nine additional credits from Theatre courses

Required Theatre Practicum

Total Credits: 33

**Theatre**

**Degree: B.A., Performing Arts**

Department of Theatre and Dance (https://cas.umw.edu/theatre)

A major in Theatre leads to a Bachelor of Arts degree in Performing Arts. The major offers students extraordinary flexibility to customize their college experience by choosing courses in the area of theatre in which they are most interested—acting, directing, costume design, scenic design, theatre history and literature, playwriting, lighting design, theatre management, arts management, theatre technology, and costume technology. Through a solid core of foundation courses and an impressive array of electives, students build a major program that allows them to pursue a professional career upon graduation.

Equally important to coursework are the many opportunities available for students to practice in our theatres what they are learning in our classrooms and studios. The Department believes that an experiential approach to theatre education offers the greatest potential of success to the emerging theatre artist. Ours is a hands-on program that emphasizes student leadership and responsibility. In addition to acting on our stages, theatre majors design, direct, build, choreograph, and manage productions in our theatres, as well as serve other leadership capacities in the Department. Beyond the main stage, students program and manage Studio 115, our flexible black box theatre, producing a season of performances that range in scope from evenings of scenes to fully-produced musicals.

The Department produces in Klein Theatre, a traditional proscenium stage, and the flexible Studio 115 in duPont Hall. Both theatres recently were transformed in extensive renovations that included the installation of state-of-the-art lighting, sound and communications systems. The Department also maintains an acting lab, design lab, rehearsal hall, craft studio, CAD lab, light lab and fully-equipped costume, lighting, and scene shops, and theatre management offices. Recent productions have included: *The Tempest, Harvey, Hedda Gabler, Rent, Elegies, A Funny Thing Happened on the Way to the Forum, Noises Off, Proof, A Midsummer Night’s Dream, Little Shop of Horrors, Sunday in the Park with George, Shakespeare's R&J, Our Town, The Amish Project, The Laramie Project, Antigone, Les Liaisons Dangereuses, Cabaret, Godspell, The Shape of Things, The Country Wife, Waiting for Godot, Sweeney Todd, As You Like It, Into the Woods, and The School for Wives.*

The Department is devoted to preparing students to graduate into professional theatre careers. In addition to sponsoring internships, members of the faculty accompany students to a variety of events throughout the year where majors can audition and interview with producers for professional opportunities. Our majors graduate with a strong liberal-arts education in the field, as well as with solid skills for working in theatre.
All majors are required to enroll in Theatre Practicum each semester except during the semester of the Senior Project; students may count eight practicum credits toward graduation. Three of those credits count toward the major.

**General Education Requirements**

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (p. 36).

**Electives**

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

**Total Credits Required for the Degree:** 120 credits

**Women’s and Gender Studies**

**Degree:** B.A., General Liberal Arts and Studies

Women’s and Gender Studies Program (https://cas.umw.edu/wgst)

The Women’s and Gender Studies major focuses on gender and the experiences of women as central categories of scholarly inquiry. This interdisciplinary program, leading to a general liberal arts and studies degree (Bachelor of Arts), emphasizes diverse perspectives on both the construction and the experience of femininity and masculinity in society, including the complex interactions of gender, class, ethnicity, sexual orientation, and race. Students learn to appreciate the breadth of human experience and the challenges that all people face as gendered beings.

The purpose of the major is to provide students with interdisciplinary breadth; however, students are encouraged to work with their faculty advisors to formulate their course work around issues or themes of particular interest.

**Major Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGST 101</td>
<td>Introduction to Women’s Studies</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 220</td>
<td>Introduction to Feminism</td>
<td>3</td>
</tr>
</tbody>
</table>

**Methods Course**

Select one of the following: 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 201</td>
<td>Introduction to American Studies</td>
<td>3-4</td>
</tr>
<tr>
<td>ARTH 303</td>
<td>Methods of Art History</td>
<td></td>
</tr>
<tr>
<td>ENGL 295</td>
<td>Methods of Advanced Literary Studies</td>
<td></td>
</tr>
<tr>
<td>HISP 205</td>
<td>Documentation and Field Work</td>
<td></td>
</tr>
<tr>
<td>PSCI 391</td>
<td>Research and Writing in Political Science</td>
<td></td>
</tr>
<tr>
<td>PSYC 362</td>
<td>Research Methods for Psychology</td>
<td></td>
</tr>
<tr>
<td>SOCG 364</td>
<td>Quantitative Research Methods and Analysis</td>
<td></td>
</tr>
<tr>
<td>SOCG 365</td>
<td>Qualitative Research Methods and Analysis</td>
<td></td>
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</tbody>
</table>

**Electives**

Select six elective courses 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCG 475</td>
<td>Public Sociology</td>
<td>18</td>
</tr>
</tbody>
</table>

**Capstone**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>WGST 491</td>
<td>Individual Study</td>
<td>3</td>
</tr>
<tr>
<td>WGST 485</td>
<td>Senior Project</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits** 33-34

1 Many of these courses have prerequisites; consult the sections of this Catalog where these course descriptions appear.

2 Taken from at least three (3) different disciplines, reflecting the interdisciplinary nature of Women’s and Gender Studies. One of the electives must emphasize difference in the form of race, class, ethnicity, religion, disability, age, or sexuality. The permanent list of approved electives appears below. An additional list of approved electives will be circulated by the program director each semester.

3 One capstone experience is a course in an appropriate field of study from an approved list to be provided each semester in which the student will focus his or her class work on issues related to the Women’s and Gender Studies major or an independent study.

4 All Women’s and Gender Studies majors will design a capstone project under the supervision of an affiliated faculty member. The student will submit a proposal for approval by a committee composed of the program director, the student’s faculty advisor, and another member of the Women’s and Gender Studies advisory committee the semester before it is to be completed. The project provides students with the opportunity to engage in the creation of original material and to apply the methods and approaches that they have acquired in the major.

**Women’s and Gender Studies Electives List**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 305</td>
<td>American Gender and Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 212</td>
<td>Anthropology of Gender</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 460</td>
<td>Seminar: Women and Western Art</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 310</td>
<td>Women in Antiquity</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 327</td>
<td>Jane Austen</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 353</td>
<td>Asian-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 369</td>
<td>Women and Modernism</td>
<td>3</td>
</tr>
<tr>
<td>HIST 334</td>
<td>Early Modern European Women’s History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 326</td>
<td>History of Manhood in the US</td>
<td>3</td>
</tr>
<tr>
<td>HIST 327</td>
<td>US Women’s History to 1870</td>
<td>3</td>
</tr>
<tr>
<td>HIST 328</td>
<td>US Women’s History Since 1870</td>
<td>3</td>
</tr>
<tr>
<td>HIST 368</td>
<td>Gender in Chinese History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 462</td>
<td>Women in Latin America</td>
<td>3</td>
</tr>
<tr>
<td>LING 307</td>
<td>Language and Gender</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 370</td>
<td>Women and Politics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 349</td>
<td>Psychology of Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 350</td>
<td>Psychology of Women</td>
<td>3</td>
</tr>
<tr>
<td>RELG 310</td>
<td>Women and Sexuality in the Western Religious Tradition</td>
<td>3</td>
</tr>
<tr>
<td>SOCG 304</td>
<td>Social Stratification</td>
<td>3</td>
</tr>
<tr>
<td>SOCG 315A</td>
<td>Gender and Society</td>
<td>3</td>
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<tr>
<td>SOCG 331</td>
<td>The Family</td>
<td>3</td>
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<tr>
<td>SOCG 400</td>
<td>Sociology of the Body</td>
<td>3</td>
</tr>
</tbody>
</table>
General Education Requirements
The general education requirements for Bachelor of Arts/Bachelor of Science degrees (p. 35) apply to all students who are seeking to earn an undergraduate B.A. or B.S. degree.

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Electives
Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits
MINORS

To allow students to gain expertise in an area beyond their major field of study, a student may elect to pursue programs of studies designated as minors. Minors consist of no fewer than 15 and no more than 28 credits. At least three minor courses must be at the 300-400 level. Students must take at least 9 credits in the minor at UMW.

Individual courses may count for both a minor and General Education requirements. In the case of a major and a minor, the maximum degree of overlap permitted between the major and minor is two courses. In the case of two minors, the maximum degree of overlap permitted between the minors is two courses. No minor courses may be taken on a Pass/Fail basis. A student must earn at least a 2.0 grade-point average in any minor.

Actuarial Science

Department of Mathematics (https://cas.umw.edu/math)

The minor in actuarial science provides students with the necessary background coursework for careers in a field whose demand is constantly on the rise. The minor is open to students from all majors. It offers an opportunity for students to develop skills expected of entry level actuaries; equipping them with the tools to help companies and businesses to better anticipate and manage risk. This minor also provides reasonable preparation for the first two actuarial examinations.

Minor Requirements

A minimum of 22 credits are required.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 122</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 481</td>
<td>Theory of Interest</td>
<td>3</td>
</tr>
<tr>
<td>STAT 381</td>
<td>Probability and Statistical Inference</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
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<td>6-7</td>
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<td></td>
<td>ACCT 301</td>
<td>Intermediate Accounting I</td>
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<tr>
<td></td>
<td>ACCT 302</td>
<td>Intermediate Accounting II</td>
</tr>
<tr>
<td></td>
<td>CPSC 310</td>
<td>Computer Information Systems</td>
</tr>
<tr>
<td></td>
<td>ECON 301A</td>
<td>Mathematical Economics</td>
</tr>
<tr>
<td></td>
<td>ECON 303</td>
<td>Microeconomics</td>
</tr>
<tr>
<td></td>
<td>ECON 304</td>
<td>Macroeconomics</td>
</tr>
<tr>
<td></td>
<td>ECON 321</td>
<td>Money And Banking</td>
</tr>
<tr>
<td></td>
<td>ECON 322A</td>
<td>Investment Analysis</td>
</tr>
<tr>
<td></td>
<td>MATH 351A</td>
<td>Numerical Analysis I</td>
</tr>
<tr>
<td></td>
<td>MATH 352A</td>
<td>Numerical Analysis II</td>
</tr>
<tr>
<td></td>
<td>STAT 382</td>
<td>Probability and Statistical Inference</td>
</tr>
</tbody>
</table>

Total Credits 22-23

Applied Mathematics

Department of Mathematics (https://cas.umw.edu/math)

The minor in applied mathematics is designed to give students the opportunity to complement their degree with a computational component. The minor offers a more concentrated applied curriculum and, more importantly, recognition for students working in areas where applications of mathematics have seen a greater presence in recent years. This includes, in particular, the natural sciences such as physics, chemistry, geology, and biology, but also computer science, economics, and business, where mathematical modeling has become very important. Adding the applied mathematics minor to such a degree will give students the more specific recognition for their course work, thereby enhancing their resume.

Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 122</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 312</td>
<td>Differential Equations</td>
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<tr>
<td>Select 9 credits of the following:</td>
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<td>9</td>
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<tr>
<td></td>
<td>MATH 300</td>
<td>Linear Algebra</td>
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<tr>
<td></td>
<td>MATH 351A</td>
<td>Numerical Analysis I</td>
</tr>
<tr>
<td></td>
<td>MATH 352A</td>
<td>Numerical Analysis II</td>
</tr>
<tr>
<td></td>
<td>MATH 411</td>
<td>Chaotic Dynamical Systems</td>
</tr>
<tr>
<td></td>
<td>MATH 421</td>
<td>Applied Partial Differential Equations</td>
</tr>
<tr>
<td></td>
<td>STAT 381</td>
<td>Probability and Statistical Inference</td>
</tr>
<tr>
<td></td>
<td>STAT 382</td>
<td>Probability and Statistical Inference</td>
</tr>
<tr>
<td></td>
<td>MATH 361</td>
<td>Topics in Mathematics 1</td>
</tr>
<tr>
<td></td>
<td>or STAT 361</td>
<td>Topics in Statistics</td>
</tr>
<tr>
<td>MATH 461</td>
<td>Topics in Mathematics 1</td>
<td></td>
</tr>
<tr>
<td>or STAT 461</td>
<td>Topics in Statistics</td>
<td></td>
</tr>
<tr>
<td>MATH 491B</td>
<td>Directed Study 1, 2</td>
<td>1-3</td>
</tr>
<tr>
<td>MATH 492A</td>
<td>Directed Study 1</td>
<td>1-3</td>
</tr>
<tr>
<td>Select 3 credits of the following:</td>
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<td>3</td>
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<tr>
<td></td>
<td>Any course in the additional upper level list above</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 224A</td>
<td>Multivariable Calculus</td>
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<tr>
<td></td>
<td>STAT 280</td>
<td>Statistical Methods</td>
</tr>
<tr>
<td></td>
<td>CPSC 220</td>
<td>Computer Programming and Problem Solving</td>
</tr>
<tr>
<td></td>
<td>ECON 301A</td>
<td>Mathematical Economics</td>
</tr>
</tbody>
</table>

Any 300/400 level course in a related discipline with mathematics department approval

Total Credits 21-25

1 With departmental approval.
2 At most three credits of MATH 491B Directed Study or STAT 491 Directed Study may be counted toward the applied mathematics minor.

Applied Statistics

Department of Mathematics (https://cas.umw.edu/math)

The minor in applied statistics provides students with the necessary background for careers in statistics and its applications in diverse fields. The minor is open to students from all majors. It offers an opportunity for students to develop the skills expected of entry-level statistical analysts; equipping them with the tools to help companies, organizations, political campaigns and businesses to better anticipate and manage variation.

Minor Requirements

A minimum of fifteen (15) credits are required.
Arabic Studies

Department of Modern Languages and Literatures (http://publications.umw.edu/undergraduatecatalog/colleges/cas/college-of-arts-and-sciences-faculty/modern-languages-and-literature)

The minor in Arabic Studies is designed for students who wish to develop their Arabic Advanced language proficiency and broaden their knowledge of Arabic literature, history, politics, and culture. Completion of the minor requires 18 credits in applicable courses.

**Minor Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARAB 201</td>
<td>Intermediate Arabic I</td>
<td>3</td>
</tr>
<tr>
<td>ARAB 202</td>
<td>Intermediate Arabic II Intermediate Arabic II</td>
<td>3</td>
</tr>
<tr>
<td>ARAB 301</td>
<td>Advanced Arabic</td>
<td>3</td>
</tr>
<tr>
<td>ARAB 302</td>
<td>Advanced Arabic</td>
<td>3</td>
</tr>
<tr>
<td>ARAB 310</td>
<td>Topics in Arabic Culture</td>
<td></td>
</tr>
<tr>
<td>ARAB 351</td>
<td>Classical Arabic Literature in Translation</td>
<td></td>
</tr>
<tr>
<td>ARAB 352</td>
<td>Modern Arabic Literature in Translation</td>
<td></td>
</tr>
<tr>
<td>ARAB 491/492</td>
<td>Independent Study Arabic Independent Study</td>
<td></td>
</tr>
<tr>
<td>GEOG 304A</td>
<td>Geography of the Middle East</td>
<td></td>
</tr>
<tr>
<td>HIST 337</td>
<td>Medieval Islamic Civilization</td>
<td></td>
</tr>
<tr>
<td>RELG 210</td>
<td>Islam</td>
<td></td>
</tr>
</tbody>
</table>

Select 6 credits of the following:

- ARAB 301
- ARAB 302
- ARAB 310
- ARAB 351
- ARAB 352
- ARAB 491/492

**Arts Administration**

Combining a solid foundation of theory and practice, the Arts Administration minor creates a pathway for the education and experience students need to gain access to a career path in the field. With strong classroom experience in business and arts administration and experiential learning designed to apply knowledge to practice, the minor is a robust and flexible field of study that is an ideal complement to any major, but particularly for students in the arts.

The minor incorporates key courses in accounting, management, and marketing in the College of Business. These concepts are focused on the field in two specialized courses in the Department of Theatre and Dance. Finally, students develop and strengthen their skills by pursuing practicum assignments in essential areas of arts administration to enhance their experience in the minor. The faculty encourages students to pursue a internship to increase their proficiency in arts administration and establish a network of professional contacts. The University's proximity to the world-class arts organizations in Washington, DC, gives students unprecedented opportunities to work in the field.

Students interested in enrolling in the minor must contact the chair of the Department of Theatre and Dance for additional details.

**Minor Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 301</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>or MKTG 301</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>THEA 281</td>
<td>Principles of Arts Administration</td>
<td>3</td>
</tr>
<tr>
<td>THEA 481</td>
<td>Resource Strategies in Arts Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

Select 3 credits of the following:

- DANC 499 Internship
- THEA 390 Theatre Practicum
- THEA 499 Internship

Total Credits 15

**Asian Studies**

Asian Studies is the interdisciplinary study of the language, literature, culture, history, society, politics, philosophy, religion, and traditions of the rich and diverse countries of Asia. Courses in more than 10 academic disciplines contribute to this minor program. The Leidecker Center for Asian Studies, established in 1998, annually sponsors lectures, workshops, concerts, conferences, and cultural events to promote awareness and understanding of Asia. These activities augment the curricular offerings of the minor.

Study abroad is not required for the Asian Studies Minor, but it is both recognized and encouraged. Asian Studies Minor students are eligible to apply to study abroad for a semester or year through any of the approved programs listed in the Center for International Education website under Asian Studies. After consultation with their academic advisors, students may contact the relevant program director for more information and are encouraged to work closely with the staff at the Center for International Education.
Minor Requirements

Twenty-four (24) credits including two semesters (6 credits) or the equivalent of an Asian language (the language credits apply to one language, taken in sequence; the language may be taken at UMW or at an outside institution or as part of a study abroad program for transfer credit); six additional non-language courses, representing at least two different academic disciplines, of which a minimum of 9 credits must be at the 300 level or above. A maximum of 6 credits Individual Study and/or Internship may count toward fulfilling the minor requirements.

Asian Studies Course Offerings

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 101</td>
<td>Beginning Chinese I</td>
<td>6</td>
</tr>
<tr>
<td>&amp; CHIN 102</td>
<td>and Beginning Chinese II</td>
<td></td>
</tr>
<tr>
<td>CHIN 201</td>
<td>Intermediate Chinese I</td>
<td>6</td>
</tr>
<tr>
<td>&amp; CHIN 202</td>
<td>and Intermediate Chinese II</td>
<td></td>
</tr>
<tr>
<td>ARTH 118</td>
<td>History of Asian Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 224</td>
<td>Arts of Japan and Korea</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 270</td>
<td>Topics in Non-Western and Non-Eurocentric Art (approved topics)</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 356</td>
<td>Global Modernisms in East Asian Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 357</td>
<td>Contemporary Asian Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 470</td>
<td>Seminar: Special Studies in Art History Seminar: Special Studies in Art History (approved topics)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 353</td>
<td>Asian-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 364</td>
<td>Contemporary Asian Novel</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 307</td>
<td>Geography of Asia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 141</td>
<td>Asian Civilization I</td>
<td>6</td>
</tr>
<tr>
<td>&amp; HIST 142</td>
<td>and Asian Civilization II</td>
<td></td>
</tr>
<tr>
<td>HIST 300</td>
<td>Topics in History (approved topics)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 324</td>
<td>Chinese History through Film</td>
<td>3</td>
</tr>
<tr>
<td>HIST 364</td>
<td>History of Japan</td>
<td>3</td>
</tr>
<tr>
<td>HIST 365</td>
<td>History of China I</td>
<td>6</td>
</tr>
<tr>
<td>&amp; HIST 366</td>
<td>and History of China II</td>
<td></td>
</tr>
<tr>
<td>HIST 368</td>
<td>Gender in Chinese History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 390A</td>
<td>The United States and Vietnam</td>
<td>3</td>
</tr>
<tr>
<td>HIST 466</td>
<td>Cultural History of Late 20th Century China</td>
<td>3</td>
</tr>
<tr>
<td>IDIS 350</td>
<td>Study Abroad (approved topics)</td>
<td>1-6</td>
</tr>
<tr>
<td>JAPN 101</td>
<td>Beginning Japanese I</td>
<td>6</td>
</tr>
<tr>
<td>&amp; JAPN 102</td>
<td>and Beginning Japanese II</td>
<td></td>
</tr>
<tr>
<td>JAPN 201</td>
<td>Intermediate Japanese I</td>
<td>6</td>
</tr>
<tr>
<td>&amp; JAPN 202</td>
<td>and Intermediate Japanese II</td>
<td></td>
</tr>
<tr>
<td>MDFL 201</td>
<td>World Literature in Cultural Context</td>
<td>3</td>
</tr>
<tr>
<td>PHIL/RELG 283</td>
<td>Hinduism</td>
<td>3</td>
</tr>
<tr>
<td>PHIL/RELG 284</td>
<td>Buddhism</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 440</td>
<td>Studies in Asian and Comparative Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>RELG 101</td>
<td>Introduction to World Religions</td>
<td>3</td>
</tr>
<tr>
<td>RELG 210</td>
<td>Islam</td>
<td>3</td>
</tr>
<tr>
<td>RELG 298</td>
<td>Ethics of Religion and Violence</td>
<td>3</td>
</tr>
<tr>
<td>RELG 331</td>
<td>Special Studies in Religion (approved topics)</td>
<td>3</td>
</tr>
<tr>
<td>RELG 383</td>
<td>Yoga In Theory, History, and Contemporary Society</td>
<td>3</td>
</tr>
<tr>
<td>RELG 384</td>
<td>Death and Rebirth in Tibetan Buddhism</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 354A</td>
<td>Politics of South Asia</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 366</td>
<td>Government and Politics of China</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 367</td>
<td>East Asia in World Affairs</td>
<td>3</td>
</tr>
</tbody>
</table>

Independent Study (in any appropriate discipline, with approved topic)
Internship (with approved topic)

Biology

Department of Biological Sciences (http://publications.umw.edu/undergraduatecatalog/colleges/cas/college-of-arts-and-sciences-faculty/biological-sciences)

The biology minor provides a well-balanced foundation in the core principles of biology, while allowing students to pursue more specific interests via upper-level elective courses. Required laboratory experiences reinforce biological concepts and teach critical research processes and skills. The biology minor is especially suitable for students who need a strong background in this discipline to pursue careers in such fields as biochemistry, biopsychology, or environmental science. Pre-medical or pre-dental students who major in disciplines other than biology are also encouraged to consider the biology minor.

Biology

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 210</td>
<td>Introduction to Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 340</td>
<td>Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 341</td>
<td>General Genetics</td>
<td>4</td>
</tr>
</tbody>
</table>

Select three additional 300-400 level Biology courses of which 2 must have a laboratory component. ¹

Total Credits 22

¹ BIOL 481 Research Design & Proposal Development in Biology, BIOL 491 Special Problems in Biology and BIOL 499 Internship may not be counted for minor credit.

Business Administration

College of Business (https://business.umw.edu/about-the-college)

The Business Administration minor provides students with majors outside the College of Business with the conceptual foundations necessary to understand the complex components of today’s competitive business environment. Essential courses in accounting, MIS, management and marketing combine theory and practice to build a strong knowledge base of core business processes. Advanced business topics allow students to develop knowledge in a specific area to complement their major.

Business Administration

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 105</td>
<td>Perspectives on Organizations in Society</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 301</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MIST 201</td>
<td>Management Information Systems and Applications</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 301</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 105</td>
<td>Perspectives on Organizations in Society</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 301</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MIST 201</td>
<td>Management Information Systems and Applications</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 301</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>
Select one additional upper-level (300-400) BUAD, ACCT, BLAW, DSCI, FINC, MGMT, MIST, or MKTG course.

Total Credits: 18


**Business French**

Department of Modern Languages and Literatures (https://cas.umw.edu/modernlanguages)

The Business French minor is an interdisciplinary program of study that combines courses in French language and culture with selected courses in Business and/or Economics. The Business French minor provides the student with a basic understanding of business and economics as well as the ability to communicate about them in French in a professional context. Students also include a three-credit internship as part of their minor programs. Approved French courses from study abroad programs may also be included among the electives of the French minor.

**Minor Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 311</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>FREN 312</td>
<td>Oral Communication and Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>FREN 313</td>
<td>Business French</td>
<td>3</td>
</tr>
<tr>
<td>Select three credits from FREN 330–FREN 335</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FREN 411</td>
<td>Stylistics</td>
<td></td>
</tr>
<tr>
<td>FREN 412</td>
<td>Translation</td>
<td></td>
</tr>
<tr>
<td>FREN 499</td>
<td>Internship</td>
<td></td>
</tr>
<tr>
<td>Select one of the following sequences:</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Sequence A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I</td>
<td></td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Principles of Accounting II</td>
<td></td>
</tr>
<tr>
<td>One College of Business course at the 300-level or higher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sequence B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>One Economics course at the 300-level or higher</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 24

Business French minors can take no more than 29 credits in Business without declaring a Business major.

**Business German**

Department of Modern Languages and Literatures (https://cas.umw.edu/modernlanguages)

The Business German minor is an interdisciplinary program of study that combines courses in German language and culture with selected courses in business and/or economics. The Business German minor provides the student with a basic understanding of business and economics as well as the ability to communicate about them in German in a professional context. Students also include a three-credit internship as part of their minor programs. Approved German courses from study abroad programs may also be included among the electives of the Business German minor.

**Minor Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 302</td>
<td>Oral Communication</td>
<td>4</td>
</tr>
<tr>
<td>GERM 303</td>
<td>Advanced Composition</td>
<td>4</td>
</tr>
<tr>
<td>GERM 313</td>
<td>German for Professional Use I</td>
<td>4</td>
</tr>
<tr>
<td>GERM 325</td>
<td>German Cultural History</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>GERM 499</td>
<td>Internship</td>
<td></td>
</tr>
<tr>
<td>ECON 499</td>
<td>Internship</td>
<td></td>
</tr>
<tr>
<td>Any College of Business 499 (for at least 1 credit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following combinations:</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Combination 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I</td>
<td></td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Principles of Accounting II</td>
<td></td>
</tr>
<tr>
<td>One College of Business course on the 300 level or above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combination 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 202B</td>
<td>Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>One ECON course on the 300 level or above</td>
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<td></td>
</tr>
</tbody>
</table>

Total Credits: 26

Business German minors can take no more than 29 credits in Business without declaring a Business major.

**Business Spanish**

Department of Modern Languages and Literatures (https://cas.umw.edu/modernlanguages)

The Business Spanish minor is an interdisciplinary program of study that combines courses in Spanish language and Hispanic culture with selected courses in business and/or economics. The Business Spanish minor provides the student with a basic understanding of business and economics as well as the ability to communicate about them in Spanish in a professional context. Students also include a three-credit internship as part of their minor programs. Approved Spanish courses from study abroad programs may also be included among the electives of the Business Spanish minor.

**Minor Requirements**

A total of nine courses (27 credits) beyond SPAN 202A Intermediate Spanish II are required for the completion of the minor.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 315</td>
<td>Spanish Civilization</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 320</td>
<td>Topics in Hispanic Culture</td>
<td></td>
</tr>
<tr>
<td>SPAN 321</td>
<td>Culture of Service and Social Action in the Hispanic World</td>
<td></td>
</tr>
<tr>
<td>SPAN 370</td>
<td>Caribbean Culture and Literature in the 20th and 21st Centuries</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 24

Business Spanish minors can take no more than 29 credits in Business without declaring a Business major.
SPAN 305  Conversation and Grammar  3
SPAN 306  Composition and Grammar  3
SPAN 393  Business Spanish  3
SPAN 414  Spanish for Translation  3
Select one of the following:  3
   SPAN 499  Internship
   BUAD 499  Internship
   ECON 499  Internship
Select one of the following tracks:  9
Business
   ACCT 101  Principles of Accounting I
   ACCT 102  Principles of Accounting II
   A College of Business course at the 300-level or higher
Economics
   ECON 201B  Principles of Macroeconomics
   ECON 202B  Principles of Microeconomics
   An Economics course at the 300-level or higher
Total Credits  27

Business Spanish minors can take no more than 29 credits in Business without declaring a Business Major.

Chemistry
Department of Chemistry and Physics (https://cas.umw.edu/chemistry)
The study of the structure, properties, and reactivity of matter, Chemistry has been titled the "central science" because of its focal position in a fundamental understanding of other scientific branches, such as biology, medicine, pharmacy, physics, environmental studies, and geology. The minor in Chemistry allows students with interests in these fields to explore the overlap between their disciplines and this "central science." The Chemistry minor fosters both breadth in appreciation of the many facets of the chemical sciences and depth of understanding of each subspecialty. The flexibility afforded by the Chemistry curriculum frees students to tailor the minor to their specific interests, while providing a rigorous academic background for further study.

For instance, an interdisciplinary, Biochemistry-oriented minor can be designed with the choices of:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 211 &amp; CHEM 212</td>
<td>Organic Chemistry I and Organic Chemistry II</td>
<td>8</td>
</tr>
<tr>
<td>CHEM 317 &amp; CHEM 318</td>
<td>Biochemistry I and Biochemistry II</td>
<td>6</td>
</tr>
<tr>
<td>CHEM 319</td>
<td>Biochemistry Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

While a General Chemistry minor might include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 211 &amp; CHEM 212</td>
<td>Organic Chemistry I and Organic Chemistry II</td>
<td>8</td>
</tr>
<tr>
<td>CHEM 317</td>
<td>Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 343</td>
<td>Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 383A</td>
<td>Physical Chemistry I</td>
<td>3</td>
</tr>
</tbody>
</table>

Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following sequences:  8

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 211 &amp; CHEM 212</td>
<td>Organic Chemistry I and Organic Chemistry II</td>
<td>8</td>
</tr>
<tr>
<td>CHEM 253 &amp; CHEM 254</td>
<td>Chemical Analysis I and Chemical Analysis II</td>
<td>8</td>
</tr>
</tbody>
</table>

Select three of the following:  7-9

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 317</td>
<td>Biochemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 318</td>
<td>Biochemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 319</td>
<td>Biochemistry Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Environmental Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 332</td>
<td>Environmental Chemistry Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 343</td>
<td>Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 345</td>
<td>Inorganic Chemistry Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 383A</td>
<td>Physical Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 384A</td>
<td>Physical Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 387A</td>
<td>Physical Chemistry Laboratory I</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits  23-25

1  No more than one of the three 300-level courses may be a laboratory course.

Climate Science
Department of Geography (https://cas.umw.edu/geography)
Climate science is inherently interdisciplinary, involving both the physical and biological sciences. However, there is flexibility within the minor for some specialization, depending on the student’s major interests. Climatologists come from the ranks of geologists, oceanographers, geographers, biologists, chemists, physicists, and meteorologists. The commonality among these disparate fields is that they all inform us about the earth’s ability to absorb and radiate energy, and the way atmospheric processes play out across the earth’s surface. This minor would serve students who might be going on to graduate work in one of the subfields of climatology or those who wish to be more informed in ongoing debates about climate change.

Minor Requirements
Sixteen to eighteen (16-18) credits.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEG 110</td>
<td>Introduction to Weather and Climate</td>
<td>4</td>
</tr>
<tr>
<td>GEG 325</td>
<td>Dynamic Climatology</td>
<td>3</td>
</tr>
<tr>
<td>GEG 327</td>
<td>Climate Change</td>
<td>3</td>
</tr>
<tr>
<td>or EESC 355</td>
<td>Icehouse-Greenhouse Earth</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two or more courses of the following:  6-8

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 210</td>
<td>Introduction to Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Environmental Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>EESC 112</td>
<td>Evolution of Earth</td>
<td>3</td>
</tr>
<tr>
<td>EESC 121</td>
<td>Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>EESC 230</td>
<td>Global Environmental Problems</td>
<td>3</td>
</tr>
<tr>
<td>EESC 325</td>
<td>Environmental Geochemistry</td>
<td>3</td>
</tr>
</tbody>
</table>
The Contemplative Studies minor is broadly interdisciplinary, incorporating coursework in the humanities, arts, and sciences to explore the theory, practice, history, and scientific study of diverse contemplative traditions. In addition to the intellectual study of these topics, students train in the daily application of secularized contemplative techniques. Critical reflection on subjective experience is a key component, and research as well as creative expression are encouraged and supported.

The minor offers students a foundation in four primary areas:

1) the theory of contemplation across traditions and history;
2) the application of contemplation in various human endeavors, including philosophy, religion, art, and performance;
3) the scientific study of meditation, its cutting-edge technologies, and the modes of gathering quantifiable psychological data to document its effects on the brain and well-being; and
4) significant training and experience in contemplative practice towards the development of concentration, empathy, stress-reduction, creativity, etc.

The minor offers students a foundation in four primary areas:

1) the theory of contemplation across traditions and history;
2) the application of contemplation in various human endeavors, including philosophy, religion, art, and performance;
3) the scientific study of meditation, its cutting-edge technologies, and the modes of gathering quantifiable psychological data to document its effects on the brain and well-being; and
4) significant training and experience in contemplative practice towards the development of concentration, empathy, stress-reduction, creativity, etc.

**Minor Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPRD 104</td>
<td>Meditation and Contemplative Practices</td>
<td>3</td>
</tr>
<tr>
<td>CPRD 304</td>
<td>Contemplative Practice II</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 100</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 305</td>
<td>Computer Systems</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 326</td>
<td>Theoretical Foundations of Computing</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 405</td>
<td>Organization of Programming Languages</td>
<td>3</td>
</tr>
<tr>
<td>CPRD 299</td>
<td>Mysterium Humanum</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 331</td>
<td>Topics in Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>RELG 331</td>
<td>Special Studies in Religion</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 350A</td>
<td>Neoclassicism to Impressionism</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 351A</td>
<td>Post-Impressionism to Abstract Expression</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 352A</td>
<td>American Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 354A</td>
<td>Pop Art to the Present</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 355</td>
<td>Modern Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 356</td>
<td>Global Modernisms in East Asian Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 470</td>
<td>Seminar: Special Studies in Art History</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 470</td>
<td>Seminar: Special Studies in Art History</td>
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</tr>
<tr>
<td>ARTS 311A</td>
<td>Ceramics II</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 331B</td>
<td>Sculpture II</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 341</td>
<td>Multiple Imaging</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 342</td>
<td>Painting II</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Neurobiology</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 202C</td>
<td>Ancient Tragedy</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 335</td>
<td>Sacred Spaces</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 201</td>
<td>Ancient Greek Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 273</td>
<td>Cognitive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 274</td>
<td>Biological Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 305</td>
<td>Cognitive Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 351</td>
<td>Positive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 372</td>
<td>Sensation and Perception</td>
<td>3</td>
</tr>
<tr>
<td>RELG 283</td>
<td>Hinduism</td>
<td>3</td>
</tr>
<tr>
<td>RELG 284</td>
<td>Buddhism</td>
<td>3</td>
</tr>
<tr>
<td>RELG 298</td>
<td>Ethics of Religion and Violence</td>
<td>3</td>
</tr>
<tr>
<td>RELG 342</td>
<td>Neuro Theology</td>
<td>3</td>
</tr>
<tr>
<td>RELG 383</td>
<td>Yoga In Theory, History, and Contemporary Society</td>
<td>3</td>
</tr>
<tr>
<td>RELG 384</td>
<td>Death and Rebirth in Tibetan Buddhism</td>
<td>3</td>
</tr>
<tr>
<td>THEA 111</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA 112</td>
<td>Introduction to Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 218</td>
<td>Voice and Body Movement</td>
<td>3</td>
</tr>
<tr>
<td>THEA 318</td>
<td>Stage Dialects</td>
<td>3</td>
</tr>
<tr>
<td>THEA 321</td>
<td>Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 322</td>
<td>Acting</td>
<td>3</td>
</tr>
<tr>
<td>Any 491</td>
<td>Any 491 (with approved topic)</td>
<td>3</td>
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</tbody>
</table>

Total Credits 18

1. At least six (6) credits at the 300/400-level
2. Special topics courses in related fields (ANTH 271 Special Studies in Ethnography, ANTH 371 Special Topics in Anthropology; ARTH 470 Seminar: Special Studies in Art History Seminar; Special Studies in Art History; ARTS 381 Special Topics in Studio Art; ARTS 470 Special Studies in Studio Art; CPRD 299 Mysterium Humanum Studies; IDIS 350 Study Abroad; PHIL 231 Topics in Philosophy, PHIL 331 Topics in Philosophy; RELG 331 Special Studies in Religion, RELG 331 Special Studies in Religion) as well as other courses with relevant content may be substituted, including towards the 300/400-level requirements, with approval of the program coordinator.
Cybersecurity

The Cybersecurity minor focuses on the field of information security, which deals with the processes and methodologies that are designed and implemented to protect data from unauthorized access, misuse, modification, and disruption. In today’s highly connected world our sensitive data and systems are increasingly in peril, and there is a growing need for knowledgeable professionals who can develop, use, and manage best practices and tools. This presents an opportunity for students in a variety of majors who are passionate about cybersecurity.

The minor provides students with a broad introduction to current cybersecurity topics. It not only gives the student a solid foundation in security fundamentals but also flexibly combines with a number of majors, such as Business, Computer Science, and Mathematics. This allows the student to position him or herself for a particular area of the cybersecurity job market, from managerial to software development. The minor includes in-depth and hands-on exposure to several key areas of information/ cybersecurity such as system/OS security, penetration testing, and software security, thus allowing the student to obtain hands-on practical experience in these areas.

Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSC 220</td>
<td>Computer Programming and Problem Solving</td>
<td>4</td>
</tr>
<tr>
<td>CPSC 225</td>
<td>Software Development Tools</td>
<td>1</td>
</tr>
<tr>
<td>CPSC 414</td>
<td>Network Principles &amp; Applicatin</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 345</td>
<td>Introduction to Computer Security</td>
<td>3</td>
</tr>
<tr>
<td>or MIST 411</td>
<td>Information Security</td>
<td></td>
</tr>
<tr>
<td>MIST 444</td>
<td>Ethical Hacking</td>
<td>3</td>
</tr>
<tr>
<td>or CPSC 445</td>
<td>Software Security</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CPSC 302</td>
<td>Computer Ethics</td>
<td></td>
</tr>
<tr>
<td>BUAD 464</td>
<td>Business Ethics</td>
<td></td>
</tr>
<tr>
<td>PHIL 225</td>
<td>Practical Ethics</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

Data Science

The minor in Data Science teaches principles and builds skills in the science of how and why we use data. It is an attractive option that can enhance the credentials for students in a wide variety of domains. Decision making across all levels is increasingly shifting away from subjective human judgment and expert opinion and is being replaced by superior evidence-based approaches driven by data and analytical models. Data Science is the discipline concerned with gathering and manipulating large volumes of data, developing statistical models to gain critical insights from it, understanding the behavior of complex systems through simulation, and making non-trivial decisions optimally, often in response to quickly changing conditions. The minor in Data Science is designed to provide students with the fundamental coursework to succeed in this area.

Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATA 101</td>
<td>Introduction to Data Science</td>
<td>3</td>
</tr>
<tr>
<td>DATA 219</td>
<td>Foundations for Data Science</td>
<td>3</td>
</tr>
<tr>
<td>Take one course from the following list of five courses:</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Digital Studies

Digital Studies engages students in the discovery, analysis, and creation of digital information and media. As an interdisciplinary minor, students will gain the academic and technological skills necessary to analyze information and communicate in an increasingly digital world. The Digital Studies Minor requires an introductory course, a capstone course, and elective courses across disciplines of study that explore the creation and use of digital information and the related social, legal, cultural, epistemological, and historical issues. Students will gain technological skills necessary to critically research, evaluate, and produce digital information and new media. Through collaborative work with digital tools, students will produce new information resources and will apply digital technologies in meaningful ways across various disciplines of study. The capstone experience requires independent research, interdisciplinary analysis, technological skills, and the production of a publicly accessible digital studies or new media project.

The minor incorporates (among others) the disciplines of American studies, anthropology, art and art history, communication, computer science, English, historic preservation, history, Spanish, and political science from which students may select elective courses. The minor is open to students from any discipline in the arts and sciences, education, or business colleges at UMW.

Students interested in enrolling in the minor should contact the Coordinator of the Digital Studies Minor for additional details.

Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DGST 101</td>
<td>Introduction to Digital Studies</td>
<td>3</td>
</tr>
<tr>
<td>Select 12 credits of the following:</td>
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<tr>
<td>AMST 204</td>
<td>American Foodways</td>
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</tr>
<tr>
<td>ARTS 104</td>
<td>Digital Approaches to Fine Art</td>
<td></td>
</tr>
<tr>
<td>ARTS 219</td>
<td>Digital Video Production</td>
<td></td>
</tr>
<tr>
<td>ARTS 226</td>
<td>Animation</td>
<td></td>
</tr>
<tr>
<td>ARTS 241A</td>
<td>Photography I</td>
<td></td>
</tr>
<tr>
<td>ARTS 316</td>
<td>Experimental Documentary</td>
<td></td>
</tr>
<tr>
<td>ARTS 341</td>
<td>Multiple Imaging</td>
<td></td>
</tr>
<tr>
<td>ARTS 454</td>
<td>Approaches to Video Art</td>
<td></td>
</tr>
<tr>
<td>COMM 353</td>
<td>Visual Rhetoric</td>
<td></td>
</tr>
<tr>
<td>COMM 357</td>
<td>Social Media</td>
<td></td>
</tr>
</tbody>
</table>
Economics

Department of Economics (https://cas.umw.edu/economics)

The minor in Economics allows students to sample what economics has to offer. Students are required to take Principles of Macroeconomics (201), Principles of Microeconomics (202) and either Microeconomics (303) or Macroeconomics (304). These courses lay out the basic theoretical framework that economists use to view the world. Students take Introduction to Economic Analysis (300) to learn how economists do research, use statistical analysis, and present their findings in either written or verbal form. Students fill out the minor by taking 3 courses in the fields of economics that most interest them.

**Minor Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201B or ECON 202B</td>
<td>Principles of Macroeconomics or Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 303 or ECON 304</td>
<td>Microeconomics or Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 300</td>
<td>Introduction to Economic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>Select 9 additional credits in upper level economics courses</td>
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<tr>
<td>Total Credits</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

English Literature

Department of English and Linguistics (https://cas.umw.edu/elc)

The minor in English literature offers the opportunity to study literature on an advanced level and to develop critical thinking, writing, and research skills alongside the enjoyment of literature. Students can explore a range of genres, including poetry, fiction, drama, and creative non-fiction; a range of national traditions, including not only British and U.S. literature but also literature written in English from around the globe; and a range of historical periods, from the Middle Ages to the present. Courses examine literary works' diverse artistic forms and cultural significances and introduce students to the most important historical and contemporary methods of reading literary texts.

**Minor Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 295</td>
<td>Methods of Advanced Literary Studies</td>
<td>3</td>
</tr>
<tr>
<td>Select 15 credits in literature on the 300- or 400-level, which must include:</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Two courses in pre-1900 literature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One course in pre-1800 literature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One course in post-1900 literature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One course in literature of historically marginalized groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

Environmental Sustainability

Department of Earth and Environmental Sciences (http://publications.umw.edu/undergraduatenetcatalog/colleges/cas/cas-college-of-arts-and-sciences-faculty/earth-and-environmental-sciences-department)

Sustainability is usually defined as the ability to meet the resource needs of the current generation without compromising the ability of future generations to meet their own needs. At UMW, we consider four aspects of sustainability: environmental, social, economic, and cultural sustainability. The goal of the Environmental Sustainability minor is to encourage students to analyze our natural and social worlds and to
examine approaches to resolving critical resource issues for the long-term. The core classes provide a common introduction to the scientific study of the environment and issues of sustainability. Students then add three additional elective classes that appeal to particular interests and their respective applications of sustainability concepts. Completing this minor will better prepare students for the complex, interdisciplinary challenges our society faces.

**Minor Requirements**

Twenty-two to twenty-five (22–25) credits.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC 110</td>
<td>Environmental and Ecological Systems</td>
<td>3</td>
</tr>
<tr>
<td>EESC 120</td>
<td>Principles of Environmental Sustainability</td>
<td>4</td>
</tr>
<tr>
<td>EESC 230</td>
<td>Global Environmental Problems</td>
<td>3</td>
</tr>
<tr>
<td>EESC 326</td>
<td>Pollution Prevention Planning</td>
<td>3</td>
</tr>
<tr>
<td>EESC 330</td>
<td>or EESC 300 Environmental Regulations</td>
<td>3</td>
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</table>

Select at least 9 credits of the following: 9-12

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 365</td>
<td>Environment and Development Narratives</td>
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</tr>
<tr>
<td>EESC 121</td>
<td>Oceanography</td>
<td></td>
</tr>
<tr>
<td>EESC 307</td>
<td>Environmental Soil Science</td>
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</tr>
<tr>
<td>EESC 313</td>
<td>Fluvial Geomorphology</td>
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</tr>
<tr>
<td>EESC 315</td>
<td>Hydrogeology</td>
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<tr>
<td>EESC 325</td>
<td>Environmental Geochemistry</td>
<td></td>
</tr>
<tr>
<td>EESC 326</td>
<td>Pollution Prevention Planning</td>
<td></td>
</tr>
<tr>
<td>EESC 330</td>
<td>Environmental Regulations</td>
<td></td>
</tr>
<tr>
<td>EESC 340</td>
<td>Energy Resources and Technology</td>
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<tr>
<td>EESC 355</td>
<td>Icehouse-Greenhouse Earth</td>
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<tr>
<td>EESC 360</td>
<td>Environmental Exploration</td>
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</tr>
<tr>
<td>EESC 421</td>
<td>Special Topics</td>
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</tr>
<tr>
<td>EESC 481</td>
<td>Readings</td>
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<tr>
<td>EESC 499</td>
<td>Internship</td>
<td></td>
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<tr>
<td>BIOL 424</td>
<td>Tropical Ecology</td>
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<tr>
<td>BIOL 428</td>
<td>Conservation Biology</td>
<td></td>
</tr>
<tr>
<td>ECON 351C</td>
<td>Poverty, Affluence, and Equality</td>
<td></td>
</tr>
<tr>
<td>GEOG 245</td>
<td>Environment and Society</td>
<td></td>
</tr>
<tr>
<td>GEOG 339A</td>
<td>Geography and Development</td>
<td></td>
</tr>
<tr>
<td>GEOG 361</td>
<td>Grassroots Development in Guatemala</td>
<td></td>
</tr>
<tr>
<td>HIST 322</td>
<td>US Environmental History</td>
<td></td>
</tr>
<tr>
<td>PHIL 330</td>
<td>Environmental Ethics</td>
<td></td>
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<tr>
<td>PHIL 430</td>
<td>Seminar: Ethics, Environment, &amp; Sustainability</td>
<td></td>
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<tr>
<td>SOCG 354</td>
<td>Environmental Sociology</td>
<td></td>
</tr>
<tr>
<td>SPAN 345</td>
<td>Ideas on Nature in Latin American Literature</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 22-25

The minor in Financial and Quantitative Analysis teaches principles and builds skills in the field of Finance. It is an attractive option that can enhance the credentials for students in a wide variety of disciplines. Financial decision making is critically important in the business world, whether the context is entrepreneurial, corporate, or governmental economic policy. The minor in Financial and Quantitative Analysis is designed to provide students with the core fundamental coursework in mathematics, economics, and business to succeed in this area.

**Minor Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 102</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>FINC 301</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>FINC 401</td>
<td>Advanced Corporate Finance</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three of the following: 9

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 401</td>
<td>Accounting Information Systems</td>
<td></td>
</tr>
<tr>
<td>DSCI 401</td>
<td>Applied Machine Learning</td>
<td></td>
</tr>
<tr>
<td>DSCI 402</td>
<td>Analytics Applications and Development</td>
<td></td>
</tr>
<tr>
<td>FINC 411</td>
<td>Student Managed Investment Fund I</td>
<td></td>
</tr>
<tr>
<td>FINC 412</td>
<td>Student Managed Investment Fund II</td>
<td></td>
</tr>
<tr>
<td>FINC 430</td>
<td>Financial Modeling</td>
<td></td>
</tr>
<tr>
<td>MKTG 411</td>
<td>Marketing Research</td>
<td></td>
</tr>
</tbody>
</table>

Any approved 471 (special topics seminars) classes within the College of Business.

Any approved 491 (Individual Study) class within the College of Business.

Total Credits 18

1 Note that ECON 201B Principles of Macroeconomics, ECON 202B Principles of Microeconomics, MIST 201 Management Information Systems and Applications or equivalent, and DSCI 259 Applied Statistics and Business Research or ECON 361A Introductory Econometrics or STAT 180 are prerequisites for FINC 301 Principles of Finance. Students should bear this in mind when planning their academic coursework.

Note that the maximum overlap between a major and a minor is two courses. Students pursuing a major within the COB must already take ACCT 102 Principles of Accounting II and FINC 301 Principles of Finance. Thus, College of Business students may not double-count electives such as ACCT 401 Accounting Information Systems toward both their major and the minor; it would on count toward one of these programs.

**French**

Department of Modern Languages and Literature (http://publications.umw.edu/undergraduatecatalog/colleges/cas/college-of-arts-and-sciences-faculty/modern-languages-and-literature)

The French minor is designed to provide the student with an advanced level of language proficiency augmented by a basic knowledge and familiarity with the cultures and literatures of France and the francophone world. In addition to the minor’s required French language classes or their equivalents, students are able to select 300- and 400-level courses in francophone culture, literature, and applied language. Students may also include individual study (French 491, 492) and three-credit internships (French 499) as part of their minor programs. Approved
French courses from study abroad programs may also be included among the electives of the French minor.

### Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>6</td>
</tr>
<tr>
<td>FREN 201A</td>
<td>Intermediate French I</td>
<td></td>
</tr>
<tr>
<td>FREN 202A</td>
<td>Intermediate French II</td>
<td></td>
</tr>
<tr>
<td>or FREN 205</td>
<td>Intensive Intermediate French</td>
<td></td>
</tr>
</tbody>
</table>

Additional French classes at the 300-level or above to equal six credits

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 311</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>FREN 312</td>
<td>Oral Communication and Phonetics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select any four additional French classes at or above the 300-level</td>
<td>12</td>
</tr>
</tbody>
</table>

Total Credits: 24

### Geographic Information Science Certificate

Department of Geography (https://cas.umw.edu/geography)

The Geography Department hosts an interdisciplinary certificate program in Geographic Information Science. Open to students in all majors and to non-degree seeking students, the program is designed to address the growing demand for GIS-trained personnel in business, government, education, health care, and numerous other settings. The field encompasses integrated hardware, software, and database systems that are capable of capturing, storing, analyzing, and displaying geographical information. Upon completion of the certificate, students may be eligible to apply for an additional professional certification in GIS administered by the GIS Certification Institute (GISCI).

### Certificate Requirements

#### Introductory Course

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>GISC 200</td>
<td>Introduction to GIS</td>
<td></td>
</tr>
<tr>
<td>GEOG 250</td>
<td>Introduction to Geographic Information Science and Cartography</td>
<td></td>
</tr>
<tr>
<td>EESC 205</td>
<td>GIS Applications in Environmental Science and Geology with Lab</td>
<td></td>
</tr>
</tbody>
</table>

#### Intermediate Course

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GISC 351</td>
<td>Spatial Analysis</td>
<td>4</td>
</tr>
<tr>
<td>or GEOG 351A</td>
<td>Spatial Analysis</td>
<td></td>
</tr>
<tr>
<td>GISC 450</td>
<td>GIS Programming</td>
<td>4</td>
</tr>
<tr>
<td>or GISC 482</td>
<td>Web GIS: Concepts and Applications</td>
<td></td>
</tr>
</tbody>
</table>

#### Programming or Web-GIS Course

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 340B</td>
<td>Remote Sensing and Air Photo Interpretation</td>
<td></td>
</tr>
<tr>
<td>GEOG 355</td>
<td>Mobile Geographic Information Systems and Global Positioning Systems</td>
<td></td>
</tr>
</tbody>
</table>

#### Elective

Select any three additional courses at or above the 300 level: 12

#### Capstone Experience

Select one of the following: 3

GISC 491 Directed Study in GIS
GISC 499 GIS Internship

Total Credits: 19

1 All directed studies and internships must be approved by the Department Chair.

All GISC course descriptions can be found in the Geographic Information Science section (https://catalog.umw.edu/undergraduate/course-descriptions/geographic-information-science).

Students with professional experience in GIS may have a maximum of one course or 4 credits waived with appropriate approval, but must take additional course credits to total 19 credit hours.

### Academic/Continuance Policies for the Certificate in GIS

A maximum of two approved courses (3-8 credits) may be transferred from another regionally-accredited institution to meet certificate program requirements. All classes for the certificate must be completed within a four-year period following matriculation into the certificate program.

Students must maintain an overall 2.5 grade-point average in certificate program courses, or have permission from the faculty advisor, prior to registering for the final directed study or internship course. Students may be required to meet with an advisor for an annual review of progress and a summary review at the completion of course work.

### German

Department of Modern Languages and Literatures (https://cas.umw.edu/modernlanguages)

The German minor is designed to provide the student with an advanced level of language proficiency augmented by a basic knowledge and familiarity with the culture and literature of Germany. In addition to the minor’s required German language courses or their equivalents, students are able to select 300- and 400-level courses in German culture, literature and applied language. Students may also include individual study (GERM 491 Individual Study, GERM 492 Individual Study) and three-credit internships (GERM 499 Internship) as part of their minor programs. Approved German courses from study abroad programs may also be included among the electives of the German minor.

### Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 201A</td>
<td>Intermediate German I</td>
<td>3</td>
</tr>
<tr>
<td>GERM 202A</td>
<td>Intermediate German II</td>
<td>3</td>
</tr>
<tr>
<td>GERM 302</td>
<td>Oral Communication</td>
<td>4</td>
</tr>
<tr>
<td>GERM 303</td>
<td>Advanced Composition</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Select any three additional courses at or above the 300 level</td>
<td>12</td>
</tr>
</tbody>
</table>

Total Credits: 26

1 If the student can demonstrate intermediate language competency through one of the accepted exams and, consequently, does not have to take GERM 201A Intermediate German I and GERM 202A Intermediate German II, he or she will replace those courses with additional courses at or above the 300 level.
Journalism

The interdisciplinary minor in journalism teaches students essential skills for working in a news environment, such as how to gather facts, evaluate them and disseminate them simply and clearly for print and online audiences, as well as how to critically examine the institution of mass media.

Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 200</td>
<td>News Journalism</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 300</td>
<td>Investigative Journalism</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 301</td>
<td>Magazine Journalism</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 380</td>
<td>Practicum in Journalism ¹</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

| ENGL 491 | Individual Study                         | 3       |
| ENGL 499 | Internship (with a focus in journalism) ²                 | 3       |

Select one of the following:

- ARTS 104 | Digital Approaches to Fine Art             | 3       |
- ARTS 219 | Digital Video Production                    | 3       |
- COMM 341 | Communication Research Methods             | 3       |
- COMM 357 | Social Media                                | 3       |
- CPSC 106 | Digital Storytelling                        | 3       |
- DGST 101 | Introduction to Digital Studies            | 3       |
- DGST 395 | Applied Digital Studies                     | 3       |
- ENGL 312 | Creative Writing: Nonfiction               | 3       |
- MUTC 100 | Technology for Musicians                    | 3       |
- PSCI 363 | Mass Media Politics                        | 3       |

Total Credits 18

¹ A 1-credit course taken three times.

² Other courses with relevant content may be substituted with approval by the Department of English, Linguistics, and Communication.

Latin American Studies

The Latin American Studies Minor is an interdisciplinary program that seeks to familiarize students with the history, geography, politics, languages and cultures of Latin America. The minor draws on courses in Anthropology, Geography, History, Political Science and Spanish with the goal of providing the student with several disciplinary approaches to the study of this complex region.

Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 361</td>
<td>History of Latin America I</td>
<td>3</td>
</tr>
</tbody>
</table>

or HIST 362 | History of Latin America II                    | 3       |

Select one upper-level Spanish course ¹ 3

Select 12 elective credits from at least two different disciplines, and can be chosen from approved courses in Anthropology, History, Geography, Political Science, and Spanish (see below) 12

Total Credits 18

¹ In consultation with the program coordinator, Geography study abroad courses to Latin America offered as a section of GEOG 360 Geographic Study Abroad may be used to meet the elective requirement for this minor.

Approved Courses

A course not on this list may be approved as one elective by the faculty advisor.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 350</td>
<td>Amazonian Societies</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 365</td>
<td>Environment and Development Narratives</td>
<td>3</td>
</tr>
</tbody>
</table>

| ANTH 450 | Ethnographic Field Methods in Guyana          | 3       |
| ENGL 329 | Literature and Nation-Building in the Americas | 3       |
| ENGL 330 | Hemispheric Fiction of the Global Age          | 3       |
| GEOG 301A | Geography of Latin America and the Caribbean  | 3       |
| GEOG 361 | Grassroots Development in Guatemala           | 3       |
| HIST 361 | History of Latin America I                    | 3       |
| HIST 362 | History of Latin America II                   | 3       |
| HIST 462 | Women in Latin America                        | 3       |
| PSCI 323 | Latin American Politics                       | 3       |
| PSCI 324 | U.S. - Latin American Relations               | 3       |
| PSCI 444 | Political Movements and Organizations in Latin America | 3 |
| SPAN 327A | Introduction to Latin American Literature     | 3       |
| SPAN 328A | Introduction to Latin American Literature     | 3       |
| SPAN 345 | Ideas on Nature in Latin American Literature  | 3       |
| SPAN 370 | Caribbean Culture and Literature in the 20th and 21st Centuries | 3 |
| SPAN 425 | The Boom of Latin American Literature         | 3       |
| SPAN 485 | Spanish American Seminar                      | 3       |

¹ Chosen from SPAN 305 Conversation and Grammar or higher.

Linguistics

Department of English and Linguistics (https://cas.umw.edu/elc)

Courses in linguistics offer the student an understanding of the fundamental structure and processes of language, and a focus on how we use language in different forms of communication from infant babbling to conversation and literature. Linguistics courses are a valuable complement to any major that deals with language, literature, the human mind and cognition, sociology, or education.

Minor Requirements

The minor program in linguistics is designed to suit those students with strong interest in pursuing a diversified and well-focused course of study in linguistics as a science, a social science, and a member of the humanities.
its place in the world.

promotes dialogue, understanding, and awareness of the Middle East and broad understanding about this dynamic region, in a manner that

privileges no single country, theme, or political position. The

Middle East (including the Arab World, Afghanistan, Iran, Turkey, and

program thus provides a foundation of knowledge and learning about the

natural sciences, will significantly enhance a student’s resume. The

Minor Requirements

The minor in mathematics is designed to give students the opportunity to complement their major program of study with a mathematical component, giving them more desirable credentials for future employment. Many areas of study have become increasingly computational in the last decade and adding a minor in mathematics to a degree in, for instance, business, economics, sociology, or one of the natural sciences, will significantly enhance a student’s resume. The minor combines four required courses at the 300 level or higher along with flexibility in the choice of the remaining courses so that students will have the freedom to best complement their chosen major course of study.

Minor Requirements

Code | Title | Credits
--- | --- | ---
LING 101B | Introduction to Linguistics | 3
LING 301A | Introduction to Psycholinguistics | 3
LING 302 | Introduction to Sociolinguistics and Anthropological Linguistics | 3
LING 309 | Introduction to Phonology | 3
or LING 311 | Introduction to Morphology | 3
Select any 400-level Seminar in Linguistics | 3
Select any other linguistics course offered through the Department of English, Linguistics, and Communication or alternate as approved by an ENLC linguistics advisor | 3

Total Credits 18

Mathematics

Department of Mathematics (https://cas.umw.edu/math)

The minor in mathematics is designed to give students the opportunity to complement their major program of study with a mathematical component, giving them more desirable credentials for future employment. Many areas of study have become increasingly computational in the last decade and adding a minor in mathematics to a degree in, for instance, business, economics, sociology, or one of the natural sciences, will significantly enhance a student’s resume. The minor combines four required courses at the 300 level or higher along with flexibility in the choice of the remaining courses so that students will have the freedom to best complement their chosen major course of study.

Minor Requirements

Code | Title | Credits
--- | --- | ---
MATH 122 | Calculus II | 4
Select 15 credits from MATH or STAT courses numbered 207 or higher 1 | 15

Total Credits 19

1 With the exception of internship credits (MATH 499 Internship or STAT 499 Internship). At least 12 credits must be earned from MATH or STAT courses numbered 300 and above. At most three credits of MATH 491B Directed Study or STAT 491 Directed Study (directed study) may be counted toward the mathematics minor.

In addition to the courses listed above, the minor includes:

- Two sequential semesters of instruction in any Middle Eastern language at Mary Washington or at a comparable institution for transfer credit (6 credits; to be approved by the program director).
- If a student places out of an approved language, they will need to complete 6 additional credits from the elective list.
- Four non-language courses in Middle Eastern Studies, chosen at the 300 or 400 level, or Religion 210, and from at least three different departments (12 credits; see course offerings below).
- A capstone experience in the form of a semester-long, relevant individual study project, study abroad program, or internship (3 credits; to be approved by the program coordinator).

Middle Eastern Studies

The minor in Middle Eastern Studies is an interdisciplinary program that seeks to familiarize students with the histories, geographies, religions, cultures, arts, languages, and politics of the region known as the Middle East. It draws on courses in Geography, History, Modern Languages and Literatures, Political Science, and Religion, fostering connections between different disciplinary approaches to the study of the region. The program thus provides a foundation of knowledge and learning about the Middle East (including the Arab World, Afghanistan, Iran, Turkey, and Israel), while privileging no single country, theme, or political position. Through this program, students will gain both specialized knowledge and broad understanding about this dynamic region, in a manner that promotes dialogue, understanding, and awareness of the Middle East and its place in the world.

Middle Eastern Course Offerings

The Middle Eastern Studies program is a multi-discipline program. Course Descriptions for these classes can be found under the individual disciplines.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARAB 351</td>
<td>Classical Arabic Literature in Translation</td>
<td>3</td>
</tr>
<tr>
<td>ARAB 352</td>
<td>Modern Arabic Literature in Translation</td>
<td>3</td>
</tr>
<tr>
<td>ARTH/CLAS 305</td>
<td>Egyptian and Near Eastern Art and Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 304A</td>
<td>Geography of the Middle East</td>
<td>3</td>
</tr>
<tr>
<td>HIST 337</td>
<td>Medieval Islamic Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 338</td>
<td>From Mongols to Ottomans</td>
<td>3</td>
</tr>
<tr>
<td>HIST 339</td>
<td>Modern Middle East History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 385</td>
<td>Arab-Israeli Conflict</td>
<td>3</td>
</tr>
<tr>
<td>HIST 387</td>
<td>Turkey from Empire to Republic</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 355</td>
<td>Politics of the Middle East and North Africa</td>
<td>3</td>
</tr>
<tr>
<td>RELG 210</td>
<td>Islam</td>
<td>3</td>
</tr>
<tr>
<td>RELG 341</td>
<td>Major Religious Thinkers</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional courses may count toward the minor, with the approval of the Middle Eastern Studies Program Director.

Museum Studies

Interdisciplinary in nature, the Museum Studies Minor provides students with the academic foundation and practical experience necessary for entrance into museum careers or related graduate studies. The curriculum explores the manner in which museums are organized and operate and how they care for and interpret their collections, serve their audiences, respond to new technologies, and grapple with complex legal and ethical issues unique to their disciplines. Combining theory with practice, the curriculum incorporates classroom study and directed research with practical experiences in the form of field trips, group projects, and internships.

The minor incorporates the disciplines of American studies, anthropology, art and art history, classics, historic preservation, and history, from which students may select their own concentration preference. The minor is open to students from any discipline in the arts and sciences, education, or business colleges at UMW. The University’s three museums support this minor with internship opportunities. The museum field is a rapidly expanding and vital part of society. The Institute of Museum and Library Services estimates there are about 35,000 museums currently operating
in the United States, generating a demand for highly trained museum professionals.

Students interested in enrolling in the minor must contact the chair of the Department of Classics, Philosophy, and Religion for additional details.

### Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 315A</td>
<td>Art Museum Studies</td>
<td>3</td>
</tr>
<tr>
<td>or AMST 306</td>
<td>Museums in the US</td>
<td></td>
</tr>
<tr>
<td>or HISP 200</td>
<td>Introduction to Museum Studies</td>
<td></td>
</tr>
<tr>
<td>ARTH 317</td>
<td>Laboratory in Museum Studies</td>
<td>3</td>
</tr>
<tr>
<td>or HISP 463</td>
<td>Laboratory in Museum Design and Interpretation</td>
<td></td>
</tr>
<tr>
<td>or HIST 425</td>
<td>Public History Seminar</td>
<td></td>
</tr>
</tbody>
</table>

Select 3 credits of the following:

- AMST 499 Internship
- ANTH 499 Internship
- ARTH 499 Internship
- CLAS 499 Internship
- HISP 499 Internship in Historic Preservation
- HIST 499B Internship

Select 9 elective credits of the following:

- ANTH 309 Anthropology of Art
- ANTH 341 Practices of Memory
- ANTH 342 Touring Cultures
- ARTH 317 Laboratory in Museum Studies
- ARTH 460 Seminar: Women and Western Art
- CLAS 380 Archaeology of the Greek and Roman World
- HISP 208 Introduction to Conservation
- HISP 303A Archives and Society
- HISP 313 Music Education
- HISP 320 Material Culture
- HISP 323 Heritage Tourism
- HISP 463 Laboratory in Museum Design and Interpretation
- HIST 425 Public History Seminar
- HIST 428 Digital History

Total Credits 18

### Elective Notes

- Special topics courses in the following disciplines may count as an elective, with the approval of the Museum Studies Committee:
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 350</td>
<td>Topics in American Studies</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 371</td>
<td>Special Topics in Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 470</td>
<td>Seminar: Special Studies in Art History Seminar: Special Studies in Art History</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 351</td>
<td>Special Studies in Classical Civilization</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 352</td>
<td>Special Studies in Classical Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HISP 471</td>
<td>Special Studies in Historic Preservation</td>
<td>3</td>
</tr>
<tr>
<td>HIST 300</td>
<td>Topics in History</td>
<td>3</td>
</tr>
</tbody>
</table>

- Three (3) additional credits of Internship from these disciplines may substitute an elective with approval of Museum Studies Committee: AMST, ANTH, ARTH, CLAS, HISP, or HIST.

- Three (3) credits of ANTH 481 Senior Thesis may substitute an elective with approval of Museum Studies Committee.

- AMST 303 Junior Special Topics Seminar may count as an elective course, with the approval of the Museum Studies Committee.

- Students interested in enrolling in the minor must contact the chair of the Classics, Philosophy, and Religion department for additional details.

### Music

Department of Music ([https://cas.umw.edu/music](https://cas.umw.edu/music))

The minor in music gives students a solid foundation in music theory, aural skills, and applied study, while allowing each student the flexibility to pursue their special interests—whether in performance, history, theory, music technology, or composition. Minors participate fully in music department ensembles. The music minor is especially suited to students whose academic load does not leave room for a second major.

### Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUTC 100</td>
<td>Technology for Musicians</td>
<td>3</td>
</tr>
<tr>
<td>MUTH 191</td>
<td>Diatonic Music Theory</td>
<td>3</td>
</tr>
<tr>
<td>MUTH 192</td>
<td>Diatonic Music Theory Skills</td>
<td>1</td>
</tr>
<tr>
<td>MUTH 291</td>
<td>Chromatic Music Theory</td>
<td>3</td>
</tr>
<tr>
<td>MUTH 292</td>
<td>Chromatic Music Theory Skills</td>
<td>1</td>
</tr>
</tbody>
</table>

Select four semesters of studio lessons and four semesters of ensembles

Select 9 credits of the following:

- MUHL 362 Beethoven
- MUHL 368 History of Jazz
- MUHL 375 Music Hist. I: Genre and Form
- MUHL 376 Music History II: Narratives and Ideologies
- MUHL 473 Special Studies in Music History and Literature
- MUPR 347A Conducting
- MUSC 473 Special Studies in Music
- MUSC 490 Music Seminar
- MUTC 320 Audio Recording
- MUTC 370 Electroacoustic Techniques
- MUTH 351 Fundamentals of Counterpoint and Form
- MUTH 369 Music Orchestration
- MUTH 391 Post-Tonal Music Theory
- MUTH 483 Scoring and Arranging
- THEA 335 Musical Theatre Performance
- THEA 336 Musical Theatre Performance

Total Credits 28

### Musical Theatre

Department of Theatre and Dance ([https://cas.umw.edu/theatre](https://cas.umw.edu/theatre))

Musical Theatre is an interdisciplinary minor that reflects the synthesis of music, dance, and theatre performance classes in a unique academic path that builds a specific and relevant body of knowledge and skill.
set for the performer. Students seeking the musical theatre minor strengthen technique by taking classes in these three areas and build their performance credentials by acting in musical productions at the University.

The Department of Theatre and Dance has a rich tradition of producing musicals. Recent productions include \(\text{RENT, Into the Woods, The 25th Annual Putnam County Spelling Bee, Bat Boy, Forever Plaid, Nunsense, elegies, Godspell, and A Funny Thing Happened on the Way to the Forum.}\)

While the minor can easily serve as a specialization for any actor pursuing a theatre major, the program’s flexibility allows students in all disciplines the opportunity to accomplish a musical theatre minor. Upon completion of the program, students will have a strong foundation in theory, skills, and practice that will allow them to continue training while pursuing a career in musical theatre.

Students interested in the minor in Musical Theatre should consult with the Chair of the Department of Theatre and Dance.

**Minor Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 218</td>
<td>Voice and Body Movement</td>
<td>4</td>
</tr>
<tr>
<td>THEA 321</td>
<td>Acting</td>
<td>4</td>
</tr>
<tr>
<td>THEA 335</td>
<td>Musical Theatre Performance</td>
<td>3</td>
</tr>
<tr>
<td>THEA 336</td>
<td>Musical Theatre Performance</td>
<td>3</td>
</tr>
<tr>
<td>Select 4 credits of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>DANC 121A</td>
<td>Beginning Ballet</td>
<td></td>
</tr>
<tr>
<td>DANC 122A</td>
<td>Beginning Ballet</td>
<td></td>
</tr>
<tr>
<td>DANC 141</td>
<td>Beginning Jazz</td>
<td></td>
</tr>
<tr>
<td>DANC 142</td>
<td>Beginning Jazz</td>
<td></td>
</tr>
<tr>
<td>DANC 301</td>
<td>Intermediate Ballet</td>
<td></td>
</tr>
<tr>
<td>DANC 302</td>
<td>Intermediate Ballet</td>
<td></td>
</tr>
<tr>
<td>DANC 305</td>
<td>Intermediate Jazz</td>
<td></td>
</tr>
<tr>
<td>DANC 306</td>
<td>Intermediate Jazz</td>
<td></td>
</tr>
</tbody>
</table>

**Neuroscience**

Department of Psychological Science (https://cas.umw.edu/psychology)

Neuroscience is the interdisciplinary study of the brain and the nervous system. A minor in Neuroscience would help both psychology and biology majors keep abreast of scientific progress in this discipline and help prepare them for emerging career opportunities. The Neuroscience minor would be an appropriate minor for anyone interested in a psychiatric health-care career including general medicine but especially psychiatry, pharmacology, psychiatric-mental health nursing, clinical psychology, or cognitive rehabilitation. This minor would also provide a strong undergraduate foundation for further training in a graduate program in neuroscience or psychobiology.

**Minor Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 274</td>
<td>Biological Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 305</td>
<td>Cognitive Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 394</td>
<td>Psychopharmacology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 340</td>
<td>Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Neurobiology</td>
<td>4</td>
</tr>
<tr>
<td>Total Credits</td>
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<td>17</td>
</tr>
</tbody>
</table>

Please note that only two of the Psychology courses can count toward the Psychology major requirements.

**Physics**

Department of Chemistry and Physics (https://cas.umw.edu/physics)

The minor in physics will meet the interest of students who wish to further their knowledge in a discipline beyond their major field of study. It will increase their options for employment and graduate study. It will bridge the overlap between physics knowledge and that of other disciplines.

**Minor Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 105</td>
<td>University Physics, w/lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 106</td>
<td>University Physics w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 211</td>
<td>Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 317</td>
<td>Methods of Mathematical Physics</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Thermodynamics and Statistical Mechanics</td>
<td></td>
</tr>
<tr>
<td>PHYS 210</td>
<td>Nuclear Physics</td>
<td></td>
</tr>
<tr>
<td>PHYS 283</td>
<td>Electronics w/Lab</td>
<td></td>
</tr>
<tr>
<td>PHYS 292</td>
<td>Optics w/Lab</td>
<td></td>
</tr>
<tr>
<td>Select two of the following:</td>
<td></td>
<td>7-8</td>
</tr>
<tr>
<td>PHYS 320</td>
<td>Classical Mechanics I w/Lab</td>
<td></td>
</tr>
<tr>
<td>PHYS 330</td>
<td>Electricity and Magnetism I w/Lab</td>
<td></td>
</tr>
<tr>
<td>PHYS 384</td>
<td>Advanced Physics Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHYS 410</td>
<td>Quantum Mechanics I w/Lab</td>
<td></td>
</tr>
<tr>
<td>PHYS 472</td>
<td>Solid State Physics</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>24-26</td>
</tr>
</tbody>
</table>

**Practical Ethics**

Department of Classics, Philosophy, and Religion (https://cas.umw.edu/clpr)

Ethical questions arise in every area of human activity and in every academic major and field. Understanding and using ethical theory and concepts to inform practical issues (and vice versa) is valuable for professional and personal development in a complex and diverse world.

The Practical Ethics Minor is designed to give students an understanding of the fundamental theories, concepts, and methodologies of ethics; to provide practice in identifying and analyzing contemporary moral issues; and to help students better comprehend how theory and practice inform one another. Students can study a number of ethical issues across many areas including the environment, medicine, law, business,
technologies, and everyday life. Topics include reproductive technologies, euthanasia, the treatment of animals, informed consent, hate speech, pornography, the relation between ethics and law, the value of species and ecosystems, and sustainability.

Students who do research or internships in ethics for course credit in any major or field of study can apply for this credit to be used also toward the Practical Ethics Minor. Examples might include courses not on the pre-approved list, URES, independent study, a senior thesis, or an internship.

Students are encouraged to seek service learning and guided research opportunities, both for credit or non-credit. The Practical Ethics Minor will be of particular value to students going on to graduate and professional studies in law, business, medicine, and the environment, and to those pursuing careers in government or other forms of service in the community.

**Minor Requirements**

Eighteen (18) credit hours to include a minimum of three courses from the philosophical ethics offerings (Group I), and three additional courses from the remainder of Group I and/or from Group II. At least three of the total courses must be at the 300-400 level.

Students who do research or other work for credit in ethics in any major or field of study – e.g., through URES, independent study, or internship – may use those credits for the minor with approval by the coordinator of the Practical Ethics Minor. Students are encouraged to contact the Center for Community Engagement for potential service learning opportunities.

### Group I

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 160</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 225</td>
<td>Practical Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 226</td>
<td>Medical Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 330</td>
<td>Environmental Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 335</td>
<td>Ethical Theory</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 430</td>
<td>Seminar: Ethics, Environment, &amp; Sustainability</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 9

### Group II

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 211</td>
<td>The Anthropology of “Race”</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 212</td>
<td>Anthropology of Gender</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 365</td>
<td>Environment and Development Narratives</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 428</td>
<td>Conservation Biology</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 464</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 302</td>
<td>Computer Ethics</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 303</td>
<td>Scientific Inquiry and Instructional Technology</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 387</td>
<td>Introduction to Special Education: Elementary</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 420D</td>
<td>The Professional Teacher and Critical Issues in Education</td>
<td>3</td>
</tr>
<tr>
<td>EESC 230</td>
<td>Global Environmental Problems</td>
<td>3</td>
</tr>
<tr>
<td>EESC 326</td>
<td>Pollution Prevention Planning</td>
<td>3</td>
</tr>
<tr>
<td>EESC 330</td>
<td>Environmental Regulations</td>
<td>3</td>
</tr>
<tr>
<td>EESC 355</td>
<td>Icehouse-Greenhouse Earth</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 331</td>
<td>Race and Place in America</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 332</td>
<td>Migration Politics in a Globalizing World</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 337</td>
<td>The Nature of Cities</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 338</td>
<td>Geopolitics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 339A</td>
<td>Geography and Development</td>
<td>3</td>
</tr>
<tr>
<td>HISP 208</td>
<td>Introduction to Conservation</td>
<td>3</td>
</tr>
<tr>
<td>HIST 322</td>
<td>US Environmental History</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 100</td>
<td>Individual and Community</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 210</td>
<td>Social and Political Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 220</td>
<td>Introduction to Feminism</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 320</td>
<td>Philosophy of Law I</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 325</td>
<td>Philosophy of Law II</td>
<td>3</td>
</tr>
<tr>
<td>RELG 231</td>
<td>Special Studies in Religion</td>
<td>3</td>
</tr>
<tr>
<td>RELG 298</td>
<td>Ethics of Religion and Violence</td>
<td>3</td>
</tr>
<tr>
<td>SOCG 315A</td>
<td>Gender and Society</td>
<td>3</td>
</tr>
<tr>
<td>SOCG 334</td>
<td>Medical Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOCG 335</td>
<td>Global Perspectives on Health and Illness</td>
<td>3</td>
</tr>
<tr>
<td>SOCG 354</td>
<td>Environmental Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 404</td>
<td>Global Inequality and Development</td>
<td>3</td>
</tr>
<tr>
<td>WGST 102</td>
<td>Perspectives in Sexuality</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 9-10

### Pre-Conservation in Fine Art Minor

The pre-conservation in fine art minor provides students with the necessary background coursework required for entrance into graduate programs in art conservation. The minor is open only to Art History, Studio Art and Chemistry majors. The major must have been declared before the student may declare this minor. For more information, contact Dr. Joe Dreiss, Department of Art and Art History.

### Art History Major – Pre-Conservation in Fine Art Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 12 credits from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 303</td>
<td>Methods of Art History</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 450</td>
<td>Topics in Art and Art History</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 281</td>
<td>Topics in Studio Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 381</td>
<td>Special Topics in Studio Art</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 28

### Chemistry Major – Pre-Conservation in Fine Art Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 115A</td>
<td>History of Western Art II</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 105</td>
<td>Design Principles</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 120</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 231A</td>
<td>Sculpture I</td>
<td>3</td>
</tr>
</tbody>
</table>
Security and Conflict Studies
Department of Political Science and International Affairs (https://cas.umw.edu/polisci)

The minor in Security and Conflict Studies is designed to provide students with a foundation in the contemporary study of security and conflict in the world today. Students will learn and apply analytical frameworks that facilitate the selection of optimal policies for solving security and conflict problems. Students will also be exposed to and utilize frameworks that aid in the comprehension of unfolding events in security and conflict. Finally, students will learn about specific issues in security and conflict. Coursework covers topics encompassing the historical (e.g., the origins of World War II) to the contemporary (cyber warfare) and the conventional (threats to territorial integrity) to the cutting edge (disease as a security issue). Students completing the minor will be well equipped for graduate level inquiry and/or relevant careers in government or the private sector.

Security and Conflict Studies

Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>PSCI 360</td>
<td>Theory and Practice of Revolution</td>
<td></td>
</tr>
<tr>
<td>PSCI 367</td>
<td>East Asia in World Affairs</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 485</td>
<td>Historical Research</td>
<td>3</td>
</tr>
<tr>
<td>INAF 491</td>
<td>Individual Study</td>
<td></td>
</tr>
<tr>
<td>PSCI 491</td>
<td>Individual Study in Political Science</td>
<td></td>
</tr>
</tbody>
</table>
| Three credit senior thesis on an aspect of security and conflict studies directed by a member of the core faculty. |  | 2

Total Credits 18

1 Other courses (e.g., "special topics" courses) in security and conflict studies may count as electives with the approval of the Minor Program Director. A relevant three-credit internship may count as an elective with the approval of the Minor Program Director.

2 Thesis topic must be approved by the Minor Program Director.

Social Justice
Department of Sociology and Anthropology (https://cas.umw.edu/sociologyanthropology)

Social justice emphasizes equity and fairness in all aspects of human experience. The Social Justice minor allows students to explore injustices such as cultural imperialism, exploitation, human rights abuses, marginalization, and structural and physical violence using a variety of disciplinary perspectives and tools.

Further, the Social Justice minor encourages students to recognize and work to ameliorate injustice in its myriad forms through a combination of classroom, research, and practical experiences in local and global communities.

Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 201</td>
<td>Introduction to American Studies</td>
<td>3</td>
</tr>
<tr>
<td>Select four electives, three of which must be upper-level, drawn from at least three disciplines</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>
| Select one of the following: | | 3
| SOCG 475 | Public Sociology                           |         |
| An approved three-credit internship | | |
| An approved three-credit course within a study abroad program | | |

Total Credits 18

Lower-Level Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 203</td>
<td>American Protest</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 211</td>
<td>The Anthropology of “Race”</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 212</td>
<td>Anthropology of Gender</td>
<td>3</td>
</tr>
<tr>
<td>GECO 101</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 210</td>
<td>Social and Political Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 220</td>
<td>Introduction to Feminism</td>
<td>3</td>
</tr>
<tr>
<td>WGST 101</td>
<td>Introduction to Women's Studies</td>
<td>3</td>
</tr>
</tbody>
</table>
Upper-Level Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 303</td>
<td>Junior Special Topics Seminar</td>
<td>3</td>
</tr>
<tr>
<td>ECON 351C</td>
<td>Poverty, Affluence, and Equality</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 328</td>
<td>New World Writing in the Colonial Period</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 329</td>
<td>Literature and Nation-Building in the Americas</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 352</td>
<td>African American Literature Pre-1900</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 360</td>
<td>Postcolonial Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 378</td>
<td>Science Fiction</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 331</td>
<td>Race and Place in America</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 332</td>
<td>Migration Politics in a Globalizing World</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 39A</td>
<td>Geography and Development</td>
<td>3</td>
</tr>
<tr>
<td>HIST 308</td>
<td>US Labor History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 315</td>
<td>U.S. Immigration History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 385</td>
<td>Arab-Israeli Conflict</td>
<td>3</td>
</tr>
<tr>
<td>SOCG 304</td>
<td>Social Stratification</td>
<td>3</td>
</tr>
<tr>
<td>SOCG 404</td>
<td>Global Inequality and Development</td>
<td>3</td>
</tr>
<tr>
<td>SOCG 421B</td>
<td>Racial and Ethnic Relations</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 345</td>
<td>Ideas on Nature in Latin American Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 365</td>
<td>Detective Fiction from Spain and Latin America</td>
<td>3</td>
</tr>
</tbody>
</table>

1. Additional courses from American Studies, Anthropology, English, History, Modern Languages and Literatures, Sociology, and other disciplines will count with the approval of the Program Coordinator.

Spanish

Department of Modern Languages and Literature (http://publications.umw.edu/undergraduatecatalog/colleges/cas/college-of-arts-and-sciences-faculty/modern-languages-and-literature)

The Spanish minor is designed to provide the student with an advanced level of language proficiency augmented by a basic knowledge and familiarity with the cultures and literatures of Spain and Latin America.

Minor Requirements

Twenty four to twenty seven credits including:

Select one of the following:

1. SPAN 202A Intermediate Spanish II
2. SPAN 205 Intensive Intermediate Spanish
3. SPAN 305 Conversation and Grammar
4. SPAN 306 Composition and Grammar
5. SPAN 312 Introduction to Literary Studies in Spanish

Select an additional 12 credits above SPAN 301

Total Credits: 24-27

Sports Management

The minor in Sports Management is designed to give students the opportunity to complement a major program of study with a concentration of courses in the sports management industry. These courses will provide them with desirable credentials which will enhance future employment opportunities. Students will be introduced to the basic principles of management, marketing, law, finance, and ethics in sport. Students will have an opportunity to apply the basic principles to practical situations in the sport management industry, such as, facility and event planning, budgeting, and facility operations for the professional, semi-professional and collegiate sports venues. Students completing this minor will be equipped for graduate level inquiry and/or relevant careers in the sport management industry.

Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYD 130</td>
<td>Introduction to Sports Management 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYD 330</td>
<td>Events and Facility Management 1</td>
<td>3</td>
</tr>
<tr>
<td>IDIS 230</td>
<td>Sports Law</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 301</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>PHYD 499</td>
<td>Sports Management Internship 1</td>
<td>3</td>
</tr>
</tbody>
</table>

One of the following electives: 3

1. COMM 357 Social Media
2. COMM 370 Topics in Speech Communication
3. IDIS 301 Sport Psychology
4. MGMT 301 Principles of Management

Total Credits: 18

1. Note: With the exception of PHYD 130 Introduction to Sports Management, PHYD 330 Events and Facility Management, and PHYD 499 Sports Management Internship, all other Physical Education (PHYD) courses are graded satisfactory/unsatisfactory (SA or UN grades) and may not be taken for a letter (A-F) grade. PHYD courses taken as SA/UN do not ever count toward a student’s grade point average. PHYD 130 Introduction to Sports Management, PHYD 330 Events and Facility Management, and PHYD 499 Sports Management Internship letter (A-F) grades do count toward a student’s grade point average.

2. Approved topics of this course may count toward the minor.

Urban Studies

Urban Studies is an interdisciplinary approach to understanding cities, including their historical, social, cultural, economic and political contexts and processes. It includes both theoretical or descriptive approaches to the city and urban life and applied or practical approaches to urban planning, historic preservation and urban policy making. Urban studies also addresses urban problems including housing, education, suburbanization, segregation, gentrification, crime, public space, and others. Urban studies recognizes that cities are distinctive places to live and work and that urban life produces particular opportunities and issues.

The Urban Studies Minor allows University of Mary Washington students to explore the particular dynamics of cities from an interdisciplinary framework. It emphasizes breadth. Students interested in obtaining a
minor in Urban Studies should contact the program director or one of the affiliated faculty.

**Minor Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HISP 209</td>
<td>Planning History and Practice</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 231</td>
<td>Introduction to Planning</td>
<td></td>
</tr>
<tr>
<td>GEOG 237</td>
<td>Cities</td>
<td></td>
</tr>
</tbody>
</table>

Select four electives in two different disciplines, with at least three at the 300-level or beyond

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDIS 400</td>
<td>Urban Research Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 18

1 One 3-credit Individual Study course may be substituted for one of the elective courses with the approval of the instructor and the Director of the minor program. One 3-credit internship can be substituted for one of the elective courses with the approval of a faculty sponsor and the Director of the minor program. One 3-credit study abroad class can be substituted for one of the elective courses with the approval of a faculty sponsor and the Director of the minor program.

**Electives for Urban Studies Minor**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 203</td>
<td>American Protest</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 211</td>
<td>The Anthropology of “Race”</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 309</td>
<td>Anthropology of Art</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 344</td>
<td>Urban Theory &amp; Ethnography</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 311</td>
<td>Roman Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 355</td>
<td>Modern Architecture</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 103</td>
<td>Ideas and Culture: Greek Civilization</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 105</td>
<td>Ideas and Culture: Roman Civilization</td>
<td>3</td>
</tr>
<tr>
<td>CLAS 390</td>
<td>Ancient City</td>
<td>3</td>
</tr>
<tr>
<td>ECON 351C</td>
<td>Poverty, Affluence, and Equality</td>
<td>3</td>
</tr>
<tr>
<td>ECON 352</td>
<td>Labor Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 354A</td>
<td>Urban and Regional Economics</td>
<td>3</td>
</tr>
<tr>
<td>EESC 326</td>
<td>Pollution Prevention Planning</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 231</td>
<td>Introduction to Planning</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 236</td>
<td>Globalization and Local Development</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 237</td>
<td>Cities</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 331</td>
<td>Race and Place in America</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 337</td>
<td>The Nature of Cities</td>
<td>3</td>
</tr>
<tr>
<td>HISP 209</td>
<td>Planning History and Practice</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 365</td>
<td>Selected sections may count with approval of Program Coordinator.</td>
<td>3</td>
</tr>
<tr>
<td>HISP 324</td>
<td>Urban Design</td>
<td>3</td>
</tr>
<tr>
<td>HISP 405C</td>
<td>Advanced Methods in Historic Preservation</td>
<td>3</td>
</tr>
<tr>
<td>HISP 469</td>
<td>Laboratory in Preservation Planning</td>
<td>3</td>
</tr>
<tr>
<td>HISP 470</td>
<td>Historic Preservation Abroad</td>
<td>3</td>
</tr>
<tr>
<td>HIST 308</td>
<td>US Labor History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 310</td>
<td>US Urban History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 320</td>
<td>The Gilded Age</td>
<td>3</td>
</tr>
<tr>
<td>HIST 321</td>
<td>The Progressive Era</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional classes from American Studies, Anthropology, Geography, Historic Preservation, History, Sociology, and other disciplines will count with the approval of the Program Coordinator.
SPECIAL PROGRAMS

This section of the catalog offers details about the Honors Program, community engaged courses, UMW’s Army ROTC (affiliated with George Mason University), and several accelerated undergraduate/graduate degree programs.

- Community Engaged Courses (https://catalog.umw.edu/undergraduate/special-programs/community-engaged-courses)
- Honors Program (p. 107)
- Military Science (p. 108)
- Study Away Program with Smithsonian-GMU School of Conservation (https://nextcatalog.umw.edu/undergraduate/special-programs/smithsonian-gmu-conservation)
- Undergraduate-Graduate Program in Geography & Geospatial Analysis (p. 108)
- Accelerated Degree Program with GMU Law School (p. 109)
- Accelerated Degree Program with Volgenau School of Engineering at GMU (https://nextcatalog.umw.edu/undergraduate/special-programs/accelerated-degree-gmu-engineering)
- Accelerated Degree Program with School of Pharmacy at Shenandoah University (p. 110)

Honors Program

The Honors Program is a university-wide undergraduate program designed to offer highly motivated and advanced students the opportunity to enhance their intellectual and personal growth within a community of learners by engaging them in rigorous honors-designated coursework, interdisciplinary seminars, professional development opportunities, extended research and creative projects, and community service.

The program will offer courses that are small in size and that develop the intellectual potential of students through activities that:

- develop communication skills
- incorporate interdisciplinary focus
- prompt analysis of their own and others’ assumptions
- enhance research skills
- develop critical reading, writing, speaking, problem solving, and thinking skills that incorporate information literacy, and an appreciation of audience
- include greater breadth than non-Honors course sections
- incorporate enrichment opportunities for students and faculty
- include innovative pedagogy and utilize flexible approaches that accommodate different learning styles

Most students entering the Honors Program will do so upon admission to the university (Track A). Students are admitted to the Honors Program based on screenings by the admissions office including consideration of high school GPA, application essay, and rigor of high school curriculum. See additional details about admission to the Honors Program in the section of the Catalog explaining about Admission to Special Programs. (p. 7)

Space permitting, others may apply for acceptance after matriculation, during their first year (Track B). Note that this application process is competitive and applicants must have a 3.2 overall UMW GPA or higher; an application with essay; a record of community service, campus involvement, or leadership; and one letter of recommendation from UMW faculty.

Completion of the Honors Program requirements will be recognized at graduation and indicated on the transcript as “University Honors.” Note that departmental Honors will continue to be distinct from the Honors Program. Honors in each discipline will still be administered by academic departments based on requirements they determine (see individual departments for details).

Student Learning Outcomes for the University Honors Program

Upon the completion of the Honors Program at Mary Washington, in addition to earning the appropriate credits for their degrees, students will be able to:

- evaluate carefully the relevance of disciplinary contexts when presenting a position using a methodology specific to the discipline of study
- apply interdisciplinary approaches to research demonstrating multiple disciplinary contexts to articulate the value of such study
- actively pursue independent educational experiences inside and outside of the classroom.
- articulate an appreciation of ethical behavior and the values of good citizenship and service.

Honors Program Requirements

**Track A: Incoming First-year Students**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSEM 100</td>
<td>First-Year Seminar (HN-designated)</td>
<td>3</td>
</tr>
<tr>
<td>HN-designated coursework (not including FSEM HN)</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>HONR 201</td>
<td>Honors Service Learning</td>
<td>1</td>
</tr>
<tr>
<td>Honors Capstone Project ¹</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

¹ Course approved by Honors Program Committee.

Additionally each student will be required to:

- complete the HONR 005 Honors Capstone Preparation - at least one semester prior to the capstone project,
- complete the Honors Program leadership requirement HONR 002 Honors Leadership,
- maintain an Honors portfolio HONR 004 Honors Portfolio,
- complete one co-curricular event summary per semester at UMW HONR 003 Honors-Co-curricular Events, and
- maintain the required GPA.

**Track B: Current UMW Students or eligible Transfer Students**

*FSEM requirement waived for Track B*

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HN-designated coursework ¹</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>HONR 201</td>
<td>Honors Service Learning</td>
<td>1</td>
</tr>
<tr>
<td>Honors Capstone Project ²</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

¹ Course approved by Honors Program Committee.

² Course approved by Honors Program Committee.
Agreement with The George Washington University Medical School

This agreement allows UMW Honors Scholars to apply for conditional acceptance to the medical school during the second year of college. Individuals with competitive SAT or ACT scores, who are in good standing in the UMW Honors Program, have at least a 3.5 UMW GPA, have completed at least two semesters of chemistry and two semesters of biology or physics, as well as a social/behavioral science course with no science grade below a B, and have participated in some patient related health care are invited to apply in March of their sophomore year at UMW. Early acceptance candidates must pursue a major or minor in a humanities area and complete all required pre-medical coursework.

Note: the application process is competitive and not all students who meet the criteria will be selected. All decisions of The George Washington University School of Medicine and Health Sciences are final and there is no appeal process.

Military Science

The University of Mary Washington is an affiliate of the George Mason University Army Reserve Officers’ Training Corps (ROTC) Patriot Battalion (http://arotc.gmu.edu). This is an elective program that emphasizes leadership and management skills, and provides the opportunity for qualified students to earn a commission as an officer in the U.S. Army while pursuing a baccalaureate degree. Enrollment in military science (MSCI) courses is open to all students, and no military service commitment is incurred by enrolling in lower level, 100 and 200 level, courses. Credit earned in military science courses count towards the degree as elective credits.

Enrollment in the ROTC advanced course requires students to enter into a contract to serve as a commissioned officer in the active or reserve component of the U.S. Army upon graduation. Because the ROTC program at the University of Mary Washington is affiliated with the program housed at George Mason University, some training will take place at the George Mason facilities. For more information about the ROTC program and scholarship opportunities, contact:

ARMY ROTC George Mason University
4400 University Drive MSN 2F9 (Recreational and Athletic Complex, 2nd Floor)
Fairfax, VA 22030-4444
Office Phone – (703) 993-2706
Office Fax Number – (703) 993-2708

Or email arotc@gmu.edu.

Additional information can also be found online at George Mason University’s ROTC site (http://arotc.gmu.edu).

The ROTC curriculum is organized into two successive course sequences. The basic course curriculum consists of the four-course sequence and is usually taken during a student’s first and second year at the University.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI 101</td>
<td>Leadership Skills I : Leadership and Personal Development</td>
<td>1</td>
</tr>
<tr>
<td>MSCI 102</td>
<td>Leadership Skills II: Introduction to Tactical Leadership</td>
<td>1</td>
</tr>
<tr>
<td>MSCI 201</td>
<td>Leadership Skills III: Foundations of Leadership</td>
<td>1</td>
</tr>
<tr>
<td>MSCI 202</td>
<td>Leadership Skills IV: Foundations of Tactical Leadership</td>
<td>1</td>
</tr>
</tbody>
</table>

This series of courses introduce students to the fundamentals of leadership and prepares them for success in the ROTC advanced course. The advanced course curriculum consists of the four-course sequence:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI 301</td>
<td>Applied Leadership I: Adaptive Team Leadership</td>
<td>1</td>
</tr>
<tr>
<td>MSCI 302</td>
<td>Applied Leadership II: Leadership in Changing Environments</td>
<td>1</td>
</tr>
<tr>
<td>MSCI 401</td>
<td>Leadership and Management: Developing Adaptive Leaders</td>
<td>1</td>
</tr>
<tr>
<td>MSCI 402</td>
<td>Leadership and Ethics: Leadership in a Complex World</td>
<td>1</td>
</tr>
</tbody>
</table>

Undergraduate-Graduate Program in Geography & Geospatial Analysis

Students have the option of entering the five-year program for a Master's of Science in Geospatial Analysis Accelerated Degree Program. Students will apply in the second semester of their junior year. Accepted students will complete 2 graduate courses in their senior year. On completion of their undergraduate degree, students may apply for formal admission to the graduate program providing the forms and documentation listed below. The two MSGA courses count toward the graduate program if formal admission to the MSGA program is received within five years of the award of the undergraduate degree.

Undergraduate Admission

Undergraduate students should apply for the MSGA Accelerated Degree Program in the second semester of their junior year (upon completion of 70 credits). Applications will be due on the Monday of the 6th week of that semester. Applicants should have a cumulative GPA of 2.7 or higher based on a minimum of 12 UMW credits, have completed at least two GIS courses each with a grade of B or higher, and supply a letter of recommendation from a UMW faculty member who teaches GIS. Once admitted, students will take MSGA 510 Spatial Thinking w/lab in the fall semester and MSGA 520 GeoDesign And Geovisualization in the spring semester. These courses are not sequenced; 520 may be taken before 510.

On completion of the undergraduate degree, students may apply for formal admission to the graduate program, providing the forms and documents listed below. The two MSGA courses count toward the
Continuance Requirements (Undergraduate)

To continue in the program, students must achieve a grade of B (3.0) or better in each of the graduate courses and must maintain a cumulative GPA higher than 2.7.

Graduate Admission to the MSGA Program

- Earned bachelor’s degree from regionally accredited college or university;
- Successful applicants typically have a GPA of 3.0 or higher from undergraduate course work. In addition, students are required to have successfully earned credits in at least two college-level GIS classes; in lieu of completed coursework, students can gain admission by providing documented evidence demonstrating they have worked with a GIS, such as ArcGIS, Grass, MapInfo, IDRISI, Intergraph – or the equivalent software – on a range of projects indicating competence in the topics typically covered in upper-level undergraduate GIS. Students may be considered for provisional admission without having previous GIS course work or related work experience under the agreement that if they are admitted they must take GISC 200 Introduction to GIS and GISC 351 Spatial Analysis or GEOG 351A Spatial Analysis prior to beginning their graduate-level courses.
- Non-native English speakers will provide evidence of proficiency in English

Required forms and documents:

- Completed application for admissions. The application form is found online.
- Official transcripts for all undergraduate and graduate course work.
- A statement of purpose outlining career goals.
- Resume, stating relevant work experience; applicants without completed course work in GIS need to provide documented evidence demonstrating their proficiency with GIS.
- Two letters of recommendation (on the application forms provided). One should be from a person who can attest to the applicant’s GIS or geospatial experience, if applicable.
- Demonstration of English competency if English is not your native language. Any of the following is acceptable: Test of English as a Foreign Language (TOEFL) – a minimum score of 88 on the internet based test or a 570 paper-based score. TOEFL website: toefl.org; International English Language Test system (IELTS) a minimum score of 6.5 on the academic exam. See ELTS website; Certification of completion of the ELS Language Centers (ELS) Intensive English Program by completing Level 112. See ELS website;
- If applicable, the International Student Application Supplement found online should be completed.

Following an initial vetting of applications by University Admissions, an interdisciplinary committee consisting of Full-time UMW faculty familiar with the geospatial field will evaluate submitted documents. This committee will determine if students without undergraduate course work in GIS have sufficient knowledge to succeed in the program.

Students are admitted for the fall or spring semester. Application Due Dates:

- Fall Admission: June 1
- Spring Admission: October 1

Requirements for Continuance in the MSGA Program

All matriculated MSGA students are expected to maintain satisfactory academic progress in their graduate courses toward completion of the degree program. A cumulative GPA of 3.0 (B) or higher is required for graduation from the program.

Students must maintain a minimum cumulative GPA of 3.0 (B) in each semester to remain in good academic standing, with no more than one grade lower than this benchmark per semester. A student who earns a total of three Cs (including C+, C, or C-) or one F in a graduate course in the program (other than the Capstone) will automatically be suspended from the program.

To earn the MSGA, students must earn a minimum grade of B for all capstone credits taken (MSGA 595 Capstone Project). Students who fail to achieve this grade on the last three credits of the capstone will be offered the chance to repeat these credits one time. A student who again earns a B- or below in capstone credits will automatically be dismissed from the program.

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSGA 510</td>
<td>Spatial Thinking w/lab</td>
<td>4</td>
</tr>
<tr>
<td>MSGA 520</td>
<td>GeoDesign And Geovisualization</td>
<td>4</td>
</tr>
<tr>
<td>MSGA 540</td>
<td>Modeling and Spatial Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MSGA 550</td>
<td>Remote Sensing and Digital Imagery</td>
<td>4</td>
</tr>
<tr>
<td>MSGA 570</td>
<td>Geospatial Intelligence w/lab</td>
<td>4</td>
</tr>
<tr>
<td>MSGA 580</td>
<td>Web GIS and Programming</td>
<td>4</td>
</tr>
<tr>
<td>MSGA 595</td>
<td>Capstone Project</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Credits 30

1 Students with expertise and the appropriate background in either remote sensing (MSGA 550 Remote Sensing and Digital Imagery) or geospatial data management (MSGA 580 Web GIS and Programming) may petition the Program Director to substitute on of these courses with an independent study: MSGA 591 Independent Study.

2 The last 3 credit house must be taken in the last semester of the program.

Accelerated Degree Program with GMU Law School

The University of Mary Washington and the George Mason University Antonin Scalia Law School have an accelerated dual degree arrangement allowing students to earn a baccalaureate degree through UMW and the Juris Doctor from George Mason University in six years rather than the usual seven. Students apply in the junior year and admission to Mason’s Scalia Law School is not guaranteed. The Scalia Law School shall make a holistic review of UMW’s applicants. In order to participate, the UMW student must be able to complete all general education and
major field requirements for a four year baccalaureate degree by the end of the spring semester of their junior year of undergraduate study (or equivalent) and take the LSAT no later than December of the junior undergraduate year. Students admitted shall receive the baccalaureate degree from UMW upon successful completion of the first year of the program and in accordance with UMW’s normal graduation procedures. Students shall receive the Juris Doctor (JD) from Mason’s Scalia Law School upon completion of those requirements, in accordance with normal law school graduation procedures. For additional information and details about the application process, contact the Dean of the College of Arts and Sciences.

Accelerated Degree Program with Volgenau School of Engineering at GMU

Under an agreement with George Mason University, UMW students have an accelerated pathway to a Master of Science degree from the Volgenau School of Engineering (VSE) at George Mason University. Students express interest through an interest form available from the Assistant Dean of Arts and Sciences at UMW. Approved students enroll as non-degree students in VSE during their senior year at UMW and may take up to 9-credits of graduate level coursework in one of several programs including Applied Information Technology, Computer Science, Data Analytics Engineering, Operations Research, Statistics, and Systems Engineering. Upon completion of their senior year at UMW, students in the program can use their earned credits from GMU as electives at UMW, and can then matriculate to GMU's Volgenau School of Engineering having already completed nine credits toward a Master of Science degree program. In most cases, students will be able to earn their MS in only one year after graduation from UMW. Additional details about the application process can be obtained from the Assistant Dean of the College of Arts and Sciences.

Accelerated Degree Program with School of Pharmacy at Shenandoah University

The University of Mary Washington and Shenandoah University have established an agreement enabling students to achieve the Doctor of Pharmacy (PharmD) degree from the Bernard J. Dunn School of Pharmacy at Shenandoah in seven years rather than the usual eight. UMW students with 84 credits or more after completion of their junior year and who have been accepted to the BJD Pharmacy School at Shenandoah to pursue a PharmD degree may start in that program after the completion of their junior year at UMW. The first year of the PharmD program credits would transfer back to UMW to complete the student’s undergraduate degree. The student would have to earn a grade of C or better in all courses for them to transfer back. The first year of the PharmD requires 36.5 credits; assuming that a student starts this program with at least 84 UMW credits already earned, the student would need to have 36 credits eligible to transfer back to UMW in order to complete the UMW undergraduate degree. If the student started at BJD with more than 84 UMW credits earned, the total BJD credits eligible for transfer (those with grades of C or higher) would need to total to at least 120 when combined with UMW credits earned outside of those transferred from BJD. All PharmD credits will transfer back to UMW as general elective credits (these courses would not be used to meet major or general education requirements), unless specifically agreed otherwise in writing by UMW. Students who successfully complete the first year of the PharmD program at BJD (with a minimum of a 2.0 gpa) may use 8 credits of the BJD first year curriculum as elective credits toward completion of a B.S. in Biology degree at UMW (with the remaining credits transferred to count as general elective credits). All students would have to have at least 120 credits total between UMW credits earned prior to the first year of the PharmD program and Shenandoah transferred courses and would have to satisfy the UMW undergraduate degree requirements listed on Attachment B in order to receive the UMW undergraduate degree. For additional details about this agreement, contact the Dean of the College of Arts and Sciences.
COURSE DESCRIPTIONS

A
• Accounting (ACCT) (https://catalog.umw.edu/undergraduate/course-descriptions/acct)
• American Studies (AMST) (p. 112)
• Anthropology (ANTH) (p. 112)
• Arabic (ARAB) (p. 114)
• Art History (ARTH) (p. 114)

B
• Bachelor of Liberal Studies (BLST) (p. 116)
• Bachelor of Profess’l Studies (BPST) (p. 116)
• Biology (BIOL) (p. 117)
• Business Administration (BUAD) (p. 119)
• Business Law (BLAW) (p. 120)

C
• Chemistry (CHEM) (p. 120)
• Chinese (CHIN) (p. 121)
• Classics (CLAS) (p. 122)
• Classics, Phil & Religion (CPRD) (p. 122)
• Communication (COMM) (p. 123)
• Computer Information Systems (CIST) (p. 124)
• Computer Science (CPSC) (p. 124)
• Cybersecurity (CYBR) (p. 126)

D
• Dance (DANC) (p. 126)
• Data Science (DATA) (p. 127)
• Decision Sciences (DSCI) (p. 128)
• Digital Studies (DGST) (p. 128)

E
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Undergraduate courses are numbered from 100-499. Courses numbered 100 through 199 are ordinarily elementary or introductory. Courses numbered 200 through 499 may assume prior study or competence in the subject, acquired in secondary school or in college. Courses numbered 300 through 498 assume either previous course work or special competence in the field. Courses numbered 499 are internships. Individual study courses offer learning opportunities in areas or subjects not covered by regular courses.

Courses numbered 500 through 599 are for graduate students. Courses numbered in the 800s and 900s are non-degree professional development courses at the pre- or post-baccalaureate level. These courses cannot be used toward the completion of degree programs at the University. Courses numbered below 100 do not carry credit that may be applied to a degree.

Prerequisite courses must be taken in the appropriate sequence to count toward graduation. A prerequisite for a course is the required preparation for that course. If course 101 is specified as a prerequisite for course 102, then course 101 must be successfully completed (passed) before the student takes course 102. Course prerequisites are listed in the course descriptions published in this Catalog, and are also available in the online Schedule of Courses. Students are responsible for checking their courses before registering.

As a general rule, no course may be taken for credit that is a prerequisite for, or introductory to, a course already completed successfully. In rare instances, and in the event of compelling reasons, a student may need to take a course out of sequence (e.g., take a course that is a higher-numbered course before or concurrently taking the lower-numbered, prerequisite course). Students seeking permission to take a course out of sequence MUST obtain the permission of the course instructor, the department chair, and approval from the Office of Academic and Career Services prior to registration. Permission is noted on the Office of Academic and Career Services General Request Form available in Lee Hall, Room 206. For additional details, contact the Office of Academic and Career Services.

A corequisite is a course to be taken at the same time as another specified course, or courses, as designated by the department. A corequisite course may also be completed before taking the course or courses with which it is paired. If one course in the co-requisite pair is completed before the other, the student should call the Office of the Registrar during the registration time to be registered in the remaining corequisite course.

**American Studies (AMST)**

**AMST 201 - Introduction to American Studies (3 Credits)**
This course is an introduction to American Studies and the types of research and methodologies that are used in this interdisciplinary field.

**AMST 202 - Sophomore Special Topics Seminar Sophomore Special Topics Seminar (3 Credits)**
This sophomore/junior readings seminar will be offered on a variety of topics based on the particular interests and experience of the instructors.

**AMST 203 - American Protest (3 Credits)**
This seminar explores how social movements have demanded access to political, cultural, and economic institutions in order to generate change and promote social justice.

**AMST 204 - American Foodways (3 Credits)**
This seminar looks at the ways in which foodways relates American society and culture, and develops many of the skills that are central to interdisciplinarity.

**AMST 303 - Junior Special Topics Seminar (3 Credits)**
This junior readings and research seminar will be offered on a variety of topics based on the particular interests and experiences of the instructors. Student research, which will culminate into a 20-page paper, is central to this course.

**AMST 305 - American Gender and Sexuality (3 Credits)**
This seminar explores the ways in which various disciplines explore the behaviors and attitudes tied to gender and sexuality in the United States.

**AMST 306 - Museums in the US (3 Credits)**
Introduction to museums in the United States with a focus on how past practices are connected to ongoing debates, dilemmas, and opportunities in the field.

**AMST 333 - Issues in Human Rights (3 Credits)**
Analysis and discussion of changing concepts of human rights and the movements that have defended and broadened them.

**AMST 350 - Topics in American Studies (3 Credits)**
Explores specific topics in American Studies, e.g., “The Impact of Darwin on American Thought”; offered occasionally depending on faculty resources and student interest; may be used to meet part of the related field requirements.

**AMST 385 - American Protest (3 Credits)**
A significant research project pursued under the supervision of a faculty mentor.

**AMST 485 - Senior Thesis (3 Credits)**
Directed individual research on problems in American Studies, as approved by the Director.

**AMST 491 - Individual Study (3 Credits)**
Supervised off-campus experience, developed in consultation with the Director. No credit in the major.

**Anthropology (ANTH)**

**ANTH 101 - Introduction to Cultural and Social Anthropology (3 Credits)**
Introduces the student to various societies around the world in comparison to western societies and in the context of contemporary global trends. It focuses on the sources of human diversity, and addresses fundamental questions about what it means to be human.
ANTH 211 - The Anthropology of “Race” (3 Credits)
Explores why current vernacular understandings of ‘race’ and scientific understandings of ‘race’ diverge so dramatically. Looks at the long history of scientific (mis)understandings of human biological diversity. Interrogates why racialist thinking has been a fundamental component of a western cultural world view.

ANTH 212 - Anthropology of Gender (3 Credits)
The anthropological approach to gender: cultural definition and social status of female and male; other genders; theories of gender definition and gender hierarchy.

ANTH 271 - Special Studies in Ethnography (3 Credits)
Prerequisites: ANTH 101 or 298 and 299. Concentrates on one culture area not otherwise covered in the curriculum, and related theoretical concerns. Choice of area reflects both student and instructor interests.

ANTH 298 - Ethnography (3 Credits)

ANTH 299 - Arguments in Anthropology (3 Credits)
Co-requisite: Anthropology 298. Examines the way the discipline of anthropology changes as it enters into arguments about what it means to be human and about what are the purposes and goals of the discipline. Explores how ethnographic data are used, evaluated, and contested in these arguments. An introduction to the theories of cultural anthropology.

ANTH 309 - Anthropology of Art (3 Credits)
The anthropological exploration of art from a comparative perspective. Combines studies of art in non-western societies with a studies of how art is produced and consumed in the West. Explores the rise of modern museums and collecting nonwestern art; aesthetics; how art produces meaning and affect.

ANTH 316 - Political Anthropology (3 Credits)
A survey of the anthropological contribution to a comparative political science. Focuses on politics and political structures in non-state societies as well as in nation-states. Includes an overview of anthropological studies of nationalism, colonialism, post-colonialism, globalization, and political ritual and protest movements.

ANTH 317 - World Economies (3 Credits)
Comparative study of the cultural logic and moral principles of the major economic systems of the world. Includes barter, trade, and gift exchange, early and late capitalism. Special attention to global expansion of capitalism into nonwestern societies.

ANTH 318 - Anthropology of Religion (3 Credits)
Anthropological study of religious ideas and practices of selected non-Western peoples: sacred and profane, spiritual law, morality; sacrifice, shamanism, divination, and prayer; millenarianism and conservatism.

ANTH 321 - Anthropology of Food (3 Credits)
A cross-cultural study of the production and consumption of food; cultural attitudes and meanings of food, food-sharing, and eating: body image and ideal body types; food in a global context. Theoretical concerns include the definition of food and the edible, the conceptual relationship between food and health, and the raw and the cooked. Satisfies the "field-research intensive" requirement for the anthropology major.

ANTH 322 - Symbolic Anthropology (3 Credits)
The interpretation of symbols as found in rituals, myths, and everyday life in both western and non-western cultures. Relationship between symbols and action; nature of culture change and persistent cultural structures.

ANTH 322A - Symbolic Anthropology (3 Credits)
Prerequisite: ANTH 101 or 298 and 299 or permission of the instructor. The interpretation of symbols as found in rituals, myths, and everyday life in both western and non-western cultures.

ANTH 333 - Issues in Human Rights (3 Credits)
Analysis and discussion of changing concepts of human rights and the movements that have defended and broadened them.

ANTH 341 - Practices of Memory (3 Credits)
Cultural memory plays a vital role in group identity and in the way present events are understood. This course examines how societies remember and forget through shared narratives, rituals, memorials, museums, films, and other media.

ANTH 342 - Touring Cultures (3 Credits)
In this course we examine cultures of tourism, including interactions between tourists, local residents, and institutions, and the ways people, places, and historic periods are produced and packaged for tourist consumption.

ANTH 343 - Culture and Identity in Europe (3 Credits)
Prerequisites: ANTH 101 or 298 and 299 or permission of the instructor. The economic and political intergration of Europe has been justified by the idea of a common European cultural heritage or "civilization." In this course we will read and discuss a range of ethnographic texts to consider changing cultural forms in Europe as well as identities focused on class, gender, ethnicity, and race. We will also examine attempts to define the boundaries of Europe, European citizenship, and European culture - attempts made all the more significant and complex by immigration and cultural diversity as well as the ambiguity of "Europe" and "European."

ANTH 344 - Urban Theory & Ethnography (3 Credits)
Cities are now more than ever the primary setting of human habitation, social life and economic and cultural production. This course seeks to expand students' fluency in anthropological and other social-scientific theories of urban life, as well as their familiarity with the historical and social dynamics urbanization and suburbanization. Students will be asked to apply and extend theoretical insights by conducting ethnographic study of their own design.

ANTH 345 - Applied Anthropology (3 Credits)
This course highlights examples of how anthropology is applied outside of academia, ranging from business management and marketing to public policy and conflict resolution. Students will learn and refine research methods by working collaboratively on a project for a client.

ANTH 350 - Amazonian Societies (3 Credits)
In-depth study of ethnographic literature on Amazonian societies, including kinship, economics, politics, gender, shamanism and other main themes. Western preconceptions about humanity, power and morality are put in comparative context alongside indigenous theories.

ANTH 365 - Environment and Development Narratives Environment and Development Narratives (3 Credits)
This course focuses on the sub-fields of environmental anthropology and the anthropology of development. It examines cross-cultural theories of nature, space and relatiionality, with a focus on the interface between indigenous societies and Western discourses and practices pertaining to conservation and socioeconomic development.

ANTH 369 - Field Research (1 Credits)
Application of ethnographic research methods including observation, interviews, transcription, interpretation, and analysis.
ANTH 371 - Special Topics in Anthropology (3 Credits)
Prerequisites: ANTH 101 or 298 and 299 or permission of the instructor. Concentrates on an important anthropological topic not otherwise covered in the curriculum; comprehensive readings and discussion. Choice of topic reflects both student and instructor interests.

ANTH 450 - Ethnographic Field Methods in Guyana (3 Credits)
Prerequisites: ANTH 350 or permission of instructor. Faculty-led, six-week study abroad course entailing ethnographic field research in an indigenous community in Guyana, South America. Students participate in community life and develop a research project based on their interests. Advanced instruction in ethnographic/qualitative research methods and indigenous cultures of Amazonia.

ANTH 480 - Senior Research (3 Credits)
Prerequisites: Anthropology major with senior standing; ANTH 298, 299. Discussion and intensive independent research resulting in a 30-40 page senior thesis on a subject of the student's choice.

ANTH 481 - Senior Thesis (3 Credits)
Prerequisites: Anthropology major with senior standing; ANTH 298, 299. Under the direction of one of the anthropology faculty, students write a 30-35 page thesis based on the research undertaken during the first semester in ANTH 480.

ANTH 491 - Individual Study and Research (1-3 Credits)
Individual work under the guidance of the instructor.

ANTH 492 - Individual Study & Research (1-4 Credits)
Individual work under the guidance of the instructor. May not be counted as Sociology credit.

ANTH 499 - Internship (1-12 Credits)
Supervised off-campus experience developed in consultation with the instructor. Up to six anthropology credits may be counted in the anthropology concentration.

Arabic (ARAB)

ARAB 101 - Beginning Arabic I (3 Credits)
An introduction to Modern Standard Arabic in both is spoken and written form. Equal emphasis on all five skills areas: speaking, listening, reading, writing, and culture. Students with credit for a higher level course in Arabic may not take this course.

ARAB 102 - Beginning Arabic II (3 Credits)
An introduction to Modern Standard Arabic in both is spoken and written form. Equal emphasis on all four skills areas: speaking, listening, reading, and writing. Students with credit for a higher level course in Arabic may not take this course.

ARAB 201 - Intermediate Arabic I (3 Credits)
The second year of Modern Standard Arabic in both spoken and written forms. Equal emphasis on all five skill areas: speaking, listening, reading, writing and culture. Required sessions in the language laboratory. Students with credit for a higher level course in Arabic may not take this course for credit.

ARAB 202 - Intermediate Arabic II (3 Credits)
The second year of Modern Standard Arabic in both spoken and written forms. Equal emphasis on all five skill areas: speaking, listening, reading, writing and culture. Students with credit for a higher level course in Arabic may not take this course for credit.

ARAB 301 - Advanced Arabic (3 Credits)
The third year of instruction in Modern Standard Arabic. Equal emphasis on all five skill areas: speaking, listening, reading, writing and culture. This is an upper-division course. Completion of second-year Arabic or possession of the requisite skill set is necessary to take this course.

ARAB 302 - Advanced Arabic (3 Credits)
The third year of instruction in Modern Standard Arabic in both its spoken and written form. Equal emphasis on all four skill areas: speaking, listening, reading, and writing. This is an upper-division course. Completion of second-year Arabic or possession of the requisite skill set is necessary to take this course.

ARAB 310 - Topics in Arabic Culture (3 Credits)
This is a new course for students who have completed the intermediate language level or for students who are native or heritage speakers of Arabic. Topics will vary according to students interest and faculty expertise. The course will be taught entirely in Arabic.

ARAB 351 - Classical Arabic Literature in Translation Classical Arabic Literature in Translation (3 Credits)
A survey course covering poetry, epic narratives and threats on government, religion and science from five epochs of Arab culture: the pre-Islamic period, the period of Islamic conquest, the Ummayed and ‘Abbasid period and Moorish Andalusia. This is an upper-division course. There are no prerequisites per se. Knowledge of elementary Arabic will be helpful but not essential.

ARAB 352 - Modern Arabic Literature in Translation (3 Credits)
A survey covering Arabic language literature of the 20th century, with special emphasis on the middle and later periods. This is an upper-division course. There are no prerequisites per se. Knowledge of elementary Arabic will be helpful but not essential.

ARAB 491 - Independent Study Arabic Independent Study Arabic (3 Credits)
Students may take further independent study in arabic with the permission of the instructor.

ARAB 492 - Independent Study Arabic Independent Study Arabic (3 Credits)
Students may take further independent study in arabic with the permission of the instructor.

Art History (ARTH)

ARTH 114A - History of Western Art I (3 Credits)
Survey of Western architecture, painting, and sculpture from the Prehistoric period to the late Gothic.

ARTH 115A - History of Western Art II (3 Credits)
Survey of Western architecture, painting, and sculpture from proto-Renaissance to the present.

ARTH 118 - History of Asian Art (3 Credits)
A survey of architecture, painting, sculpture, ceramics, and gardens produced by societies in Asia from the Prehistoric period to the present.

ARTH 224 - Arts of Japan and Korea (3 Credits)
Explores the history of Japanese and Korean art from the Prehistoric period to the present day. The works of architecture, gardens, ceramics, sculpture, painting, and other visual forms from the major periods of Japanese and Korean history are examined within social, cultural, political, and religious contexts.
**ARTH 260 - Topics in Art History (3 Credits)**
Explores significant figures, styles, movements, and topics in Western art. Does not fulfill an area requirement but can count as elective credit in the major.

**ARTH 270 - Topics in Non-Western and Non-Eurocentric Art (3 Credits)**
Major monuments of architecture, sculpture, and painting of non-Western and/or non-Eurocentric cultural contexts are explored, as specified by the title. Previous topics have included: Asian art, African art, Islamic art, and Pre-Columbian and Latin American art.

**ARTH 303 - Methods of Art History (3 Credits)**
Philosophies of art historical methodologies and summation of principles and historic development of the discipline. Permission of department chair and instructor required.

**ARTH 305 - Egyptian and Near Eastern Art and Archaeology (3 Credits)**
Egyptian and Near Eastern Art and Archaeology (3) Using the methodologies developed by archaeologists and art historians, this course examines the artistic and architectural traditions of Egypt and the Near East from the prehistoric through the Greco-Roman periods. Cross-listed as CLAS 305.

**ARTH 310 - Greek Art (3 Credits)**
Greek Art (3) Focuses on the development of Greek art from the early Aegean Age through the Geometric, Archaic, Classical, and Hellenistic periods.

**ARTH 311 - Roman Art (3 Credits)**
Roman Art (3) A review of the major developments in Roman art and architecture from the Italo-Etruscan period to the end of the Roman Empire. Special attention is devoted to the topography and major monuments of the ancient city of Rome.

**ARTH 315A - Art Museum Studies (3 Credits)**
Examines the art museum and its role, including: developing and managing collections and exhibits; interpretation and museum education for diverse audiences; funding; governance; and ethics and values. Case studies, field trips, practice, and readings included. Does not satisfy the Art History requirement for the Studio Art major.

**ARTH 317 - Laboratory in Museum Studies (3 Credits)**
Prerequisite: ARTH 315A or HISP 200. Through the creation of an exhibition or hypothetical museum, students gain experience working in a team environment as they apply their knowledge about museum audience, collections, education, curation, organization and administration, physical plant, and public relations. Does not count as an elective for the Art History major. Does not satisfy the Art History requirement for the Studio Art major.

**ARTH 325 - Early Christian, Byzantine, and Early Medieval Art (3 Credits)**
This course traces the development of art and architecture from the beginnings of the Christian tradition through the Byzantine, Hiberno-Saxon, Carolingian, and Ottonian periods. Focus is placed on the major monuments from these periods and the related issues of patronage, culture, and liturgy that influenced their creation.

**ARTH 326 - Romanesque & Gothic Art (3 Credits)**
Romanesque and Gothic Art (3) A survey of the visual arts of Western Europe from the 11th through the 15th centuries. The works of architecture, sculpture, and painting are studied with attention to the social, religious, and intellectual frameworks of the societies that produced them. Special emphasis is given to the monastic tradition, pilgrimage and relic cults, and the urban cathedral.

**ARTH 330 - Northern European Art, 1400 to 1600 (3 Credits)**
An introduction to the artistic traditions of northern Europe through a focus on such artists as Jan van Eyck, Rogier van der Weyden, Bosch, Dürer, and Bruegel. The relations between patron and image are of particular interest, as are the connections between northern and southern European art during this period.

**ARTH 331A - Early Italian Renaissance (3 Credits)**
A survey of the painting, sculpture, and architecture of Italy from about 1300 to 1475. All major figures, including Giotto, Ghiberti, Donatello, and Botticelli are considered. Works are examined in terms of setting, patronage, and cultural context in addition to questions of style and meaning. Of particular interest is the relationship between artistic expression and the personalities and institutions of the city of Florence.

**ARTH 332A - High Renaissance & Mannerism (3 Credits)**
A survey of the painting, sculpture, and architecture of Italy from about 1475 to 1600. Among the High Renaissance artists considered are Leonardo da Vinci, Michelangelo, Raphael, and Titian. Of special consideration is the nature of the Papacy as a patron of the arts and the city of Rome as a context for artistic activity. The course also considers the reasons for the dissolution of the classical tradition during this time by artists such as Pontormo, Parmigianino, and Giulio Romano.

**ARTH 340 - Northern Baroque Art (3 Credits)**
Examines the major works of northern European art from the late sixteenth century until around 1700. Issues covered include the influence of antiquity, contacts with Italy, patronage of royal courts as well as the new “middle class,” and the role of religion. Selected works by Rubens, Van Dyck, Rembrandt, Vermeer, Poussin, and others are studied from a variety of interpretative points of view including iconography, style, technique, social and economic circumstances, and the relationship of the visual arts to other cultural productions such as literature and music.

**ARTH 341A - Italian and Spanish Baroque Art (3 Credits)**
Examines the major works of Italian and Spanish art from the late sixteenth century until around 1700, with some attention paid to Islamic influences in Spain as well as influences from the arts of the “New World”. Selected works by Caravaggio, Bernini, Borromini, Velazquez, Zurbaran, and others are studied from a variety of interpretative points of view including iconography, style, technique, social and economic circumstances, and the relationship of the visual arts to other cultural productions such as literature and music.

**ARTH 350A - Neoclassicism to Impressionism (3 Credits)**
Focuses on the periods of Neoclassicism, Realism, and Impressionism in painting and sculpture in Europe, with emphasis on French art.

**ARTH 351A - Post-Impressionism to Abstract Expressionism (3 Credits)**
Focuses on the periods of Post-Impressionism to Abstract Expressionism in painting and sculpture.

**ARTH 352A - American Art (3 Credits)**
A survey of American painting and sculpture with emphasis on the 19th and 20th centuries.

**ARTH 354A - Pop Art to the Present (3 Credits)**
Explores the history of art since 1945 and its critical response.

**ARTH 355 - Modern Architecture (3 Credits)**
A chronological survey of 20th-century architecture that focuses on the most noted architects and their work, as well as the revolutionary building technologies and aesthetic theories that made such architecture possible.
Bachelor of Liberal Studies (BLST)

BLST 101 - Portfolio Development Portfolio Development (1 Credit)
Techniques for identifying, defining, and presenting experiential learning for assessment. Open only to BLS students.

BLST 312 - Professional Communication (3 Credits)
Students learn the importance of effective professional written and oral communication skills. Students learn the elements of research and writing or academic papers, including appropriate use of the American Psychological Association (APA) format. Students learn the importance of effective oral communication and demonstrate proficiency in the development of individual and group oral presentations.

BLST 491 - Individual Study (3 Credits)
Prerequisites: Admitted to the BLS Program for at least one semester. Students must have earned 90 credits and have completed 12 UMW credits in good standing. Individual investigation of a subject appropriate to the major and directed by a member of the faculty. This individual study option is only available for Bachelor of Liberal Studies Students pursuing either an approved self-designed or an interdisciplinary BLS major the registration form must be signed by the directing faculty member and by the directing faculty member and by the Director of the Bachelor of Liberal Studies program.

BLST 499 - Internship (3-6 Credits)
A supervised work experience directed by a member of the faculty in consultation with an agency supervisor. This internship option is available for Bachelor of Liberal Studies students pursuing either an approved self-designed or an interdisciplinary BLS major. Students must contact the Center for Career and Professional Development to complete the required contract in order to register, and must follow all internship program guidelines set forth by that Office.

Bachelor of Profess'l Studies (BPST)

BPST 314 - Business Legal Environment (3 Credits)
Students will examine a broad spectrum of legal principles as they relate to business organizations. Students will study the critical nexus between law and the environment in which business operates. Students will analyze the creation of rights, liabilities, and regulations under law, dispute resolution, contracts, torts, product liability and property issues. Students will study the different forms of business organization available and the fiduciary duties of officers, directors and shareholders. The legal aspects of the employment relationship as they relate to protection of trade secrets, agency, discrimination, and wrongful termination will also be covered. Students will analyze relevant legal cases and statutes to learn the impact of law on organizations. Prerequisite: ENGL 101 or equivalent.

BPST 471 - Special Topics (3-6 Credits)
Prerequisite: Topic dependent. Selected topics that reflect faculty specialization or program needs. May be repeated for credit with a change in topic.

BPST 491 - Directed Study (1-6 Credits)
This is an individual study under faculty direction on a topic.

BPST 499 - Internship (1-6 Credits)
The Professional Internship Program offers students opportunities to experience various fields of employment while working with a variety of organizations on important and challenging projects. These experiences augment classroom learning while allowing on-the-job training.
Biology (BIOL)

BIOL 000 - Community Service Learning (0 Credits)
40 hours of community service in which biology classroom learning is applied. Students must submit a journal and attend one 2-hour reflective discussion section. Fulfills the general education experiential learning requirement. No Credits.

BIOL 121 - Biological Concepts (4 Credits)
An introduction to biological concepts common to all organisms. Includes discussions of current topics in cellular biology, genetics, ecology, and evolution. Laboratory. Does not count toward the biology major. Credit for only one introductory biology course (121 or 125) can be counted toward degree requirements.

BIOL 125 - Phage Hunters I (4 Credits)
This research course sequence is designed for freshmen using a “learning by doing” approach to introductory biology. It is a hands-on, discovery course with an emphasis on critical thinking. Themes covered will be similar to BIOL 121, 132 with an emphasis on microbiology, molecular biology, genomics and bioinformatics. In the lab, students will isolate and characterize their own unique virus. Laboratory. BIOL 125 does not count toward the biology major. BIOL 126 counts toward the biology major and is a prerequisite for all other required courses in the major. Credit for only one introductory biology sequence (121-132 or 125-126) can count toward degree requirements.

BIOL 126 - Phage Hunters II (4 Credits)
Prerequisite: BIOL 125. This research course sequence is designed for freshmen using a “learning by doing” approach to introductory biology. It is a hands-on, discovery course with an emphasis on critical thinking. Themes covered will be similar to BIOL 121, 132 with an emphasis on microbiology, molecular biology, genomics and bioinformatics. In the lab, students will isolate and characterize their own unique virus. Laboratory. BIOL 125 does not count toward the biology major. BIOL 126 counts toward the biology major and is a prerequisite for all other required courses in the major. Credit for only one introductory biology sequence (121-132 or 125-126) can count toward degree requirements.

BIOL 127 - Human Biology (3 Credits)
Prerequisite: BIOL 121. This course will examine the structure and function of the human body, human genetics and the influence of humans on their environment. It will also examine ethical issues that affect humans in these different areas. Students may not count credit for both 122 and 127 toward degree requirements. Does not count toward biology major.

BIOL 128 - Current Topics in Biology (3 Credits)
Prerequisites: BIOL 121. Courses will cover topics in biology that are of current interest to non-major students. Topics will be specifically developed to build upon basic biological concepts and will satisfy the second semester of the natural science general education requirement. Does not count toward the biology major.

BIOL 132 - Organism Function and Diversity (4 Credits)
Prerequisite: BIOL 121 (C- or better). Survey of organisms, focusing on structure, physiology, and diversity. Plant and animal form and function are emphasized. Laboratory. This course counts toward the biology major and it a prerequisite for all other required courses in the major.
BIOL 323 - Entomology (4 Credits)
Prerequisite: BIOL 126 or 132 and CHEM 111, 112 (C- or better in each course). Introduction to structure, function and ecology of insects. Students prepare insect collections. Laboratory.

BIOL 340 - Cellular Biology (4 Credits)
Prerequisites: BIOL 126 or 132 and CHEM 112 (C- or better in each course). Study of cell structure and function. Laboratory.

BIOL 341 - General Genetics (4 Credits)
Prerequisite: BIOL 126 or 132 and CHEM 112 (C- or better in each course). Structure, function, and transmission of genetics material using examples from viruses, bacteria, and eukaryotic organisms. Application of these principles to human inheritance. Laboratory.

BIOL 371 - Microbiology (4 Credits)
Prerequisites: BIOL 126 or 132 and CHEM 112 (C- or better in each course). Emphasis is placed on bacteria, their morphology, physiology, nutrition, and ecology. Laboratory.

BIOL 372 - Parasitology (4 Credits)
Prerequisite: BIOL 126 or 132 (C- or better in each course). The structure, life histories, and host relationships on invertebrate parasitic forms. Laboratory.

BIOL 384 - Human Anatomy (4 Credits)
Prerequisites: BIOL 126 or 132 (C- or better in each course). The structure of the human body at the cell, tissue, organ, and system levels of organization. Laboratory.

BIOL 401 - Animal Behavior (3 Credits)
Prerequisite: BIOL 210 (C- or better). Integrative survey of the biology of animal behavior from an evolutionary perspective.

BIOL 406 - Histology (4 Credits)
Prerequisite: BIOL 340 (C- or better). The anatomy and physiology of vertebrate tissues, with an emphasis on human tissues. Laboratory.

BIOL 410 - Neurobiology (4 Credits)
Prerequisite: BIOL 340 (C- or better). Examines the structure and function of neurons, neural networks and nervous systems. The laboratory includes physiological experimentation and basic human neuroanatomy. Laboratory.

BIOL 412 - Endocrinology (4 Credits)
Prerequisite: BIOL 340 (C- or better). A study of the structure and function of mammalian hormone systems. An in-depth exploration of individual endocrine systems including the cellular and molecular mechanisms mediating hormone action, the central and peripheral control of endocrine systems, and clinical correlates of endocrine dysfunction. Lab.

BIOL 413 - Human Physiology (4 Credits)
Prerequisite: BIOL 340 (C- or better). A systematic study of the physiology of the human body, with focus on the nervous and endocrine systems, muscle function, cardiovascular and pulmonary systems, kidney function, digestion, and reproduction. Laboratory.

BIOL 414 - Exercise Physiology (3 Credits)
Prerequisite: BIOL 340 (C- or better). A study of the physiological responses of the metabolic, cardiovascular, respiratory, and muscular systems to acute and chronic exercise in the human, and the roles of the nervous and endocrine systems in mediating these responses.

BIOL 415 - Nutrition and Metabolism (3 Credits)
Prerequisite: BIOL 340 (C- or better). A study of the scientific basis for the current recommendations for a healthy diet. Course topics include metabolic pathways, macro and micro nutrients, diet and health, and controversial topics in nutrition.

BIOL 424 - Tropical Ecology (4 Credits)
Prerequisite: BIOL 210 (C- or better). Study of selected tropical ecosystems; exploration of these in Puerto Rico; consideration of some problems, uses, and interesting facets of these ecosystems. Field trip to Puerto Rico.

BIOL 425 - Vertebrate Zoology (4 Credits)
Prerequisite: BIOL 210 (C- or better). A survey of the vertebrates including their natural history, evolution, and taxonomy. The student will become familiar with the biological species concept, speciation and nomenclature as they apply to the vertebrates. Laboratory.

BIOL 426 - Biology of Fishes (4 Credits)
Prerequisite: BIOL 210 (C- or better). A survey of the fishes, including their anatomy, physiology, natural history, and systematics. The laboratory includes the collection and identification of local species. Each student will be required to develop and complete an independent project during the semester. Laboratory.

BIOL 427 - Ornithology (4 Credits)
Prerequisites: BIOL 210 and 260 (C- or better in each course). Comprehensive survey of the anatomy, physiology, behavior, ecology, and evolution of birds. Laboratory emphasizes scientific investigation and development of research skills in ornithology. Laboratory. Previously taught as BIOL0471R. Do not register for BIOL427 if you have successfully completed BIOL0471R.

BIOL 428 - Conservation Biology (4 Credits)
Prerequisite: BIOL 210 (C- or better). Study of social science and natural science approaches to the conservation of biological diversity. Course topics include conservation law, conservation values, population genetics, and population dynamics. Laboratory.

BIOL 430 - Molecular Biology of the Gene (4 Credits)
Prerequisite: BIOL 260 and BIOL 341 (C- or better in each course). The study of gene structure and function at the molecular level. Laboratory emphasizes the use of molecular techniques to carry out original research on the characterization of a gene.

BIOL 432 - Virology (4 Credits)
Prerequisites: BIOL 260 and BIOL 341 (C- or better). The study of viruses and their replication cycles. Laboratory emphasizes scientific investigation and development of research skills in virology.

BIOL 434 - Physiological Adaptations (4 Credits)
Prerequisites: BIOL 210 and 340 (C- or better in each course). A study of the adaptations of physiological systems in animals that have evolved in diverse environments. Laboratory emphasizes hypothesis-testing and experimental design. Laboratory. Previously taught as BIOL0471P. Do not register for this course if you have successfully completed BIOL0471P.

BIOL 435 - Plant Physiology (4 Credits)
Prerequisites: BIOL 340 and BIOL 341 (C- or better in each course). Experimental and theoretical treatment of the functional mechanisms in plants. Laboratory.

BIOL 439 - Developmental Biology (4 Credits)
Prerequisites: BIOL 260, BIOL 340 and BIOL 341 (C- or better in each course). An examination of the cellular and genetic mechanisms which control the formation of multicellular organisms during reproduction. Laboratory emphasizes inquiry based scientific investigation and development of research skills in Developmental Biology. Fulfills the Research Intensive requirement of the biology major.
BIOL 440 - Biology of Cancer (3 Credits)
Prerequisite: BIOL 341 (C- or better). Lectures and discussions focused on various aspects of cancer including epidemiology, cellular and molecular characteristics of cancer cells, carcinogenesis, treatment and prevention.

BIOL 441 - Immunology (4 Credits)
Prerequisites: BIOL 340 and BIOL 341 (C- or better in each course). Introduction to the principles and theories of host defense with emphasis on humoral and cell mediated responses. Laboratory.

BIOL 442 - Evolution (3 Credits)
Prerequisite: BIOL 341 (C- or better). Lectures and discussion center around modern evolutionary theory and how evolutionary events are measured and documented.

BIOL 443 - The Biology and Biochemistry of Proteins (3 Credits)
Prerequisites: BIOL 340 (C- or better) and CHEM 211; or CHEM 317. A study of the principles of protein structure and active site function, including a study of the structure and function of a select group of proteins representing major protein families. Students complete a research project involving the use of major protein databases and on-line analytical tools.

BIOL 444 - Bioinformatics (3 Credits)
Prerequisites: BIOL 340 and BIOL 341. An exploration of the rapidly growing genomics approach to biological problems. Areas of study include genome sequencing, comparative genomics, functional genomics, and diversity. Students complete three research projects based on primary literature and utilize bioinformatics approach to analyze original data. Class time is spent on discussions, on student presentations of research project results, and in collaborative work.

BIOL 445 - Research Practices in Aquatic Ecology (4 Credits)
Prerequisites: Grade of C- or better in BIOL 210 and BIOL 260. Students conduct field based collaborative research projects in aquatic ecosystems. Fulfills the Research Intensive (RI) requirement for the biology major.

BIOL 451 - Seminar (2 Credits)
Prerequisites: This course is open only to senior biology majors. Preparation and presentation of an oral report on a topic in the biological sciences. Each seminar section will focus on a particular area of biology.

BIOL 462 - Research Practices in Plant Ecology (4 Credits)
Prerequisite: BIOL 210 and BIOL 260 with a grade of C- or better in each. Collaborative investigation of field and ecology based problem. Requires a significant research project conducted in a small group. Fulfills the Research Intensive (RI) requirement of the biology major.

BIOL 471 - Topics in Biology (2-4 Credits)
Prerequisites: BIOL 126 or 132 (C- or better in each course); additional prerequisites as appropriate to specific topic. Specialized topics not offered on a regular basis. Laboratory included with certain topics.

BIOL 472 - Research-Intensive Topics in Biology (4 Credits)
Prerequisites: BIOL 126 or 132 and BIOL 260 (C- or better in each course); additional prerequisites as appropriate to specific topic. Specialized topics not offered on a regular basis. Fulfills the Research Intensive requirement of the biology major. Laboratory.

BIOL 481 - Research Design & Proposal Development in Biology (1-2 Credits)
Prerequisites: BIOL 260 and permission of instructor. Students will be guided by a faculty member to read biological literature and develop a proposal for an independent research project.

BIOL 482 - Literature Research in Biology (1 Credit)
Prerequisites: BIOL 260 and Permission of Instructor. This individually mentored course allows students to practice scientific reasoning and analysis by reading, analyzing, discussing and writing about the primary literature in a specific topic area of biology. Students will then write a comprehensive synthesis paper detailing the state of knowledge in that particular field.

BIOL 491 - Special Problems in Biology (1-3 Credits)
Prerequisites: BIOL 260 and 481, and C- or better in all BIOL courses. Individual laboratory or field investigation supervised by a staff member. Open to junior and senior majors by permission of Department. No more than six credits of BIOL 491 may be counted toward the biology major.

BIOL 499 - Internship (1-12 Credits)
Supervised off-campus experience, developed in consultation with the department. Does not count toward biology major. Junior or senior majors in good academic standing only.

Business Administration (BUAD)

BUAD 000 - Research Experience (0 Credits)
Open to qualified students by permission of the department. Supervised corporate-sponsored research experience developed in consultation with the department.

BUAD 105 - Perspectives on Organizations in Society (3 Credits)
The evolution of economic systems from political, sociological, and cultural perspectives will be examined in order to better understand the interactive nature of business, governmental, and societal systems. This course introduces the conceptual foundations necessary to make informed, well-reasoned analyses of the current issues involving an array of organizations from the private, public, and not-for-profit sectors of the economy.

BUAD 350 - Business Communication (3 Credits)
Prerequisites: DSCI 259 or 352, MIST 201, and business administration major or permission of the Associate Dean for Faculty. In this course students study Business Communication as a strategic process. The emphasis of the course is on the practical application of written and oral principles of business communication, including audience management, information control, and mastery of language. Additional areas of study include discourse analysis, oral and multimedia presentation techniques and critiques, intra- and inter-cultural differences in communication, impromptu speaking, and structured and planned briefings.

BUAD 360 - The Cooperative Bus Model (3 Credits)
Prerequisite: College of Business major or permission of the Associate Dean for Faculty. This course discusses the historical context and ideas behind the cooperative movement; the evolution of cooperative enterprise; comparative models and practice; and the relevance of the cooperative business model both as a means of achieving business goals and of addressing contemporary economic and social issues.

BUAD 464 - Business Ethics (3 Credits)
A study of ethical conduct in management and the elements involved. The course will use a series of applied case studies (illustrating both positive and negative models) to provide an understanding of how to recognize a moral dilemma, evaluate the implications of the proposed actions and develop a response. The student should leave with an understanding of ethics and social responsibility as they relate to management.
BUAD 471 - Business Administration Seminars (1-3 Credits)
Prerequisite: College of Business major or permission of the Associate Dean for Faculty. Special topics of interest to staff and students are discussed in individual seminars which focus on specific areas within the various disciplines of Business Administration.

BUAD 472 - Business Administration Seminar Abroad (3 Credits)
Special topics of interest to staff and students pertaining to how business is conducted in one or more countries outside the United States are explored in depth in individual seminars. In order to receive credit for this class, students must also travel to the country as part of a class trip with the instructor.

BUAD 473A - Environment of International Business Seminar (3 Credits)
Prerequisite: ECON 201B; and business administration major or permission of Associate Dean For Faculty. The political, cultural, and economic aspects of the international business environment are explored in depth. The goal of this seminar is to develop an understanding of the forces at work in the global conduct of business across national boundaries.

BUAD 491 - Individual Study in Business Administration (1-3 Credits)
Directed by a department faculty member, students conduct individual research focusing on an approved topic of interest in business administration.

BUAD 499 - Internship (1-3 Credits)
Prerequisites: Junior or senior status; College of Business major, minor or 15 hours of BUAD courses or equivalent; permission of instructor and permission of the Associate Dean of Faculty. A supervised work experience in a sponsoring organization developed in consultation with, and under the supervision of, a College of Business faculty member. A maximum of 3 hours of 499 classes from the College of Business may be used toward the upper-level elective requirement for any of the majors in the College of Business.

Chemistry (CHEM)
CHEM 000 - Summer Research (0 Credits)
Open to qualified students by permission of the department. Supervised on-campus or off-campus summer research experience developed in consultation with the department. POI, requires permission of instructor.

CHEM 101 - Foundations of Chemistry (3 Credits)
Foundations of Chemistry is designed to develop fundamental mathematical skills and introduce foundational chemistry concepts underlying this central science. The use of mathematics is stressed in the context of chemical problems involving measurement, atoms, molecules, reactions and solutions. This course prepares students interested in pursuing a science major for the General Chemistry course curriculum. This course does not count toward the chemistry major, minor nor fulfillment of the General Education requirement in the Natural Science. Students who have received credit for Chem 111 may not enroll in this course.

CHEM 105A - Chemistry and Society with Laboratory I (3 Credits)
A study of societal problems and issues involving an understanding of important chemical principles with emphasis on relevant applications and the enhancement of chemical literacy for the non-scientist. Laboratory. Does not satisfy any major program requirements or serve as a prerequisite to any other chemistry courses. Credits for only one sequence (Chemistry 105-106 or 111-112) can count toward degree requirements. Only in sequence.

CHEM 106A - Chemistry and Society with Laboratory II (4 Credits)
Prerequisite: CHEM 105A. A study of societal problems and issues involving an understanding of important chemical principles with emphasis on relevant applications and the enhancement of chemical literacy for the non-scientist. Laboratory. Does not satisfy any major program requirements or serve as a prerequisite to any other chemistry courses. Credit for only one sequence (Chemistry 105-106 or 111-112) can count toward degree requirements. Only in sequence.

CHEM 107 - Societal Chemistry (3 Credits)
Prerequisite: CHEM 105A. A study of societal problems and issues involving an understanding of important chemical principles with emphasis on relevant applications and the enhancement of chemical literacy for the non-scientist. CHEM 105, 106 have a laboratory component. Does not satisfy any major program requirement or serve as a prerequisite to any other chemistry course. Credit for only one sequence (Chemistry 105-106, Chemistry 105-107, or 111-112) can count toward the degree requirement. Only in sequence (105-106 or 105-107).

CHEM 111 - General Chemistry I (4 Credits)
Introduction to the fundamental principles of chemistry and the more important elements and their compounds. Laboratory. The entry-level course for additional work in chemistry, biology, and environmental science. Credit for only one sequence (Chemistry 105-106, 105-107, or 111-112) can count toward degree requirements. Completion of the UMChem Placement Exam required prior to registration for CHEM 111. Contact department for schedule.

BLAW 201 - Legal Environment of Business (3 Credits)
This course focuses on the legal, political, and ethical framework in which businesses and other types of organizations operate. Topics include: common law and statutory business crimes and torts, common law contracts, business entities, securities regulation, employer/employee relations, environmental protection, and personal and real property laws. In addition, the legal consequences of the choice of business entity are explored while studying sole proprietorships, partnerships, and corporations.

BLAW 300 - Cybersecurity Law (3 Credits)
Prerequisite: College of Business major or Cybersecurity Major or permission of the Associate Dean for Faculty. Students will examine legal, policy, and ethical challenges stemming from cybersecurity threats involving government and nongovernment actors. Students will explore the national and international legal frameworks that govern malicious and defensive actions in cyberspace, including laws related to cybercrime, cyberespionage, privacy, and cyberwar. This is a core requirement for a cybersecurity major, and may satisfy the upper level business elective requirement for a business administration major.

BLAW 301 - Commercial Law (3 Credits)
Prerequisite: BLAW 201 or equivalent; and business administration major or permission of Associate Dean for Faculty. This course provides in-depth study of laws affecting commercial transactions and the rationale underlying rights and obligations of parties to these transactions. The Uniform Code is emphasized, especially the Articles dealing with Sales, Commercial Paper, Bank Deposits, Bulk Transfers, Document of Title, and Secured Transactions. The topics of Antitrust, Consumer Protection, Labor Law, and Insurance matters are explored.
CHEM 112 - General Chemistry II (4 Credits)
Prerequisite: CHEM 111. Introduction to the fundamental principles of chemistry and the more important elements and their compounds. Laboratory. The entry-level course for additional work in chemistry, biology, and environmental science. Credit for only one sequence (CHEM 105-106, 105-107, or 111-112) can count toward degree requirements. Only in sequence with a grade of C or better in CHEM 111. Completion of the UMW Chemistry Placement required prior to registration for CHEM 111. Contact department for schedule.

CHEM 211 - Organic Chemistry I (4 Credits)
Prerequisite: a grade of C or better in CHEM 112. The comprehensive study of the structure and reactivity of carbon compounds. Laboratory.

CHEM 212 - Organic Chemistry II (4 Credits)
Prerequisite: CHEM 211. The comprehensive study of the structure and reactivity of carbon compounds. Laboratory. Only in sequence with a grade of C or better in CHEM 211.

CHEM 253 - Chemical Analysis I (4 Credits)
Prerequisite: a grade of C or better in CHEM 112. Introduction to principles of chemical analysis, statistical treatment of measurements, volumetric and gravimetric analyses, and electrochemical analysis. Laboratory.

CHEM 254 - Chemical Analysis II (4 Credits)
Prerequisite: a grade of C or better in CHEM 112. Introduction to sampling in chemical analysis as well as instrumental methods. Laboratory.

CHEM 317 - Biochemistry I (3 Credits)
Prerequisite: a grade of C or better in CHEM 212. The application of chemical principles to the study and understanding of the living state.

CHEM 318 - Biochemistry II (3 Credits)
Prerequisite: a grade of C or better in CHEM 212, and CHEM 317. The application of chemical principles to the study and understanding of the living state.

CHEM 319 - Biochemistry Laboratory I (1 Credits)
Corequisites: CHEM 317 and CHEM 318. CHEM 253 and CHEM 254 are highly recommended. Selected research techniques involving the chemical composition and properties of cells, tissues, and organisms.

CHEM 320 - Biochemistry Laboratory II (1 Credits)
Corequisites: CHEM 317 and CHEM 318. CHEM 253 and CHEM 254 are highly recommended. Selected research techniques involving the chemical composition and properties of cells, tissues, and organisms. Only in sequence with CHEM 319.

CHEM 331 - Environmental Chemistry (3 Credits)
Prerequisite: CHEM 112 or permission of the instructor. An introduction to chemical processes that regulate the composition of air, water, and soil. Attention will be paid to understanding chemical equilibrium and kinetics of natural systems and how they are influenced by human actions.

CHEM 332 - Environmental Chemistry Laboratory (1 Credits)
Corequisite: CHEM 331. Laboratory experiments and field sampling methods that determine the chemical composition of environmental samples. Does not satisfy any major program requirements or serve as prerequisite to any other chemistry courses.

CHEM 343 - Inorganic Chemistry (3 Credits)
Prerequisite: a grade of C or better in CHEM 112. Modern theories of atomic structure and chemical bonding and their applications to molecular and metallic structures and coordination chemistry.

CHEM 345 - Inorganic Chemistry Laboratory (1 Credits)
Corequisite: CHEM 343. Prerequisites: CHEM 253, CHEM 254. Selected experiments in the principles of inorganic chemistry, including preparation and characterization of selected inorganic compounds.

CHEM 383A - Physical Chemistry I (3 Credits)
Prerequisites: MATH 122, PHYS 105 and PHYS 106 or PHYS 101 and PHYS 102, and a grade of C or better in CHEM 112. Thermodynamic, kinetic, quantum mechanical, and spectroscopic properties of chemical systems.

CHEM 384A - Physical Chemistry II (3 Credits)
Prerequisites: MATH 122, and PHYS 105 and PHYS 106 or PHYS 101 and PHYS 102, a grade of C or better in CHEM 112, and CHEM 383A. Thermodynamic, kinetic, quantum mechanical and spectroscopic properties of chemical systems.

CHEM 387A - Physical Chemistry Laboratory I (2 Credits)
Corequisites: CHEM 253, CHEM 254. Selected experiments involving the investigation of the thermodynamic, electrochemical, kinetic and spectroscopic properties of chemical systems.

CHEM 388A - Physical Chemistry Laboratory II (2 Credits)
Corequisites: CHEM 383, CHEM 384 sequence. Prerequisites: CHEM 253, CHEM 254, and CHEM 387A. Selected experiments involving the investigation of the thermodynamic, electrochemical, kinetic and spectroscopic properties of chemical systems.

CHEM 423 - Experimental Methods in Chemistry (4 Credits)
Prerequisites: CHEM 212 and CHEM 253, CHEM 254. Spectroscopic, chromatographic, and chemical functional group techniques used in synthesizing and characterizing chemical systems. Laboratory.

CHEM 453 - Seminar (2 Credits)
Open to graduating majors only with a major GPA of 2.0 or higher, except by permission of the department. Introduction to the chemical literature and information retrieval; oral reports and discussion of selected topics in chemistry.

CHEM 471 - Advanced Topics in Chemistry (1-4 Credits)
Advanced treatment of selected topics in chemistry.

CHEM 491 - Individual Study (1-4 Credits)
Individual investigation of a chemical topic or system under the direction of a member of the department. Students pursuing Honors in Chemistry register for 4 credits of CHEM 491H each semester of the senior year.

CHEM 492 - Spec Prob in Chem (1-4 Credits)

CHEM 493 - Chemical Outreach (1-2 Credits)
Open to qualified students by permission of the department. Supervised development of outreach experiences involving chemistry/science with community and/or university groups.

CHEM 499 - Internship (1-12 Credits)
Supervised off-campus experience developed in consultation with the department. The first six (6) credits of internship may not count toward the major program requirements. Subject to departmental approval, credits beyond six may be substituted for some major requirement.

Chinese (CHIN)

CHIN 101 - Beginning Chinese I (3 Credits)
An introduction to Mandarin Chinese in both its spoken and written form. Equal emphasis on all four skill areas: speaking, listening, reading, and writing. Required sessions in the language laboratory. Students with credits for a higher level course in Chinese may not take this course.
CHIN 102 - Beginning Chinese II (3 Credits)
Students with credit for a higher level course in Chinese may not take this course for credit.

CHIN 201 - Intermediate Chinese I (3 Credits)
The second year of Mandarin Chinese in both spoken and written forms. Equal emphasis on all five skill areas: speaking, listening, reading, writing, and culture. Required sessions in the language laboratory. Students with credit for a higher level course in Chinese may not take this course for credit.

CHIN 202 - Intermediate Chinese II (3 Credits)
The second year of Mandarin Chinese in both spoken and written forms. Equal emphasis on all five skill areas: speaking, listening, reading, writing, and culture. Required sessions in the language laboratory. Students with credit for a higher level course in Chinese may not take this course for credit.

CHIN 300 - Topics in Chinese Language and Culture (3 Credits)
Prerequisite: CHIN 202 or equivalent. Advanced intermediate instruction in Chinese language and culture.

CHIN 301 - Advance Intermediate Chinese I (3 Credits)
Prerequisite: CHIN 202. Third Year Mandarin Chinese in both its spoken and written form. Equal emphasis on all four skill areas: speaking, listening, reading, and writing. Required sessions in the language laboratory.

CHIN 302 - Advance Intermediate Chinese II (3 Credits)
Prerequisite: CHIN 301. Third-Year Mandarin Chinese in both its spoken and written form. Equal emphasis on all four skill areas: speaking, listening, reading, and writing. Required sessions in the language laboratory.

Classics (CLAS)

CLAS 103 - Ideas and Culture: Greek Civilization (3 Credits)
An introduction to ancient Greek literature, thought, art, drama, and culture from the Bronze Age to the Hellenistic Era, with particular focus placed upon fifth century Athens.

CLAS 105 - Ideas and Culture: Roman Civilization (3 Credits)
An introduction to ancient Roman literature, thought, architecture, and culture from the Early Republic to the dissolution of the empire, with particular focus placed upon the Late Republic and Early Empire.

CLAS 110 - Greek and Roman Mythology in Art and Literature (3 Credits)
The principal Greek and Roman myths, with emphasis on their appearance in literature and art.

CLAS 202C - Ancient Tragedy (3 Credits)
A study of the tragic plays of Aeschylus, Sophocles, and Euripides.

CLAS 204 - Epic Traditions (3 Credits)
A comparative study of epic poetry from the ancient civilizations of Mesopotamia, Greece, and Rome.

CLAS 211 - Greek and Roman Religion (3 Credits)
The public, personal, and mystery religions of the Greek and Romans, and the development of classical religious ideas. Crosslisted as RELG 211.

CLAS 305 - Egyptian and Near Eastern Art and Archaeology (3 Credits)
Using the methodologies developed by archaeologists and art historians, this course will examine the artistic and architectural traditions of Egypt and the Near East from the prehistoric through the Greco-Roman periods. Cross-listed as ARTH 305.

CLAS 310 - Women in Antiquity (3 Credits)
Prerequisite: Sophomore standing or above or permission of instructor. The nature, roles, and lives of women in ancient Greece and Rome.

CLAS 351 - Special Studies in Classical Civilization (3 Credits)
Prerequisite will vary, depending on topic. Reading and study in a specialized area of ancient culture.

CLAS 352 - Special Studies in Classical Civilization (3 Credits)
Prerequisite will vary, depending on topic. Reading and study in a specialized area of ancient culture.

CLAS 380 - Archaeology of the Greek and Roman World (3 Credits)
Prerequisite: ARTH 114A, CLAS 103 or CLAS 105. Study of the archaeologicial excavation of the Greek and Roman world, with emphasis on the history, techniques, and ethics of classical archaeology.

CLAS 390 - Ancient City (3 Credits)
Prerequisite: ARTH 114A, CLAS 103 or CLAS 105. The growth and development of selected urban centers in the Greek and Roman world, with emphasis on the archaeological record.

CLAS 485 - Guided Research (3 Credits)
Preparation of a senior thesis under the direction of the Classics faculty. Recommended for all Classics majors; required for graduation with Honors in Classics.

CLAS 491 - Individual Study (1-4 Credits)
Individual study under the direction of a member of the staff. Permission of the department.

CLAS 492 - Individual Study (1-4 Credits)
Individual study under the direction of a member of the staff. Permission of the department.

CLAS 499 - Internship (1-4 Credits)

Classics, Phil & Religion (CPRD)

CPRD 100 - Topics in Classics, Philosophy, and Religion (3 Credits)
Special interdisciplinary offerings in Classics, Philosophy, and Religion

CPRD 104 - Meditation and Contemplative Practices (3 Credits)
This course offers a practical, experiential, and theoretical introduction to mindfulness meditation and contemplation. Students learn and practice meditation techniques daily while exploring the contemplative practices and theories of diverse cultural traditions from a variety of disciplinary perspectives, such as philosophy, psychology, and neuroscience.

CPRD 299 - Mysterium Humanum Studies (3 Credits)
Different topics of fundamental human concern are treated at different times in this interdisciplinary course involving the entire faculty of the Department of Classics, Philosophy, and Religion. Topics covered in the past include "Wrestling with Death," "The Tempest of Time," "Sex and Society in the West;" and "Slavery."

CPRD 301 - Studies in Ancient Languages (3 Credits)
Introduction to the morphology and syntax of selected ancient languages relevant to the study of Classics, Philosophy, and Religion (such as Coptic, Quranic Arabic, and Sanskrit). By permission of instructor. These courses do not satisfy the College's general education requirement for proficiency in a foreign language.

CPRD 302 - Studies in Ancient Languages (3 Credits)
Introduction to the morphology and syntax of selected ancient languages relevant to the study of Classics, Philosophy, and Religion (such as Coptic, Quranic Arabic, and Sanskrit). By permission of instructor. These courses do not satisfy the College's general education requirement for proficiency in a foreign language.
CPRD 304 - Contemplative Practice II (3 Credits)
Prerequisite: CPRD 104. Contemplative Practice II is a continuation of CPRD 104. Students will further develop and refine their daily meditation practice by exploring additional techniques and advanced topics. It also surveys current trends in psychological and neuroscientific research on meditation, and deeply engages related philosophical concepts and debates.

CPRD 331 - Cross-disciplinary Topics in Classics, Philosophy, and Religion (3 Credits)
A consideration of a theme from the perspective of two or three of the disciplines taught in the Department of Classics, Philosophy, and Religion.

CPRD 492 - Individual Study (1-3 Credits)

Communication (COMM)

COMM 205 - Public Speaking (3 Credits)
Study of the basic principles of public address. Emphasis is on developing a theoretical and practical understanding of oral communication through practice in preparing, delivering, and criticizing speeches in class.

COMM 206 - Small Group Communication (3 Credits)
Study of the theories and principles of effective communication and decision making in small group contexts. Emphasis is on understanding communication capabilities as a participant in and leader of small groups.

COMM 209 - Argumentation (3 Credits)
Study of the use of reasoning in persuasive communication with emphasis on the construction, evaluation, presentation, refutation, and defense of oral arguments.

COMM 340 - Introduction to Rhetoric and Communication (3 Credits)
Introduction to human communication studies, focusing on the history, theory, criticism and mediation of persuasive messages to discover their roles in human society, culture, and contemporary life.

COMM 341 - Communication Research Methods (3 Credits)
Prerequisites: COMM 340 or permission of the instructor. This course introduces students to the study of the qualitative, quantitative, and rhetorical methods used to conduct communication research. Topics covered include research design, data collection, data analysis, and a review of the major sources for publication of academic and professional research in communication. Students will complete a communication research project and present their results.

COMM 351 - Communication and Political Campaigns (3 Credits)
Study of persuasive communication in political campaigns, emphasizing the evaluation and criticism of campaign speeches, televised debates, and political advertising.

COMM 353 - Visual Rhetoric (3 Credits)
Study of the rhetorical use of visual texts with an emphasis on the development and use of visual arguments.

COMM 357 - Social Media (3 Credits)
Study of the communication theory and practice of social media as used by individuals and groups.

COMM 370 - Topics in Speech Communication (3 Credits)
Studies in major figures, movements, and problems in speech communication theory and practice. Consult Schedule of Courses for specific topics

COMM 375 - Not-For-Profit Communication Campaigns (3 Credits)
This course takes a broad view of not for profit communication campaigns, including, but not limited to health, human rights, and environmental campaigns. Topics include theoretical foundations, design, evaluation, and the new media environment, all while using applicable examples and readings. Students will have the opportunity to design a digital communication campaign.

COMM 376 - Gender and Communication (3 Credits)
Explores the ways in which communication constructs gender. This course will be a guided study of the different areas in which our understanding and expectations of gender emerge. Covers theoretical foundations and approaches to gender and communication, and areas such as family, workplace, media, and politics.

COMM 377 - Studies in Rhetoric and Communication (3 Credits)
Study of rhetoric and human communication; consult Schedule of Courses for specific topics.

COMM 406 - Seminar in Digital Rhetoric (3 Credits)
Prerequisites: COMM 340 or permission of the instructor. Study of the contemporary function of rhetoric in the context of our globally networked society.

COMM 481 - Policy Debate Practicum (1 Credits)
Credit for satisfactory work on the University's intercollegiate policy debate team. Enrollment by permission of instructor and the department. No more than 8 credits of Practicum (481, 482, 483) may count toward the 120 hours required for graduation.

COMM 482 - Public Debate Practicum (1 Credits)
Credit for satisfactory work on the University's public debate team. Enrollment by permission of the instructor and department. No more than 8 credits of Practicum (481, 482, 483) may count toward the 120 hours required for graduation.

COMM 483 - Communication Consulting Practicum (1 Credits)
By permission of the instructor. Students will review, study, and apply the principles of public speaking, rhetoric, peer tutoring, and instructional communication. In addition, students will reflect upon, discuss, and write about the application of these principles to their tutoring process. No more than 8 credits of Practicum (481, 482, 483) may count toward the 120 hours required for graduation.

COMM 491 - Individual Study (3 Credits)
Individual study under the direction of a member of the staff. By permission of the department. Only three credits of individual study may count toward the Communication and Digital Studies major.

COMM 492 - Individual Study (1-6 Credits)
Individual study for variable credit under the direction of a member of the staff. By permission of the department. Only three credits of individual study may count toward the Communication and Digital Studies major.

COMM 499 - Internship (1-6 Credits)
Supervised experience, typically off-campus, developed in consultation with the department. Credits variable. Up to three credits may be counted toward the Communication and Digital Studies Major.
### Computer Information Systems (CIST)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIST 299</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
<td>This course provides a foundational knowledge base for students in computer information systems. Topics include file structures, pseudocode, algorithms, and basics in procedural and object-oriented programming. The operating systems component includes reviews of popular operating systems, file management, and computer hardware. The Internet component introduces infrastructure of the Internet, electronic mail, FTP, creating web pages using HTML, and basics of e-business and e-commerce.</td>
</tr>
<tr>
<td>CIST 301</td>
<td>Business Information Systems</td>
<td>3</td>
<td>This course discusses how organizations can use information systems strategically to reengineer business processes. Topics covered include theories, principals and business cases about a variety of business applications supporting different organizational levels and functions.</td>
</tr>
<tr>
<td>CIST 441</td>
<td>Network Security &amp; Cryptography</td>
<td>3</td>
<td>Prerequisite: MIST 411 or equivalent. Topics include fundamentals of network security, security threats and vulnerabilities, viruses, cryptography, digital signatures, and key certification and management. In addition, this course covers areas such as access control, authentication, intrusion detection, firewalls and virtual private networks. Wireless and mobile network security is covered in detail. (Credit is not awarded for both CIST 441 and MMIS 541.)</td>
</tr>
<tr>
<td>CIST 442</td>
<td>Security Policy, Planning, and Assurance</td>
<td>3</td>
<td>This course covers policy, legal systems, ethical issues, physical security, disaster recovery, business continuity issues, and risk in information systems. Topics also include maintenance of essential business processes following a disaster, restoration of systems, assurance, and building systems with formal evaluation methods. (Credit is not awarded for both CIST 442 and MMIS 542.)</td>
</tr>
<tr>
<td>CIST 471</td>
<td>Special Topics</td>
<td>1-3</td>
<td>Prerequisite: Topic dependent. Selected topics that reflect faculty specialization or program needs. Topics may include simulation techniques, parallel processing, and artificial intelligence. May be repeated for credit with a change in topic.</td>
</tr>
<tr>
<td>CIST 490</td>
<td>IT Research Project</td>
<td>3</td>
<td>Students select, propose, and write a research papers on a topic related to computer information systems. The study may include data collection from actual field observations and will be substantiated with a current literature review. The course culminates with an oral presentation accompanied by visual displays and a research paper.</td>
</tr>
<tr>
<td>CIST 491</td>
<td>Directed Study</td>
<td>1-6</td>
<td>This is an individual study under faculty direction on a topic of relevance to the Computer Information Systems concentration.</td>
</tr>
<tr>
<td>CIST 499</td>
<td>Internship</td>
<td>1-6</td>
<td></td>
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</tbody>
</table>

### Computer Science (CPSC)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSC 104</td>
<td>The Internet: Technology, Information, and Issues</td>
<td>3</td>
<td>A survey of the technology and issues underlying the use of the Internet for communication, resource discovery, research, and dissemination of information in multimedia formats. Topics include as introduction to Internet protocols, Internet history and development, electronic mail, group discussions, use and functions of a Web browser, accessing Internet services and resources, using the Internet for research, Web site design and implementation, and social, legal, and ethical issues related to using the Internet.</td>
</tr>
<tr>
<td>CPSC 106</td>
<td>Digital Storytelling</td>
<td>3</td>
<td>People have been telling stories since the beginning of time, but how is story telling evolving in the digital age? This course explores how computers are being used to tell stories. We'll study text-based technologies—blogging, the web—and how those models have changed the way we publish and disseminate narratives. Well also study the roles of audio, video, and images in narrative: computer animation, the ethics of altering digital images, and the Story Corps project. Students will use technology including blogs, virtual worlds, and computer games to create and tell their own stories.</td>
</tr>
<tr>
<td>CPSC 109</td>
<td>Introduction to Modeling and Simulation</td>
<td>3</td>
<td>This course introduces students to the concepts of modeling and simulation as tools for solving problems in the sciences. Students will be introduced to several modeling and simulation tools and will learn how to decompose problems so they can be represented and solved with the tools. Agent models and system models will be introduced. Example problems to demonstrate the modeling and simulation techniques and tools drawn from a number of scientific fields and will introduce basic problems that will not require depth of knowledge in any particular field of science. Examples of these problems include forest fires, predatory problems, transmission of diseases, chemical reactions, and elementary particle simulations. Students completing the course will be able to model complex systems and have attained programming skills equivalent to those learned in CPSC 110. Successful completion of this course is sufficient to continue on to CPSC 220. No previous programming experience or computer background is expected.</td>
</tr>
<tr>
<td>CPSC 110</td>
<td>Introduction to Computer Science</td>
<td>3</td>
<td>This course provides a foundation in computer science for a student who does not have prior programming experience. It provides sufficient support to permit a student to continue in the major program. Topics include an introduction to the algorithm and program development process using a high-level structured programming language and the department's computing facilities. Supervised hands-on experience provided. May not be taken for graded credit after passing any Computer Science course numbered 220 or higher.</td>
</tr>
</tbody>
</table>
CPSC 220 - Computer Programming and Problem Solving (4 Credits)
Prerequisite: CPSC 110 or CPSC 219 or successful completion of the UMW computer science placement exam. Continued coverage of disciplined problem-solving and algorithmic development including emphasis on procedural and data abstraction. Topics include elementary data structures such as arrays, files, and classes. The notions of data modeling and the linking of data type definitions with their associated operations is introduced. Study of program design, coding, debugging, testing, and documentation in a higher level language that supports the object-oriented paradigm. Intended for students who have had previous programming experience.

CPSC 225 - Software Development Tools (1 Credits)
Prerequisites: CPSC 220. This course provides a practical introduction to using common software developments tools. Topics will include using the Unix command line, files and permissions, managing processes, the vim text editor, version control, and writing shell scripts.

CPSC 240 - Object-oriented Analysis and Design (4 Credits)
Prerequisite: CPSC 220 (grade of C or better). Theory and practice of the object-oriented software development paradigm including abstraction, encapsulation, inheritance, polymorphism, aggregation, visibility, modeling notations, and design patterns. Also covers issues in collaborative software development including communication, code sharing, diversity, and inclusion. Students work in teams to develop collaborative software solutions an object-oriented language.

CPSC 270 - Introductory Special Topics in Computer Science (3 Credits)

CPSC 284 - Applied Discrete Mathematics (4 Credits)
Prerequisites: CPSC 110, CPSC 219, or CPSC 220, or successful completion of the UMW computer science placement exam. Designed to prepare beginning Computer Science majors for advanced study by emphasizing the components of Discrete Mathematics especially related to Computer Science. Topics include systems, logic, methods of proof, counting techniques, mathematical induction, sets, relations, functions, vectors, matrices, graphs and trees.

CPSC 302 - Computer Ethics (3 Credits)
Prerequisite: CPSC 110 or 220. An examination of issues and events related to ethics, professional conduct and social responsibility as they apply to the field of Computer Science. Includes study of ethical responsibilities and behaviors appropriate for computer scientists.

CPSC 305 - Computer Systems and Architecture (4 Credits)
Prerequisites: CPSC 225, a grade of C or better in CPSC 240, and either CPSC 284 or MATH 201. This course examines the basic operation of computing systems. It takes a bottom-up approach covering each major component of such systems including hardware, logic circuit design, CPU instruction sets, assemblers, and compilers. Students will gain experience programming in assembly language and C.

CPSC 310 - Computer Information Systems (4 Credits)
Prerequisite: CPSC 220. This course introduces the student to the use and implications of information technology in the business environment. This course covers such topics as data management, networks, analysis and design, computer hardware and software, decision support systems, database management systems, transaction processing systems, executive information systems, and expert systems. It also provides activity with computer-based and non-computer-based problems/cases and includes real-world programming projects that are implemented using a high-level programming language.

CPSC 318 - System and Network Administration (4 Credits)
Prerequisite: CPSC 225. A hands-on course on the fundamentals of system and network administration with a focus on proper design and management for ensuring system and network security.

CPSC 326 - Theoretical Foundations of Computing (4 Credits)
Prerequisites: CPSC 240 and either CPSC 284 or MATH 201. Covers structures and concepts relating to the underlying theory of computation and mathematical models of actual physical processes. Also covers a repertoire of advanced algorithms for data processing, and the asymptotic analysis of those algorithms to describe their running time and space requirements. Topics may include formal languages, automata theory, Turing machines, the halting problem, NP completeness, searching and traversal algorithms, dynamic programming, compression algorithms, and random number generation.

CPSC 340 - Data Structures and Algorithms (4 Credits)
Prerequisite: CPSC 225, a grade of C or better in CPSC 240, and either CPSC 284 or MATH 201. Continued study of data modeling and incorporation of abstract data types including linked lists, stacks, queues, heaps, trees, and graphs. Study of advanced sorting and searching techniques. Provides experience in the use of algorithm analysis. Continued study of program design, coding, debugging, testing, and documentation in an object-oriented higher level language.

CPSC 345 - Introduction to Computer Security (3 Credits)
Prerequisites: CPSC 220 and 225. Provides an introduction to computer security. The focus is on providing the students a wide overview of current computer security. Topics covered include, but are not limited to, basic cryptography, network security, system security, wireless security and mobile security. In addition, course labs provide a more hands-on, in-depth exploration of specific topics.

CPSC 350 - Applications of Databases (4 Credits)
Prerequisite: CPSC 225 and grade of C or better in CPSC 240. Presents basic techniques for the design and implementation of database-driven web applications. Topics include the design of relational and NoSQL databases and scaling techniques such as the use of load balancing and distributed systems. Programming intensive using a dynamic high-level general-purpose language.

CPSC 370 - Special Topics (1-4 Credits)

CPSC 391 - Special Projects in Computer Science (1-4 Credits)
Prerequisite: Permission of the instructor. Intensive individual investigation of significant research problem under the direction of a faculty member. GPA and course prerequisites apply.

CPSC 401 - Organization of Programming Languages (3 Credits)
Prerequisites: CPSC 326 and 340. A course in programming language construction and design emphasizing the run-time behavior of programs. Alternative implementations of programming language constructs are considered. Techniques for language definition may also be discussed.

CPSC 405 - Operating Systems and Systems Programming (4 Credits)
Prerequisites: CPSC 305 and CPSC 340. This course examines the abstractions above the hardware that make a computer usable to both programmers and users. These abstractions include processes, context switching, concurrent programming, semaphores, virtual addressing, transactions, access control, and virtualization. Many of these abstractions are the foundation for operating systems kernel development. The abstractions are also applicable to any large-scale programming project. Programming intensive.
CPSC 414 - Network Principles & Applications (3 Credits)
Prerequisite: CPSC 220 and CPSC 225. This course provides an introduction to the basic principles of networking. Topics covered in the course include: network topologies, protocols, the OSI Model, methods of data transmission, error detection and correction, TCP/IP, network security and other topics as time permits. This course is theoretical and concept-oriented rather than consisting of the details of specific network packages.

CPSC 415 - Artificial Intelligence (3 Credits)
Prerequisites: CPSC 240 and either CPSC 284 or MATH 201. A survey of current artificial intelligence topics including informed search, knowledge representation, knowledge-based systems, and machine learning. Other topics such as image processing, robotics, and language processing, may also be covered. Artificial intelligence programming projects are required.

CPSC 419 - Data Mining (3 Credits)
Prerequisites: DATA 219, CPSC 219, DSCI 219, or CPSC 220. Practical knowledge of data mining, machine learning, and information retrieval. Students will examine the theoretical foundations of a variety of techniques, gain experience with these techniques using open source software, and learn how to apply them to solve real-world problems. Topics include decision trees, Naive Bayes, probabilistic retrieval models, clustering, support vector machines, approaches to web mining, and scalable machine learning applications. Cross-listed as DATA 419.

CPSC 420 - Modeling & Simulation (3 Credits)
Prerequisite: DATA 219, CPSC 219, DSCI 219, or CPSC 220. A robust introduction to techniques of mathematical modeling and computational simulation applied to practical problems. Topics include system dynamics approaches, discrete-event simulation, and agent-based models. Students complete small projects on topics as diverse as population growth, epidemic transmission, queuing theory, and forest fire outbreaks. Cross-listed as DATA 420.

CPSC 425 - Parallel Computing (3 Credits)
Prerequisite: CPSC 305 or 340. This course provides an introduction to parallel computing, covering topics including parallel architectures, programming techniques and libraries, the study of existing parallel computing systems, and performance analysis. Students will use a variety of hardware to explore current libraries and methods used for parallel programming.

CPSC 430 - Software Engineering (4 Credits)
Prerequisite: CPSC 340 and 350. Techniques for modeling, designing, implementing, and managing large-scale computer programs are studied. Studies include software process models, modeling using UML, and application development with a CASE tool. Continued study of issues in collaborative software development including communication, code sharing, diversity and inclusion. Students work in groups and apply the techniques studied to semester-long projects.

CPSC 435 - Advanced Cybersecurity (3 Credits)
Prerequisites: CPSC 225, MATH 253, and CPSC 345 or MIST 411. CPSC 435 explores more advanced cybersecurity related topics including but not limited to: Data security and forensics, component security, system security, and human security.

CPSC 440 - Game Programming (3 Credits)
Prerequisite: CPSC 340. Student will design, develop, and implement computer games that involve real-time, even-driven, and multimedia programming techniques. Students learn the history of computer games and the elements of video game design and architecture.

CPSC 444 - 3D Computer Graphics (3 Credits)
Prerequisite: CPSC 340. The study of three-dimensional modeling involving the use of light, color, texture and transformation; visible surface detection; parallel and perspective projections; clipping algorithms.

CPSC 445 - Software Security (3 Credits)
Prerequisite: CPSC 345 or MIST 411. A course on the intersection of software and information security. A programming intensive course. Topics include but are not limited to: Programming flaws, causes, identification, exploitation and prevention; malicious software, development, identification, and prevention; software fuzzing and other flaw identification and testing methods.

CPSC 448 - Advanced Web Application Development (3 Credits)
Prerequisite: CPSC 350. An examination and application of contemporary software technologies focused on providing Web-based services and applications. Special emphasis on distributed systems that have cooperating client-side and server-side components.

CPSC 470 - Selected Topics in Computer Science (1-4 Credits)
Prerequisite: Specified by Instructor. Treatment of selected topics in Computer Science. Most recently this has included topics such as Cloud Computing, Animation, and Information System Security. May be repeated for credit with a change in topic.

CPSC 491 - Individual Study in Computer Science (1-4 Credits)
Individual study under the direction of a member of the department. Minimum GPA and course prerequisites apply. May be repeated for credit with a change in topic. Two semesters of 3-credits of study required for graduation with Departmental Honors.

CPSC 492 - Individual Study (1-3 Credits)
Individual study under the direction of a member of the department. Minimum GPA and course prerequisites apply. May be repeated for credit with a change in topic. Two semesters of 3-credits of study required for graduation with Departmental Honors.

CPSC 499 - Internship (1-12 Credits)
Supervised off-campus experience, developed in consultation with the department. Only 3 credits may count toward the major and minimum gpa and course prerequisites apply.

Cybersecurity (CYBR)

CYBR 491 - Individual Study in Cybersecurity (3 Credits)
Prerequisite: Department Permission. Individual study in cybersecurity under the direction of a faculty member in an affiliated department.

CYBR 499 - Internship in Cybersecurity (1-4 Credits)
A supervised work experience in a sponsoring organization developed with, and under the supervision of, a department faculty member. Only 3 credits may count towards the major.

Dance (DANC)

DANC 121A - Beginning Ballet (1 Credits)
For students satisfying the physical education requirement. S/U credit only.

DANC 122A - Beginning Ballet (1 Credits)
Prerequisite: DANC 121A or permission of instructor. Classical Ballet technique for the beginning student, emphasizing vocabulary, alignment, and precision of movement. For students satisfying the physical education requirement. S/U credit only.
DANC 123A - Beginning Modern Dance (1 Credits)
For students satisfying the physical education requirement. S/U credit only.

DANC 124A - Beginning Modern Dance (1 Credits)
Prerequisite: DANC 123A or permission of instructor. Introduction to the technique of modern dance with a focus on breath, alignment, balance, and flexibility. For students satisfying the physical education requirement. S/U credit only.

DANC 141 - Beginning Jazz (1 Credits)
For students satisfying the physical education requirement. S/U credit only.

DANC 142 - Beginning Jazz (1 Credits)
Prerequisite: DANC 141 or permission of instructor. Introduction to jazz technique through an exploration of alignment, strength, lyricism, and rhythm. For students satisfying the physical education requirement. S/U credit only.

DANC 225 - Summer Workshop (4 Credits)
An intensive course focused on the production of plays and musicals for the student interested in developing professional skills in the theatre. Crosslisted as THEA 225. May not be used to satisfy physical education requirement.

DANC 226 - Summer Workshop (4 Credits)
An intensive course focused on the production of plays and musicals for the student interested in developing professional skills in the theatre. Crosslisted as THEA 226. May not satisfy the physical education requirement.

DANC 243 - Dance Improvisation (3 Credits)
Exploration of spontaneous dance composition through manipulation of spatial, temporal, and dynamic qualities of movement.

DANC 301 - Intermediate Ballet (2 Credits)
Prerequisite: DANC 122A or permission of instructor. Ballet as a discipline, emphasizing exactness and precision of line, creative expression, and historical reference.

DANC 302 - Intermediate Ballet (2 Credits)
Prerequisite: DANC 301 or permission of instructor. Ballet as a discipline, emphasizing exactness and precision of line, creative expression, and historical reference.

DANC 303 - Intermediate Modern Dance (2 Credits)
Prerequisite: DANC 124A or permission of instructor. Study of the various techniques emphasizing alignment, strength, flexibility, and the aesthetic elements of dance.

DANC 304 - Intermediate Modern Dance (2 Credits)
Prerequisite: DANC 303 or permission of instructor. Study of the various techniques emphasizing alignment, strength, flexibility, and the aesthetic elements of dance.

DANC 305 - Intermediate Jazz (2 Credits)
Prerequisite: DANC 142 or permission of instructor. Study of jazz dance techniques and exploration of movement as related to jazz music.

DANC 306 - Intermediate Jazz (2 Credits)
Prerequisite: DANC 305 or permission of instructor. Study of jazz dance techniques and exploration of movement as related to jazz music.

DANC 491 - Individual Study (1-3 Credits)
Research, choreography, or composition of an approved creative project. By permission of the department.

DANC 492 - Individual Study (1-3 Credits)
Research, choreography, or composition of an approved creative project. By permission of the department.

DANC 499 - Internship (1-12 Credits)
Supervised, off-campus experience, developed in consultation with the department.

Data Science (DATA)

DATA 101 - Introduction to Data Science (3 Credits)
A hands-on introduction to the field of Data Science and its applications. Covers a wide range of topics to provide an overview of the use of data in different fields. Provides hands-on practice with basic tools and methods of data analysis. Prepares students to use data in their field of study and in their work and to effectively communicate quantitative findings. Cross-listed as DSCI 101.

DATA 219 - Foundations for Data Science (3 Credits)

DATA 352 - Analytics I: Predictive Models (3 Credits)
Prerequisite: STAT 180 or equivalent. This course will introduce students to data visualization methods as well as essential predictive modeling approaches widely used in analytics practice today. Beginning with a foundation in inferential statistics, the course will cover regression, classification, time series, and clustering models. The use of visualization both to explore data and to create narratives around data will also be emphasized.

DATA 353 - Analytics II: Optimization Models (3 Credits)
Prerequisite: STAT 180 or equivalent. This course will introduce students to data visualization methods as well as essential predictive modeling approaches widely used in analytics practice today. Beginning with a foundation in inferential statistics, the course will cover regression, classification, time series, and clustering models. The use of visualization both to explore data and to create narratives around data will also be emphasized.

DATA 370 - Special Topics in Data Science (3 Credits)
Prerequisite: Specified by Instructor. Treatment of selected topics in Data Science. May be repeated for credit with a change in topic.

DATA 401 - Applied Machine Learning (3 Credits)
Prerequisite: Grade of C or better in CPSC 220 or DSCI/CPSC 219 or equivalent. This course develops an overview of the challenges of developing and applying analytics for insight and decision making. Examples and cases will come from customer relation management, price modeling, social media analytics, location analysis and other business domains. Cross-listed as DSCI 401.

DATA 402 - Analytics Applications and Development (4 Credits)
Prerequisite: Grade of C or better in CPSC 220 or DSCI/CPSC 219 or equivalent. A course in programming and data manipulation techniques for constructing analytics-based applications. Topics include SQL or no-SQL databases, using web service API's to acquire data, introduction to Hadoop and MapReduce, and use of third-party analytic component API's. Course previously taught as BUAD 400. Cross-listed as DSCI 402.
DATA 419 - Data Mining (3 Credits)
Prerequisites: DATA 219, CPSC 219, DSCI 219, or CPSC 220. Practical knowledge of data mining, machine learning, and information retrieval. Students will examine the theoretical foundations of a variety of techniques, gain experience with these techniques using open source software, and learn how to apply them to solve real-world problems. Topics include decision trees, Naïve Bayes, probabilistic retrieval models, clustering, support vector machines, approaches to web mining, and scalable machine learning applications. Cross-listed as CPSC 419.

DATA 420 - Modeling and Simulation (3 Credits)
Prerequisite: DATA 219, CPSC 219, DSCI 219, or CPSC 220. A robust introduction to techniques of mathematical modeling and computational simulation applied to practical problems. Topics include system dynamics approaches, discrete-event simulation, and agent-based models. Students complete small projects on topics as diverse as population growth, epidemic transmission, queuing theory, and forest fire outbreaks. Cross-listed as CPSC 420.

DATA 491 - Indiv Study in Data Science (1-4 Credits)
Prerequisite: CPSC 219, DATA 219, or DSCI 219. Individual study in Data Science under the direction of a faculty member in an affiliated department.

Decision Sciences (DSCI)

DSCI 101 - Introduction to Data Science (3 Credits)
A hands-on introduction to the field of Data Science and its applications. Covers a wide range of topics to provide an overview of the use of data in different fields. Provides hands-on practice with basic tools and methods of data analysis. Prepares students to use data in their field of study and in their work and to effectively communicate quantitative findings. Cross-listed as DATA 101.

DSCI 219 - Foundations for Data Science (3 Credits)

DSCI 259 - Applied Statistics and Business Research (3 Credits)
Prerequisite: STAT 180 or similar statistics course. This course introduces students to the scientific method to facilitate their understanding of what constitutes good and bad research and enable them to design and conduct research studies. In addition, the course provides students with skills necessary to analyze, synthesize and evaluate statistical information in order to make informed and appropriate decisions in the workplace and to prepare students for research courses in graduate school. Students may elect to conduct the group project on an individual basis to also complete the university's learning requirement.

DSCI 352 - Analytics I: Predictive Models (3 Credits)
Prerequisite: STAT 180 or equivalent; and College of Business major or Data Science minor or permission of the Associate Dean for Faculty. This course will introduce students to data visualization methods as well as essential predictive modeling approaches widely used in analytics practice today. Beginning with a foundation in inferential statistics, the course will cover regression, classification, time series, and clustering models. The use of visualization both to explore data and to create narratives around data will also be emphasized.

DSCI 353 - Analytics II: Optimization Models (3 Credits)
Prerequisite: DSCI 352, MIST 201 or equivalent and STAT 180 or similar statistics course; and College of Business major or Data Science minor or permission of the Associate Dean for Faculty. This course introduces a variety of Management Science models for use in analysis of business problems. A computer software package provides the computational basics for case analysis of problems in linear programming, inventory, waiting lines, PERT/CPM, and simulation. Cross-listed as DATA 353.

DSCI 363 - Operations Management (3 Credits)
Prerequisite: DSCI 353 or equivalent; and business administration major or permission of the Associate Dean for Faculty. Operations management is an area of business concerned with the production of goods and services. It involves the study of concepts, theories and techniques relating to the operations functions in both manufacturing and service organizations. Lectures, discussions, and case studies are used to provide a comprehensive knowledge of the theories, current practices, and trends in several topical areas of operations management. Quantitative tools of analysis used to support decision making in the various operations management are surveyed.

DSCI 401 - Applied Machine Learning (3 Credits)
Prerequisite: Grade of C or better in CPSC 220 or DSCI 219 / CPSC 219 or equivalent; and College of Business major or Data Science minor or permission of the Associate Dean for Faculty. This course provides an introduction to modern machine learning methods with an emphasis on application. Traditional algorithms for classification, clustering, and regression are covered as well as model development and performance evaluation. Select deep learning algorithms, including convolutional and LSTM networks are also covered. Examples will come from customer behavior modeling.

DSCI 402 - Analytics Applications and Development (4 Credits)
Prerequisite: Grade of C or better in CPSC 220 or DSCI 219 / CPSC 219 or equivalent. A course in programming and data manipulation techniques for constructing analytics-based applications. Topics include SQL or no-SQL databases, using web service APIs to acquire data, introduction to Hadoop and MapReduce, and use of third-party analytic component API's. Cross-listed as DATA 402. Course previously taught as BUAD 400.

Digital Studies (DGST)

DGST 101 - Introduction to Digital Studies (3 Credits)
Introduces an interdisciplinary approach to using technology and specifically provides a foundation for the Digital Studies Minor. Coursework may include digital approaches to creativity, historiography, media analysis and thinking critically about and through digital culture.

DGST 201 - Tinkering, Hacking, and Making (3 Credits)
This course introduces students to the process of making, from initial design to the finished product, and to the emerging maker culture. Students are introduced to a variety of tools and practices for the development and making of objects using innovative software and hardware.

DGST 301 - Special Topics in Digital Studies (3 Credits)
Variable topics in digital culture, digital creativity, or digital methodology. Consult the Schedule of Courses for specific course titles.

DGST 395 - Applied Digital Studies (3 Credits)
Prerequisite: DGST 101. Apply the skills and methodologies developed in the Digital Studies curriculum toward larger-scale, self-designed digital projects that contribute meaningfully to some cultural field, academic discipline, social issue, or other research question.
DGST 483 - Digital Project Consulting Practicum (1 Credits)
Students in the course will develop their skills with a variety of digital tools and technologies used at the University for the purpose of providing peer support on digital projects. Students will also receive instruction in effective tutoring techniques and creating technical documentation and support materials. No more than 4 credits of DGST 483 may count toward the 120 hours required for graduation; three may be counted in the Digital Studies minor.

### Economics (ECON)

**ECON 100** - Economics of Social Issues (3 Credits)
This course surveys contemporary social issues, while focusing on economic aspects and using economic approaches. It is designed to provide a broad exposure to economics for students who are not planning to major in economics or related fields, such as business administration, international affairs, or environmental science.

**ECON 201B** - Principles of Macroeconomics (3 Credits)
One half of the two-semester introduction to economics and economic theory in the context of a general education course. Survey of economic activity in the economy as a whole, focusing on such issues as economic growth and business cycles, unemployment, and inflation.

**ECON 202B** - Principles of Microeconomics (3 Credits)
One half of the two-semester introduction to economics and economic theory in the context of a general education course. Economic analysis of households, firms, and the public sector, focusing on issues such as competition, monopoly power and antitrust, poverty and labor markets, and environmental problems.

**ECON 300** - Introduction to Economic Analysis (3 Credits)
Prerequisites: ECON 201B and ECON 202B, and economics major or minor or applied economics major status. The first course in a three course sequence (including ECON 361A and ECON 462) on the development of research skills in economics, students will be introduced to the tools of economic analysis, including how to develop a good research question, how to do a literature search in economics, how to find and collect economic data, and how to integrate economic theory and empirical analysis, as well as oral and written presentation skills.

**ECON 301A** - Mathematical Economics (3 Credits)
Prerequisites: ECON 201B and ECON 202B. Use of mathematical methods in economic analysis. Topics will include equilibrium analysis, comparative statics, and optimizations.

**ECON 302** - Managerial Economics (3 Credits)
Prerequisite: ECON 201B and 202B. Application of economic analysis in formulating managerial decisions drawing upon the theoretical foundations of the concepts of demand, cost, production, profits, and competition, with special emphasis on case studies.

**ECON 303** - Microeconomics (3 Credits)
Prerequisites: ECON 201B and ECON 202B. Systematic study of the role of the price system in organizing economic activity and an evaluation of its effectiveness.

**ECON 304** - Macroeconomics (3 Credits)
Prerequisites: ECON 201B and ECON 202B. Analysis of the determinants of macroeconomic activity including national income, employment, and the price level. Investigation of the capabilities and limits of government stabilization and growth policies.

**ECON 311B** - Industrial Economics (3 Credits)
Prerequisites: ECON 201B and ECON 202B. Case study analysis of different types of structural organization, behavior, and performance of industry.

**ECON 312** - Government and Business (3 Credits)
Prerequisites: ECON 201B and ECON 202B. The rationale for and impact of government participation in the marketplace. Topics include antitrust laws and policies and regulation.

**ECON 321** - Money and Banking (3 Credits)
Prerequisites: ECON 201B and ECON 202B. Analysis of financial instruments, markets and intermediaries and monetary policy.

**ECON 322A** - Investment Analysis (3 Credits)
Prerequisites: ECON 201B and ECON 202B. Introduction to portfolio theory and the evaluation of investment alternatives. Topics include the stock market and the valuation of securities.

**ECON 331A** - Environmental and Resource Economics (3 Credits)
Prerequisites: ECON 201B and ECON 202B. The application of economic methods to analysis of environmental and natural resource issues. Public policy issues will also be considered.

**ECON 333** - Introduction to Game Theory (3 Credits)
Prerequisites: ECON 201B and ECON 202B. Introduction to the theory of games as applied to the study of economics, business and international affairs. Topics include games of complete and incomplete information and non-cooperative games and cooperative games.

**ECON 341A** - Public Finance (3 Credits)
Prerequisites: ECON 201B and ECON 202B. An economic analysis of political decision-making, and the impact of government spending and taxation on the allocation of resources and distribution of income.

**ECON 342** - Law and Economics (3 Credits)
Prerequisites: ECON 201B and ECON 202B. Economic analysis of legal rules and institutions.

**ECON 351C** - Poverty, Affluence, and Equality (3 Credits)
Prerequisites: ECON 201B and ECON 202B. Economic analysis of the distributions of income and wealth, poverty, and discrimination.

**ECON 352** - Labor Economics (3 Credits)
Prerequisites: ECON 201B and ECON 202B. Economics of labor force participation, occupational choice, education and training, mobility, compensation systems, productivity and unemployment. Specific topics at discretion of instructor.

**ECON 354A** - Urban and Regional Economics (3 Credits)
Prerequisites: ECON 201B and ECON 202B. An economic analysis of contemporary urban topics including location theory and economic structure of cities, growth and development of central cities and ghettos, housing, transportation, poverty, crime and fiscal issues.

**ECON 361A** - Introductory Econometrics (3 Credits)
Prerequisites: ECON 201B, ECON 202B and ECON 300. ECON 361A is the second course of a three-course sequence (including ECON 300 and ECON 462) on the development of research skills in economics. The course provides students with a more sophisticated understanding of the statistical methods used in economics and expects students to produce more sophisticated economic research.

**ECON 374** - History of Economic Thought (3 Credits)
Prerequisites: ECON 201B and ECON 202B. A survey of economic analysis from antiquity to the 21st century. Focus on the 18th and 19th centuries.
ECON 375 - American Economic History (3 Credits)
Prerequisites: ECON 201B and ECON 202B. The study of factors contributing to economic development of the United States, including the historical growth of economic institutions such as agriculture, banking, labor unions, and manufacturing.

ECON 382 - International Trade (3 Credits)
Prerequisites: ECON 201B and ECON 202B. An introduction to international trade, the balance of payments, exchange rate determination, and related issues of international economic policy.

ECON 384 - Economic Development (3 Credits)
Prerequisites: ECON 201B and ECON 202B. An introduction to theories of economic development. Focus on current problems of developing countries.

ECON 386 - International Finance (3 Credits)
Prerequisite: ECON 201B, ECON 202B. Survey of the major topics in contemporary international finance: balance of payments, international capital flows, foreign exchange markets and exchange rate determination, international monetary system, monetary union, global market place, and financial crises.

ECON 405 - Contemporary Economic Issues (3 Credits)
Prerequisites: ECON 201B, ECON 202B, ECON 303 and ECON 304. Discussion of contemporary issues in economic theory and policy.

ECON 428 - Economics of Multinational Economics of Multinational Corporations (3 Credits)
Prerequisite: ECON 201B and ECON 202B. Introduction to topics on Foreign Direct Investment (FDI) and Multinational Corporation (MNC). Topics include major determinants of FDI and various economic effects of FDI by the MNCs.

ECON 460 - Applied Economic Analysis (3 Credits)
Prerequisites: ECON 300 and ECON 302. Development of research skills and their application to markets, industries, and firms. Focus on independent research project. This course serves as a capstone to the study of applied economics at the University.

ECON 462 - Advanced Economic Analysis (3 Credits)
Prerequisite: ECON 201B, ECON 202B, ECON 300, and ECON 361A. ECON 462 is the third course in a three-course sequence (along with ECON 300 and ECON 361A) in the development of research skills in economics. This course has the highest expectations with respect to mastery of statistical methods in economic research and the quality of research produced. This course serves as a capstone to the study of economics at the University.

ECON 485 - New Institutional Economics (3 Credits)
Prerequisites: ECON 201B and ECON 202B. Comparison of the institutions that govern the production and distribution of goods and services in different countries. Focus on the evolution of institutions and their influence on economic performance.

ECON 488 - Seminar in Economics (3 Credits)
Prerequisites: ECON 201B and ECON 202B. Special topics of interest to faculty and students.

ECON 490 - Experiential Learning (3 Credits)
Prerequisites: ECON 201B and ECON 202B and permission of the instructor. A faculty supervised experience designed to challenge students to go outside of the bounds of the typical classroom.

ECON 491 - Individual Study in Economics (1-6 Credits)
Prerequisites: ECON 201B and ECON 202B. Directed individual research on an approved topic in economics. Required for honors in economics.

ECON 492 - Individual Study (3 Credits)
Directed individual research on an approved topic in economics. Required for honors in economics.

ECON 499 - Internship (1-12 Credits)
Prerequisites ECON 201B and ECON 202B. Supervised off-campus experience, developed in consultation with the department.

ED: Special Education (EDSE)

EDSE 250 - Survey of Special Education: Characteristics and Legal Issues (3 Credits)
Prerequisites: EDUC 206 and EDUC 207; Corequisites: EDUC 290 and EDUC 291. This course presents an overview of the historical basis and regulatory requirements related to special education, including the individual education plan (IEP) as a legal document and the rights and responsibilities of parents, teachers, and schools. The characteristics of elementary and secondary learners with disabilities and their educational and medical implications are examined, as well as the cultural, familial, and ethical issues involved.

EDSE 303 - Understanding Autism (3 Credits)
Prerequisite: EDUC 203 or 204. This 3-credit course will teach students about the characteristics of individuals diagnosed with disabilities that fall under the category of Autism Spectrum Disorders (ASDs). This course will include a discussion of the core behavioral and secondary characteristics of autism as well as the known physiological components associated with these ASDs. Students will learn about the prevalence as well as the common theories on etiologies. Dual diagnoses, co-morbidity, educational concerns and medical issues will also be discussed. Additionally, a review of the characteristics across the lifespan, from infancy and toddler-hood through adulthood will be provided. Family concerns and considerations will be discussed in the context of age, development, and need for support. Field based experience required.

EDSE 305 - Mathematics Instruction for Special Education (3 Credits)
Prerequisites: EDUC 351A and EDUC 385 or EDUC 388. This course prepares pre-service teachers to apply evidence-based teaching and assessment practices for the instruction of Virginia Mathematics Standards of Learning (SOL) content strands at the elementary and secondary levels to students with disabilities.

EDSE 324 - Transition Planning for Students with Disabilities (3 Credits)
Prerequisites: EDUC 351A and EDUC 385 or EDUC 388. This course prepares students to work with K-12 students with varying disabilities who are transitioning throughout the educational experience. These skills include consultation, case management and collaboration with general educators, service providers and parents. Additional topics include postsecondary education, training, employment, and independent living skills in relationship to technology, community resources, self-advocacy, self-determination, guardianship, and legal requirements.

EDSE 421 - Language and Literacy for Special Populations (3 Credits)
Prerequisites: EDUC 351A and EDUC 385 or EDUC 388. The study of language development provides a context for understanding and diagnosing language and reading problems. Topics include normal and abnormal language development patterns, basic reading skills, explicit phonics instruction, multisensory structured language programs, comprehension, assessment and evaluation, and effective language, reading and writing instructional strategies for students with disabilities. Field experience required. This course is cross-listed as EDSE 521.
EDSE 434 - Assessment, Evaluation, and Instructional Planning (3 Credits)
Prerequisite: EDSE 305 and EDSE 421. This course examines a variety of formal and informal approaches to assessing and evaluating student learning and behavior. Experiences are provided in selecting, administering, and interpreting norm referenced, criterion referenced, and curriculum-based measures; participating in eligibility decisions and response to intervention programs; developing instructional plans; and monitoring the progress of students with disabilities in the K-12 setting. This course is cross listed as EDSE 534.

EDSE 439 - Supporting Students with Disabilities in the General Curriculum (3 Credits)
Prerequisite: EDSE 434. Corequisite: EDSE 450. This course prepares students to work with K-12 students with disabilities who are accessing the general curriculum across the K-12 grade levels. Topics include legal and regulatory requirements in special education, instructional planning, individualized education planning, assessment and evaluation, collaboration, and co-teaching.

EDSE 450 - Teaching Lab: Special Education (1 Credit)
Prerequisites: EDSE 434. Corequisite: EDSE 439. In this teaching lab course, students will develop and demonstrate proficiency in monitoring student progress, using educational technology, evaluating practice, and reflecting deeply on their professional teaching practices in preparation for the full-time internship. Students will develop and teach four lesson plans for a minimum of five hours of instructional time, one of which will be video recorded, and reflect on their implementation.

Education (EDUC)

EDUC 101 - How to Succeed in Coll, Part I (2 Credits)
Introduction to the college experience focusing on strategies for success during the first year and beyond. This course is open only to first year students who are members of the Summer Transition Program.

EDUC 102 - How to Succeed in Coll, Part II (1 Credit)
Introduction to the college experience focusing on strategies for success during the first year and beyond. This course is open only to first year students who are members of the Summer Transition Program.

EDUC 206 - Foundations of Education (3 Credits)
Co-requisite: EDUC 207. This course serves as an introduction to the field of education. It focuses on the historical, philosophical, and sociological foundations of public education in the United States and provides an overview of curriculum and instructional planning.

EDUC 207 - Development of the Learner and Instructional Practices (3 Credits)
Co-requisite: EDUC 206. This course examines the range of human development from early childhood through adolescence, including the physical, social, emotional, and cognitive development of children and the ability to use this understanding to plan curriculum and develop instructional strategies. Educational theorists will be explored in relation to instructional practices.

EDUC 272 - Special Topics in Education (1 Credit)
Topics in education chosen according to timely interest and designed for students not necessarily in the education program. Topics will vary. May be repeated with different topics.

EDUC 290 - Teaching Linguistically and Culturally Diverse Students (3 Credits)
Prerequisite: EDUC 206 and EDUC 207. Co-requisite: EDUC 291 and EDUC 250. In EDUC 290 students will learn instructional methods for teaching English learners in elementary and secondary general education classrooms. This course combines theory, research, and practice to enable participants to develop the knowledge to work with students who function in more than one language and across cultures.

EDUC 291 - Practicum in Language and Learning Diversity (1 Credit)
Prerequisite: EDUC 206 and EDUC 207. Co-requisite: EDUC 290 and EDUC 250. Off-campus experience in a K-12 school setting exploring the teaching and assessment of learners with linguistic and learning differences. Prospective teachers develop observation and reflection skills necessary for meeting the academic and behavioral needs of students in inclusive classrooms.

EDUC 303 - Scientific Inquiry and Instructional Technology (3 Credits)
Prerequisite: EDUC 351A and EDUC 388. Co-requisite: EDUC 451. Planning and instructional skills for teaching science in the elementary classroom. Provides students training and practice in using an assortment of developmentally appropriate teaching methods for elementary level science and technology. Also provides students with an understanding of the current Virginia Standards of Learning for Elementary Science and Computer Science and how instruction may be designed to meet the requirements of those Standards. Field experience required.

EDUC 305 - Mathematical Concepts and Methods II (3 Credits)
Prerequisites: All required courses in phases I, II and III of the B.S. Ed. program and MATH 204. Mathematical concepts and methods of teaching for the elementary school. Topics include geometry, measurement, probability and statistics, with a focus on differentiation.

EDUC 311 - Literature and the Arts in the Elementary Classroom (3 Credits)
Prerequisite: Prerequisite: EDUC 351A and EDUC 388. Educational approaches that encourage children's expressive development through the integration of literature, the arts, and media throughout the elementary curriculum. Students will read a variety of genres of children's literature and learn basic information about dance, drama, visual arts, and music, as well as strategies for teaching science, math, social studies, reading and language using children's literature and these art forms.

EDUC 351A - Instructional Design and Assessment (4 Credits)
Prerequisite: Prerequisite: EDUC 290, EDSE 250, and EDUC 291. This course provides a foundation in interpreting curriculum and planning instruction and assessment in K-12 classrooms, with a focus on evidence-based practices. 30-hour field experience required.

EDUC 371 - Language Development and Literacy Instruction: Primary (3 Credits)
Prerequisite: EDUC 351A and EDUC 388. Study of language development and learner-sensitive approaches to early childhood literacy instruction for emerging readers. Focus is on teaching and assessment strategies for literacy instruction in the primary grades (K-2).
EDUC 373 - Language Development and Literacy Instruction: Intermediate (3 Credits)
Prerequisites: EDUC 351A, EDUC 371, and EDUC 388. Focus is on teaching and assessment strategies for literacy instruction in the upper elementary grades (3-6). Course emphasizes how to effectively utilize literacy workstations, guided reading, word study, spelling instruction and vocabulary exploration to optimize children’s learning and development across the curriculum, and addresses the language and literacy needs of students who do not speak English as their first language. Field experience required.

EDUC 384 - Introduction to Special Education: Secondary (3 Credits)
Prerequisite: EDUC 203 or 204. The characteristics of learners with disabilities in secondary classrooms and their educational implications are examined as well as the cultural, familial, and ethical issues involved. The course also presents an overview of the regulatory and legal requirements related to special education, including the individual education program (IEP) as a legal document and the rights and responsibilities of parents, teachers and schools.

EDUC 385 - Managing the Secondary Classroom (3 Credits)
Prerequisite: EDUC 290, EDSE 250, and EDUC 291. Teacher candidates will learn a variety of approaches to secondary classroom management. Emphasis is on establishing a classroom community, working with challenging adolescents, and communicating with parents.

EDUC 386 - Elementary Social Studies Methods (3 Credits)
Prerequisite: EDUC 351A and EDUC 388. Teacher candidates will learn the major orientations to the social studies and their corresponding methods. Emphasis is on researching, writing, and implementing lessons that teach for understanding and inspire critical thinking.

EDUC 387 - Introduction to Special Education: Elementary (3 Credits)
Prerequisite: EDUC 203 or 204. The characteristics of learners with disabilities in elementary classrooms and their educational implications are examined, as well as the cultural, familial, and ethical issues involved. The course also presents an overview of the regulatory and legal requirements related to special education.

EDUC 388 - Managing the Elementary Classroom (3 Credits)
Prerequisite: EDUC 290, EDSE 250, and EDUC 291. Teacher candidates will learn a variety of approaches to elementary classroom management. Emphasis is on establishing a classroom community, working with challenging children, and communicating with parents.

EDUC 415 - Literacy and Language Across the Curriculum (3 Credits)
Prerequisites: EDUC 351A and EDUC 385 or EDUC 388. All courses in Phases I, II and III for the 4-year Secondary and Pre-K-12 licensure pathways. This course explores reading and language acquisition in the content areas. Emphasis is placed on comprehension skills in all content areas, including a repertoire of questioning strategies, summarizing and retelling skills, and strategies in literal, interpretive, critical, and evaluative comprehension. Students explore strategies to foster appreciation of literature that supports the curriculum. Field experience required. This course is cross-listed with EDCI 515.

EDUC 420D - The Professional Teacher and Critical Issues in Education (3 Credits)
Prerequisites: EDUC 203 or 204, and at least two additional education courses. Prospective teachers become independent, reflective decision makers by critically examining the philosophical, ethical, historical, legal, and social contexts of the American school.

EDUC 451 - Teaching Lab: Elementary (1 Credits)
Prerequisites: EDUC 351A and EDUC 385 or EDUC 388. Co-requisite: EDUC 303. In this teaching lab course, students will develop and demonstrate proficiency in monitoring student progress, using educational technology, evaluating practice, and reflecting deeply on their professional teaching practices in preparation for the full-time internship. Students will develop and teach four lesson plans for a minimum of five hours of instructional time, one of which will be video recorded, and reflect on their implementation.

EDUC 452 - Content-Area Teaching Lab: Secondary, Pre-K-12 (1 Credits)
Prerequisite: EDUC 351A and EDUC 385 or EDUC 388. Co-requisite: EDUC 453 or EDUC 454 or EDUC 455 or EDUC 456 or EDUC 457 or EDUC 458 or EDUC 459. In this teaching lab course, students will develop and demonstrate proficiency in monitoring student progress, using educational technology, evaluating practice, and reflecting deeply on their professional teaching practices in preparation for the full-time internship. Students will develop and teach four lesson plans for a minimum of five hours of instructional time, one of which will be video recorded, and reflect on their implementation.

EDUC 453 - The Teaching of English and Theater Arts (3 Credits)
Prerequisite: EDUC 351A or EDCI 501. In this course students will develop an advanced level of proficiency in the following areas: discipline specific teaching methods and standards, differentiation, assessment strategies, use of technology for instruction, and use of writing as an instructional and assessment tool. Professional organizations and methods to monitor student progress and analyze student data will be introduced. Field experience required. Writing Intensive Course. Cross-listed as EDCI 553 – The Teaching of English and Theater Arts.

EDUC 454 - The Teaching of Foreign Language (3 Credits)
Prerequisite: EDUC 351A or EDCI 502 or EDCI 538. In this course students will develop an advanced level of proficiency in the following areas: discipline-specific teaching methods and standards, differentiation, assessment strategies, use of technology for instruction, and use of writing as an instructional and assessment tool. Professional organizations and methods to monitor student progress and analyze student data will be introduced. Field experience required. Writing Intensive Course. Cross-listed as EDCI 554 – The Teaching of Foreign Language.

EDUC 455 - The Teaching of History and Social Sciences (3 Credits)
Prerequisite: EDUC 351A or EDCI 501. In this course students will develop an advanced level of proficiency in the following areas: discipline-specific teaching methods and standards, differentiation, assessment strategies, use of technology for instruction, and use of writing as an instructional and assessment tool. Professional organizations and methods to monitor student progress and analyze student data will be introduced. Field experience required. Writing Intensive Course. Cross-listed as EDCI 555 – The Teaching of History and Social Sciences.

EDUC 456 - The Teaching of Mathematics and Computer Science (3 Credits)
Prerequisite: EDUC 351A or EDCI 501. In this course students will develop an advanced level of proficiency in the following areas: discipline-specific teaching methods and standards, differentiation, assessment strategies, use of technology for instruction, and use of writing as an instructional and assessment tool. Professional organizations and methods to monitor student progress and analyze student data will be introduced. Field experience required. Writing Intensive Course. Cross-listed as EDCI 556 – The Teaching of Mathematics and Computer Science.
**EDUC 457 - The Teaching of Music (3 Credits)**
Prerequisite: EDUC 351A or EDCI 502 or EDCI 538. In this course students will develop an advanced level of proficiency in the following areas: discipline-specific teaching methods and standards, differentiation, assessment strategies, use of technology for instruction, and use of writing as an instructional assessment tool. Professional organizations and methods to monitor student progress and analyze student data will be introduced. Field experience required. Writing Intensive Course. Cross-listed as EDCI 557 – The Teaching of Music.

**EDUC 458 - The Teaching of Sciences (3 Credits)**
Prerequisite: EDUC 351A or EDCI 501. In this course students will develop an advanced level of proficiency in the following areas: discipline-specific teaching methods and standards, differentiation, assessment strategies, use of technology for instruction, and use of writing as an instructional assessment tool. Professional organizations and methods to monitor student progress and analyze student data will be introduced. Field experience required. Writing Intensive Course. Cross-listed as EDCI 558 – The Teaching of Sciences.

**EDUC 459 - The Teaching of Visual Arts (3 Credits)**
Prerequisite: EDUC 351A or EDCI 502 or EDCI 538. In this course students will develop an advanced level of proficiency in the following areas: discipline-specific teaching methods and standards, differentiation, assessment strategies, use of technology for instruction, and use of writing as an instructional assessment tool. Professional organizations and methods to monitor student progress and analyze student data will be introduced. Field experience required. Writing Intensive Course. Cross-listed as EDCI 559 – The Teaching of Visual Arts.

**EDUC 460 - Internship Seminar: Secondary, Pre-K-12 (3 Credits)**
Prerequisite: EDUC 452, EDUC 415, and EDUC 453 or EDUC 454 or EDUC 455 or EDUC 457 or EDUC 458 or EDUC 459. Co-requisite: EDUC 499. In this seminar course, students will develop and demonstrate proficiency in monitoring student progress, using educational technology, reviewing research, and reflecting deeply on their professional teaching practices in the internship. Students will complete a digital portfolio of artifacts that demonstrate their accumulated skills and knowledge.

**EDUC 461 - Internship Seminar: Elementary (3 Credits)**
Prerequisites: EDUC 206, EDUC 207, EDSE 250, EDUC 290, EDUC 291, EDUC 388, EDUC 351A, EDUC 371, EDUC 311, MATH 204, EDUC 305, EDUC 373, EDUC 303, EDUC 386, and EDUC 451. Co-requisite: EDUC 499. In this seminar course, students will develop and demonstrate proficiency in monitoring student progress, using educational technology, evaluating research, and reflecting deeply on their professional teaching practices in the internship. Students will complete a digital portfolio of artifacts that demonstrate their accumulated skills and knowledge.

**EDUC 499 - Internship (9 Credits)**
Supervised off-campus experience developed in consultation with the department. May not be used to satisfy required professional education coursework. A maximum of three credits may count in the teacher licensure program.

**English (ENGL)**

**ENGL 101 - Writing Workshop (3 Credits)**
Instruction and practice in the fundamental techniques of expository and argumentative writing: organization development coherence research methods mechanics. Frequent workshop approach with group and tutorial work.

**ENGL 200 - News Journalism (3 Credits)**
An introduction to the techniques of newsgathering, including practice in news judgement, interviewing, and writing various kinds of news stories.

**ENGL 202 - Writing Seminar (3 Credits)**
Allows students to hone their writing skills, while focusing on writing in a particular context of interest to them. Topics vary by section; consult Schedule of Courses for specific topics.

**ENGL 203 - Writing with Digital Media (3 Credits)**
A digital writing seminar equipping students with the rhetorical and technical tools to engage in contemporary digital discourse through multimodal composition.

**ENGL 205 - The Art of Literature (3 Credits)**
An introductory course emphasizing the development of the genres of poetry, prose fiction, non-fiction, and drama. Using a historical perspective, students study the role of the reader, the surrounding culture, and the language of the text. The course offers students the tools of critical analysis and encourages the pleasures of close reading and exchange of ideas.

**ENGL 206A - Global Issues in Literature (3 Credits)**
An introductory course exploring multiple perspectives on a selected global theme or issue as expressed in literature. Attending to the pleasures of literature, the role of the reader, the language of the text, and the social context of literature, the course includes both historical and contemporary texts in traditional and non-traditional forms. It explores the contact zone between Anglo European perspectives and disparate world cultures outside Western Europe and North America.

**ENGL 207 - Literature in Performance (3 Credits)**
A performance course designed to enhance the performer's appreciation and understanding of the great literature of the world--poetry, prose, and drama--by translating the printed page into the spoken word. Experience in presenting material to both adults and children.

**ENGL 245 - Introduction to Cinema Studies (3 Credits)**
Equips students to analyze and understand the art of narrative cinema within the Anglophone tradition.

**ENGL 251 - Issues in Literature (3 Credits)**
 Significant literary figures, movements, and topics. Specific topics vary.

**ENGL 252 - Literature and Adaptation (3 Credits)**
An introduction to media studies focusing on literary works that have been adapted in nontextual genres.

**ENGL 253 - Games and Culture (3 Credits)**
A critical exploration of cultural value in video games - - including issues of gender, race, sexuality, class, labor and disability - - and the ways by which contemporary and historical games demonstrate, respond to, or represent those concerns.

**ENGL 254 - The Art of Literature (3 Credits)**
Prerequisite: EDUC 351A or EDCI 502 or EDCI 538. In this course students will develop an advanced level of proficiency in the following areas: discipline-specific teaching methods and standards, differentiation, assessment strategies, use of technology for instruction, and use of writing as an instructional assessment tool. Professional organizations and methods to monitor student progress and analyze student data will be introduced. Field experience required. Writing Intensive Course. Cross-listed as EDCI 557 – The Teaching of Music.

**ENGL 255 - Methods of Advanced Literary Studies (3 Credits)**
An introduction to the techniques of newsgathering, including practice in news judgement, interviewing, and writing various kinds of news stories.
ENGL 301 · Magazine Journalism (3 Credits)
Prerequisite: ENGL 200 or permission of the instructor. Practice in reporting and writing longform magazine stories incorporating multimedia for online audiences.

ENGL 302A · Introduction to Creative Writing (3 Credits)
Prerequisite: ENGL 295 or permission of the instructor. Introduction to writing fiction and poetry. Primary emphasis on developing student's abilities to write creatively, with periodic attention to examples from established writers.

ENGL 302A · Creative Writing: Poetry (3 Credits)
Prerequisite: ENGL 302A or permission of the instructor. An intermediate workshop focused on poetic techniques and writing poetry.

ENGL 305A · Creative Writing: Fiction (3 Credits)
This course offers students of Creative Writing the opportunity to concentrate on the creation of short fiction. Students produce a portfolio of three or four polished short stories and also explore a variety of narrative techniques.

ENGL 306 · Topics in Writing (3 Credits)
Practice in writing in certain styles and forms. Consult Schedule of Courses for specific topics and prerequisites.

ENGL 307 · Writing Studies (3 Credits)
This course takes writing as an academic focus on study. In this advanced course about composition, and the teaching of writing, students are introduced to the history of research and theory related to the writing process and those practices that support novice writers as they develop into more effective writers.

ENGL 308 · Writing Studies and Healing (3 Credits)
Advanced study of composition introducing students to research and theory of writing, with focus on the relationship between writing and healing. Practice in writing for personal, academic, and professional purposes.

ENGL 309 · Chaucer and His Age (3 Credits)
The study of popular literature in England during the middle ages with emphasis on Chaucer’s Canterbury Tales, Anglo-Saxon heroic narrative, Piers Plowman, and the origins of medieval drama.

ENGL 310 · The Courtly Tradition in Medieval Literature (3 Credits)
Development of courtly literature in medieval England, including Chaucer’s Troilus and Cresside, works of the Gawain poet, love lyrics and native Arthurian material.

ENGL 312 · Creative Writing: Poetry (3 Credits)
Prerequisite: ENGL 302A or permission of the instructor. An introduction to writing creative nonfiction. Primary emphasis on developing student’s abilities to write nonfiction creatively, with periodic attention to examples from established writers.

ENGL 313 · Special Topics in Creative Writing (3 Credits)
Prerequisite: ENGL 302A or permission of instructor. Practice in creative writing in various styles, genres, and forms. Consult Schedule of Courses for specific topics.

ENGL 314 · The Literary Journal: Professional Practice in Publishing and Editing (3 Credits)
Prerequisite: ENGL 302A or permission of the instructor. A study of the contemporary national literary journal. Students also design and produce an online journal.

ENGL 318 · Sex, Love, and Power in Renaissance England (3 Credits)
Exploration of sexuality, sex, and gender in the literature and culture of sixteenth-century England. Special attention to the origins of and alternatives to twenty-first century conceptions of sexuality and gender, and to the symbolic and practical roles of sexuality and gender in Elizabethan society.

ENGL 319 · Shakespeare: The Early Plays (3 Credits)
Shakespeare's early development, focusing on the comedies and history plays.

ENGL 320 · Shakespeare: Later Plays (3 Credits)
Shakespeare's later development, focusing on the tragedies, problem plays, and final romances.

ENGL 322 · Seventeenth-Century British Literature (3 Credits)
Studies in the non-dramatic literature of the English Renaissance circa 1600-1667. Substantial discussion of cultural contexts. Authors covered will range from Donne through Marvell.

ENGL 325A · Restoration and Early Eighteenth-Century Literature (3 Credits)
British literature from 1660-1740. Poetry, plays, and novels by Dryden, Behn, Swift, Pope, Defoe, Fieldin, or others. Emphasis on satire and the bility of the novel.

ENGL 326B · Eighteenth-Century British Literature (3 Credits)
Novels, poetry, plays, and nonfiction by such writers as Johnson, Burney, Equiano, Sheridan, Austen, and Blake. Emphasis on cultural controversies and literary experimentation.

ENGL 327 · Jane Austen (3 Credits)
A study of the six great novels. May also include attention to the shorter works, Austen's predecessors, Austen's successors, and/or film adaptations.

ENGL 328 · New World Writing in the Colonial Period (3 Credits)
This course examines writings from North America, South America, and the Caribbean during the period of exploration, settlement, and conquest. Selections range from fifteenth-century European travel accounts to nineteenth-century declarations of national independence. Topics include cultural traditions before European contact, paradigms of New World encounters, race and transculturation, Amerindian and African slavery, and revolutions across the hemisphere.

ENGL 329 · Literature and Nation-Building in the Americas (3 Credits)
This course examines writings from North America, South America, and the Caribbean in relation to the establishment of independent nation-states starting in the late eighteenth century. Topics include the emergence of national literary traditions, Native Americans and the frontier, race and miscegenation, the experience of industrialization, democracy and dictatorship, New World plantation cultures, and the rise of border literature after the U.S.-Mexican War.

ENGL 330 · Hemispheric Fiction of the Global Age (3 Credits)
This course examines the wide cultural impact of modernity and postmodernity on the literatures of North America, South America, and the Caribbean. Topics include the construction of American usable pasts, the impact of immigration into the Americas, environmentalism and multinational capitalism, the emergence of Black cultural and political consciousness, the post-1960s counterculture, aesthetics of technological devastation, and the impact of popular culture on literature.
ENGL 332 - British Romantic Women Poets (3 Credits)
This course proposes an alternative female canon to the male pantheon of poets who traditionally have dominated the study of British literature from 1770-1840. Writers include Joanna Baillie, Anna Barbauld, Felicia Hemans, L.E.L., Caroline Norton, and Charlotte Smith - all of whom were more popularly and/or more critically acclaimed than their now more famous counterparts.

ENGL 335B - British Romantic Literature (3 Credits)
The study of late 18th-early 19th century British literary culture. Explores the revolutionary changes occurring in Britain and examines their impact on canonical writers such as Blake, Wollstonecraft, Coleridge, Shelley, Wordsworth, Burns, and Scott, as well as non-canonical writers whose works had a major influence on the period.

ENGL 336 - British Victorian Literature (3 Credits)
British literature from 1830-1914. Emphasis on to pical focus points such as The Woman Question and imperialism. Writers include E. B. Browning, Dickens, C. Rossetti, Tennyson, and Wilde.

ENGL 338 - British Victorian Novel (3 Credits)
This reading-intensive course will cover writers such as the Brontes, Dickens, Eliot, and Hardy. It also may include significant precursors (such as Austen) and/or successors (such as Ford).

ENGL 340 - Modern British Fiction (3 Credits)
Studies in the forms, themes and politics of British fiction, with special emphasis on the genre of the novel, from approximately 1945 to the present.

ENGL 342 - Contemporary British Fiction (3 Credits)
Studies in the forms, themes and politics of British fiction, with special emphasis on the genre of the novel, from approximately 1945 to present.

ENGL 345 - Film, Text, and Culture (3 Credits)
Advanced study in narrative and non-narrative films, focusing on the analysis of films as texts and in relation to other texts (literary, visual, musical, etc.). Consideration of film text as they originate in, and express, human society.

ENGL 348 - Literature of the Great War (3 Credits)
This class focuses on literary representations of World War One (1914-1918) and its far-reaching effects on individuals, nations, social hierarchies, ideologies, and institutions. Readings by both combatants and non-combatants will cover multiple literary genres and will articulate the public and intimate experience of this conflict.

ENGL 350 - Electronic Literature (3 Credits)
A survey of born digital literature including: hypertext fiction, interactive fiction, playable media, net.art, and other genres of literary work produced and experienced through computers.

ENGL 352 - African American Literature Pre-1900 (3 Credits)
A chronological exploration of poetry, short stories, plays, slave narratives, autobiographies, and other forms of non-fiction written by people of African descent in the United States before 1900. In addition to its primary focus on literature, the course also explores the connections between early African American literature and history, politics, gender, class, race, psychology, an economics.

ENGL 353 - Asian-American Literature (3 Credits)
The study of texts produced by Asian-American authors of diverse national or ethnic backgrounds. Introduces Asian-American literacy criticism and theory.

ENGL 354 - African American Literature Post-1900 (3 Credits)
A chronological exploration of poetry, autobiographies, non-fiction, short stories, novels, plays and neo-slave narratives written by people of African descent in the United States after 1900. In addition to its primary focus on literature, the courses also explores the interconnections between African American literature and history, politics, psychology, popular culture, and economics.

ENGL 355 - American Romanticism (3 Credits)
Expressions of and challenges of 19th-century American romantic ideology in prose and poetry. May include such writers as Emerson, Fuller, Hawthorne, Alcott, Melville, Whitman and Dickinson.

ENGL 356 - American Realism (3 Credits)
Exploration of literary realism in American fiction of the 19th and early 20th centuries. Includes writers across a spectrum of race, gender, class and geogpahical focus, such as Rebecca Harding Davis, Henry James, Charles Chesnutt, Sarah Orne Jewett, and Stephen Crane.

ENGL 357 - Southern Literature (3 Credits)
A representative survey of the literature of the U.S. South from the early nineteenth century until the present.

ENGL 358 - Modern American Fiction (3 Credits)
Studies in the forms, themes and politics of American fiction, with special emphasis on the genre of the novel, between approximately 1900 and 1945.

ENGL 359 - Transmedia Fiction (3 Credits)
Surveys transmedia fiction: narratives conveyed simultaneously through distinct but complementary media, including film, video games, comics, or music. Students examine major and emerging texts in this genre and engage with current creative practice in the field by producing their own transmedia work.

ENGL 360 - Postcolonial Studies (3 Credits)
Studies in contemporary postcolonial literature from Africa, the Caribbean, and South Asia representing the impact of colonialism and its aftermath on individuals, communities and culture.

ENGL 364 - Contemporary Asian Novel (3 Credits)
Studies in themes, movements, significant literary figures and problems in twentieth century fiction of Asia.

ENGL 365A - Modern Drama (3 Credits)
Studies the development of modern dramatic literature and its aesthetic, political and performative contexts. The course examines not only the work of individual playwrights but also that of directors-theorists and theatre scholars.

ENGL 366A - Modern Poetry (3 Credits)
Explorations of modern themes and techniques in the works of major modern writers, chiefly British and American.

ENGL 369 - Women and Modernism (3 Credits)
A study of women's literature in the period called Modernism (roughly 1890-1945), positioned in its sociohistorical context. We will also consider gendered theories of the traditional Modernist aesthetic and the usefulness of codified definitions of Modernism in reading women's writing.

ENGL 371 - Contemporary Poetry (3 Credits)
Studies in poetic themes, techniques, forms, and theories or movements since 1945, including discussion of social and historical contexts.
ENGL 378 - Science Fiction (3 Credits)
A study of the development of science fiction as literature in an historical and sociocultural context, with an emphasis on contemporary works. Students will explore the genre through the major themes and motifs, and as a phenomenon of pop culture.

ENGL 379 - Fantasy (3 Credits)
A study of the development of fantasy as literature in a historical and sociocultural context, with an emphasis on contemporary works. Students will explore the genre through major themes and motifs, and as a phenomenon of popular culture.

ENGL 380 - Practicum in Journalism (1 Credits)
Practice writing, taking photos, editing stories and other activities for the University of Mary Washington's student newspaper, an experience that will help students learn the principles of sound journalism and how news helps to form community. May be repeated for a total of eight credits; four may be counted in the English major.

ENGL 381 - British Literature to 1800 (3 Credits)
Survey of British literature from the Anglo-Saxon period to roughly 1800, not including Romanticism. Required for English majors.

ENGL 382 - British Literature from 1800 to the Present (3 Credits)
Survey of British literature from Romanticism to the present. Required for English majors.

ENGL 384 - Disability and Literature (3 Credits)
This course takes for its focus the complex intersection(s) of disability and literature. Throughout the semester we will consider the various ways in which literary representations of disability from the nineteenth century to the present have embodied a range of pejorative, enabling, and/or ambivalent possibilities.

ENGL 385 - Contemporary American Fiction (3 Credits)
Studies in the forms, themes and politics of American fiction, with special emphasis on the genre of the novel, from approximately 1945 to the present.

ENGL 386 - The Graphic Novel (3 Credits)
A study of the graphic novel form, including the analysis of graphic novel texts, the integration of related critical theory, and experimentation with producing graphic narrative. Specific topics and themes may include formal approaches to the medium, as well as issues of race, class, and gender as represented in graphic novels.

ENGL 387 - South Asian Literature and Cinema (3 Credits)
Explores contemporary South Asian literature and film from India, Pakistan, Bangladesh and its diasporas. We will analyze emerging ideas of nationhood, and the changes in gender dynamics and the structures of class and caste through the course of the twentieth and twenty-first centuries.

ENGL 390 - Special Studies in Pre-1800 Literature (3 Credits)
Studies in significant literary figures, movements, and topics in pre-1800 literature. Consult Schedule of Courses for specific topics.

ENGL 391 - Special Studies in Pre-1900 Literature (3 Credits)
Studies in significant literary figures, movements, and topics in pre-1900 literature. Consult Schedule of Courses for specific topics.

ENGL 392 - Special Studies in Post-1900 Literature (3 Credits)
Studies in significant literary figures, movements, and topics in post-1900 literature. Consult Schedule of Courses for specific topics.

ENGL 393 - Special Studies in Literature of Historically Marginalized Groups (3 Credits)
Studies in literature of historically marginalized groups that center on the intersection of literature with age, class, disability, gender, postcoloniality, race, religion, and/or sexuality. Consult Schedule of Courses for specific topics.

ENGL 394 - Special Studies in Literature and Culture (3 Credits)
Studies in significant literary figures, movements, and topics in literature and culture. Consult Schedule of Courses for specific topics.

ENGL 399 - Community Service Learning (1 Credits)
Prerequisite: 12 hours in any English, Linguistics, or Communication course work. Community service learning at approved sites. May be repeated up to three times for credit in the major. Fulfills Experiential Learning Requirement.

ENGL 400 - Grellet and Dorothy Simpson Summer Institute in Medieval Studies (6 Credits)
An intensive summer institute in a seminar format, this course provides the opportunity for independent undergraduate research on a variety of topics appropriate to medieval studies. Intensive discussion sessions directed by a variety of scholars from inside and outside the College faculty will guide students, ensuring the timeliness and currency of their research.

ENGL 406 - Advanced Studies in Composition: History and Theory (3 Credits)
Prerequisite ENGL 295 and 307. A survey of the historical roots of the field of composition from its classical roots to the present day, and an examination of contemporary theories and how they are put into practice.

ENGL 411 - Studies in Drama (3 Credits)
Major problems, themes, movements, or figures in drama. Consult Schedule of Courses for specific topics.

ENGL 413 - Studies in Poetry (3 Credits)
Major problems, themes, movements, or figures in poetry. Consult Schedule of Courses for specific topics.

ENGL 415 - Studies in the Novel (3 Credits)
Major problems, themes, movements, or figures in the novel. Consult Schedule of Courses for specific topics.

ENGL 445 - Studies in English Literature to 1600 (3 Credits)
Significant figures, movements, themes, or problems in English literature to 1600. Consult Schedule of Courses for specific topics.

ENGL 447 - Studies in English Literature, 1600–1800 (3 Credits)
Significant figures, movements, themes, or problems in English literature, 1600–1800. Consult Schedule of Courses for specific topics.

ENGL 449 - Studies in English Literature, 1800–Present (3 Credits)
Significant figures, movements, themes, or problems in English literature, 1800 to the present. Consult Schedule of Courses for specific topics.

ENGL 451 - Seminar in New Media (3 Credits)
Significant figures, genres, movements and texts in contemporary and emerging new media. Consult the Schedule of Courses for specific topics.

ENGL 455 - Studies in American Literature to 1900 (3 Credits)
Significant figures, movements, themes or problems in American literature through the 19th century. Consult Schedule of Courses for specific topics.

ENGL 457 - Studies in American Literature, 1900–Present (3 Credits)
Significant figures, movements, themes, or problems in American literature of the 20th century. Consult Schedule of Courses for specific topics.
Environmental Earth Science (EESC)

EESC 000 - Summer Research  (0 Credits)
Open to qualified students by permission of department. Supervised on-campus or off-campus summer research experience developed in consultation with department.

EESC 110 - Environmental and Ecological Systems  (3 Credits)
Connecting humans and the environment with biological, chemical, and geologic principles, with a focus on ecological effects.

EESC 111 - Our Dynamic Earth  (4 Credits)
The modern view of the Earth as a dynamic, constantly-changing planet and the impact of geological processes on our lives. Discussions will include the origin of the solar system and Earth, how earthquakes and volcanoes result from heat-driven plate tectonic processes and our ongoing attempts to predict such hazardous events, and how Earth's rocks and minerals are ingrained in our everyday lives. Streams and groundwater processes, and cycles of mountain uplift and erosion that continuously alter the Earth's surface, will also be examined. Laboratory.

EESC 112 - Evolution of Earth  (4 Credits)
Prerequisite: EESC 110 or EESC 111 History of the Earth with emphasis on surficial processes, evolution of life, energy resources, and climate change. Laboratory.

EESC 120 - Principles of Environmental Sustainability  (4 Credits)
Scientific examination of human impacts on the environment, including population growth, pollution, climate change, and energy use, along with possible solutions for a more sustainable world. Laboratory.

EESC 121 - Oceanography  (4 Credits)
An introduction to the oceans. Physical and chemical processes affecting seawater; the geology of the seafloor; biological productivity in the oceans; and environmental challenges involving the oceans. Laboratory.

EESC 201 - Paleontology  (4 Credits)
EESC 111 or BIOL 121 or BIOL 125. This course introduces the fundamental procedures and applications of paleontology that include taxonomy, taphonomy, biostratigraphy, paleoecology and environmental science. The course format is project oriented with student opportunities to collect, describe and analyze fossil specimens retrieved from rock samples and sediment cores. The lab will provide a survey of the major fossil groups and introduce modern analytical procedures. Laboratory.

EESC 205 - GIS Applications in Environmental Science and Geology with Lab  (4 Credits)
This course emphasizes the acquisition of spatial data and their display and analysis within ArcGIS geographic information system software. The class also includes an introduction to the use of global positioning system instruments for data collection. Laboratory.

EESC 221 - Environmental Geology  (3 Credits)
Prerequisite: EESC 111. Interaction of geologic phenomena and processes with society and the biosphere.

EESC 230 - Global Environmental Problems  (3 Credits)
Prerequisites: EESC 110 and EESC 120. An in-depth analysis of specific global environmental problems facing society today. The course connects economic development, population growth, resource consumption, and environmental degradation with detailed case studies. The challenges of achieving a sustainable society today will be investigated through the lessons learned from these environmental crises across the world.

EESC 240 - Field Methods in Environmental Science and Geology  (4 Credits)
Prerequisites: EESC 110 or EESC 111 or GEOG 110. The Earth & Environmental Sciences rely heavily on mapping and collection of physical, chemical, and biological field data. Students enrolled in the course will complete weekly laboratory and hands-on exercises to learn the essential field skills necessary to advance their careers in the earth sciences as technicians, academics, and/or educators. This introductory field course will provide a solid foundation to prepare students for advanced earth science study and/or a general introduction to the field methods within the discipline.

EESC 301 - Mineralogy  (4 Credits)
EESC 111; prerequisite or corequisite CHEM 111 Study of Earth's major rock forming minerals, and those of economic value, in hand sample, microscopic thin section and through field studies. Course is conducted as a mix of lecture and laboratory activities. Laboratory.

EESC 302 - Petrology  (4 Credits)
EESC 301; prerequisite or corequisite CHEM 112 Study of metamorphic and igneous processes and important rock types in hand sample, microscopic thin-section and through field studies. Course is conducted as a mix of lecture and laboratory activities. Laboratory.
EESC 307 - Environmental Soil Science (3 Credits)
Prerequisites: EESC 110 or EESC 111 or GEOG 111; prerequisite or corequisite: CHEM 112. An introduction to soil formation processes; soil classification (both basic classification and soil taxonomy); physical properties of soil; soil chemistry; and discussion of soil as an environmental interface.

EESC 311 - Sedimentation and Stratigraphy (4 Credits)
Prerequisite: EESC 111; prerequisite or corequisite CHEM 111; recommended: EESC 301 This course provides an overview of the concepts associated with sedimentary rock formation, including theoretical sedimentology, process oriented facies analysis and applied stratigraphy in the context of cyclic sea level and climate change through time. Class work includes several field trips to collect samples for physical and chemical analysis. Laboratory.

EESC 313 - Fluvial Geomorphology (4 Credits)
Prerequisites: EESC 111 or GEOG 111. Use of both classical (qualitative) and modern (quantitative) geomorphological methods to study and understand fluvial processes acting on the surface of the earth, and how landforms and landscapes created by these processes control the global environment. The class will combine field-based observations with in-class instruction. Laboratory.

EESC 315 - Hydrogeology (4 Credits)
Prerequisite: EESC 111. An introduction to surface water and groundwater flow, the hydrologic cycle; aquifer testing; flow to wells; contaminant transport; and field and laboratory instruments. Laboratory.

EESC 325 - Environmental Geochemistry (4 Credits)
Prerequisites: EESC 110, EESC 120, and CHEM 112. Study of chemical processes operating at or near the surface of the Earth, in bedrock, soils, streams, the oceans and the atmosphere. Particular attention is given to environmental applications. Laboratory.

EESC 326 - Pollution Prevention Planning (3 Credits)
Prerequisite EESC 110 and EESC 120. This course provides an examination of the legislative and scientific approaches to reduce pollution. Examples include an evaluation of industry processes, recycling, wastewater, air and solid waste treatment.

EESC 330 - Environmental Regulations (3 Credits)
Prerequisite EESC 110 and EESC 120. This course provides an introduction to environmental laws and regulations with a focus on policy development and implementation.

EESC 335 - Plate Tectonics (4 Credits)
Prerequisite: EESC 111 This laboratory course offers a comprehensive study of lithospheric plate movements using information derived from seismology, paleomagnetics, petrology and tectonics. Selected topics also include a historical review of the development of the theory of plate tectonics, geologic and geophysical events at plate boundaries and an evaluation of evidence regarding plate-driving forces. Laboratory.

EESC 340 - Energy Resources and Technology (3 Credits)
Prerequisite: One from BIOL 126, or BIOL 132, or CHEM 112, or EESC 111, or EESC 120, or PHYS 106. Intended primarily for science majors, this course investigates the basic science and technology relating to alternative energy sources and fossil fuels. Students who complete this class will have a greater technical understanding of energy sources and the methods used to tap them.

EESC 355 - Icehouse-Greenhouse Earth (3 Credits)
Prerequisites: EESC 111 or EESC 120. This course examines the history of the Earth's climate system in the context of the two primary modes: Icehouse and Greenhouse. Through critical evaluation of primary literature, written assignments and oral presentations, students will gain an appreciation of the magnitude of temporal and spatial climate reorganizations through time and develop an in-depth understanding of both long and short term cyclic changes that have contributed to the development of our modern climate system.

EESC 360 - Environmental Exploration (2-4 Credits)
Specialized courses with a significant filed component not offered on a regular basis. Study of selected environments along with relevant geological issues with a focus on active exploration and research. Overnight trips and extra fees required. Permission of instructor required to register.

EESC 412 - Structural Geology (4 Credits)
Prerequisite: EESC 301 Analysis and interpretation of structural features of the Earth's crust such as folds and faults. Laboratory.

EESC 421 - Special Topics (2-4 Credits)
Prerequisite: permission of the instructor. Specialized topics not offered on a regular basis.

EESC 460 - Environmental Science Seminar (2 Credits)
Multidisciplinary evaluation of environmental problems. Senior-level seminar for Environmental Science majors; others by permission of the instructor.

EESC 481 - Readings (1-2 Credits)
481 – Readings (1–2) Readings in environmental and/or geologic literature selected by the student, who is guided by a faculty member. Open to majors by permission of the department. A maximum of two (2) credits count toward the major requirements.

EESC 491 - Individual Study (1-4 Credits)
Prerequisite: permission of the instructor and the department. Investigation of a topic which may include laboratory, field work, and literature research. Course of study determined by supervising instructor and student. A maximum of four (4) credits may count toward the major requirements.

EESC 493 - Honors Research (4 Credits)
Prerequisites: EESC 491 and permission of instructor and the department. Independent research project which may include field and/or laboratory work. Course of study determined by supervising research advisor and student. Successful completion of a written thesis and oral defense is required, and will result in the student earning Departmental Honors at graduation. A maximum of four (4) credits may count toward the major requirements.

EESC 499 - Internship (1-12 Credits)
Supervised off-campus experience, developed in consultation with the department.
Finance (FINC)

FINC 301 - Principles of Finance (3 Credits)
Prerequisite: ECON 201B or ECON 202B, ACCT 102 or ACCT 110 or equivalent, MIST 201 or equivalent, and STAT 180; and College of Business major or Financial and Quantitative Analysis minor or permission of the Associate Dean for Faculty. An overview of financial management which provides identification and solution of financial problems. Coverage includes the role of financial management, tools of financial analysis, cost of capital, financial structure, long term assets and financial forecasting.

FINC 401 - Advanced Corporate Finance (3 Credits)
Prerequisite: FINC 301. This course develops the processes of making optimal strategic decision by applying corporate financial theory to cases of financial policy, financial instruments and valuation. The course will focus on six broad topics including cost of capital and capital budgeting, discounted cash flow valuation and financial multiples, payout policy, equity and debt financing, corporate control and recapitalizations, and corporate governance.

FINC 411 - Student Managed Investment Fund I (3 Credits)
Prerequisite: FINC 301 and Permission of Instructor. The first of two courses on Student Managed Investment Funds providing hands-on money management experience in investing. Major areas covered are: (1) portfolio objectives and risk measurement, (2) company analysis and valuation, and (3) portfolio formation and risk control. Additional attention is paid to critical and fundamental concepts and techniques in support of performing investment analysis and making investment decisions.

FINC 412 - Student Managed Investment Fund II (3 Credits)
Prerequisite: FINC 301 and Permission of Instructor. The second of two courses on Student Managed Investment Funds providing hands-on money management experience in investing. Major areas covered are: (1) industry/sector analysis, (2) trading, and (3) performance evaluation. Additional attention is paid to reinforcing and adding depth to previous learning of related concepts and techniques.

FINC 430 - Financial Modeling (3 Credits)
Prerequisite: FINC 301. This course introduces students to technology supporting financial modeling and decision making. Students will learn to apply and extend the concepts they have learned in the introductory finance course into a spreadsheet model framework of Microsoft Excel. The course will examine modeling in four primary areas: (1) corporate finance models, (2) fixed income securities models, (3) portfolio models, and (4) option pricing models.

FINC 471 - Seminars in Finance (1-3 Credits)
Special topics of interest to faculty and students are discussed in individual seminars which focus on Finance.

FINC 471D - Financial Crisis and Origins (3 Credits)
This course provides an overview of the causes, events, policy responses, and aftermath of financial crises, including the current global economic crisis under the COVID-19 pandemic. The primary goal is to comprehensively review these major economic events, global responses to crises, and how they impact the current global economy.

FINC 491 - Individual Study in Finance (1-3 Credits)
Directed by a finance faculty member, students conduct individual research focusing on an approved topic of interest in finance.

First-Year Seminar (FSEM)

FSEM 100 - First-Year Seminar (3 Credits)
Prerequisite: Freshman standing (30 credits or less). The first-year seminar introduces students to the pursuit of intellectual inquiry. Students will study a non-traditional topic in a non-traditional way while exploring the concept of a liberal arts education. Specific topics will vary from course to course. Transfer students enrolling at UMW with more than 30 credits may not take this course.

French (FREN)

FREN 101 - Beginning French I (3 Credits)
Grammar, composition, conversation, reading, laboratory use. Students with credit for a higher level course in French may not take this course.

FREN 102 - Beginning French II (3 Credits)
Grammar, composition, conversation, reading, laboratory use. Students with credit for a higher level course in French may not take this course.

FREN 105 - Intensive Beginning French (6 Credits)
Grammar, composition, reading, conversation, laboratory use. Students with credit for a higher level course in French may not take this course for credit.

FREN 201A - Intermediate French I (3 Credits)
Grammar review, reading, composition, laboratory use, oral work. Students with credit for a higher level course in French may not take this course for credit.

FREN 202A - Intermediate French II (3 Credits)
Grammar review, reading, composition, laboratory use, oral work. Students with credit for a higher level course in French may not take this course for credit.

FREN 205 - Intensive Intermediate French (6 Credits)
Students with credit for a higher level course in French may not take this course for credit.

FREN 311 - Composition (3 Credits)
Prerequisite: FREN 202A. Advanced grammar, composition, reading, conversation.

FREN 312 - Oral Communication and Phonetics (3 Credits)
Prerequisite: FREN 202A. Oral skills, phonetics, listening comprehension, conversation. Grammar, composition, reading, conversation.

FREN 313 - Business French (3 Credits)
Prerequisite: FREN 311 or FREN 312. Especially designed for those who may be connected with businesses dealing in France or French-speaking countries.

FREN 319 - French Cinema (3 Credits)
Prerequisite: FREN 311 or FREN 312, or permission of the instructor. A study of the major movements of French cinema, including silent films, surrealism and the Avant-Garde, films of the Occupation, the new Wave, the "cinema du look," neo-realism, and films that have come to be described as postmodern and postnationalist.

FREN 326 - Introduction to Pre-Revolutionary French Literature (3 Credits)
Prerequisites: FREN 311 or 312. A chronological study of French Literature from the Medieval Period to 1789.

FREN 327 - Introduction to Post-Revolutionary French Literature (3 Credits)
Prerequisites: FREN 311 or 312. A chronological study of French Literature from 1789 to the present.
FREN 330 - Power, Conflict, and Revolution (3 Credits)
Prerequisite: Two of the following courses: FREN 311, 312, 326, 327. This course examines the interrelationships of power and conflict in the creation of imbalances on the social and political stage.

FREN 331 - Representations of Good & Evil (3 Credits)
Prerequisite: Two of the following courses: FREN 311, 312, 326, 327. From literature to film, Evil has consistently preoccupied cultural imagination. Equally prevalent has been the preoccupation with the Good. This course examines how the struggle between the two is rooted in religious, social, and political conflicts.

FREN 332 - Text and Image (3 Credits)
Prerequisite: Two of the following courses: FREN 311, 312, 326, 327. The visual and written arts have always influenced each other in productive ways. This course investigates the ever-changing reciprocal dynamics between text and image.

FREN 333 - Travel and Cultural Relativity (3 Credits)
Prerequisite: Two of the following courses: FREN 311, 312, 326, 327. Journeys, whether real or imagined, physical or emotional, contribute to one's conception of the Self and the Other. This course examines ways in which travel expands our horizons, allowing us both to examine directly the beliefs, values, and customs of another culture, and to compare them indirectly to our own.

FREN 334 - Women and Gender in Society (3 Credits)
Prerequisite: Two of the following courses: FREN 311, 312, 326, 327. This course examines women and gender roles, and the power individuals do and do not have in their personal relationships, their vocational niche in society, and in the arenas of politics and religion.

FREN 335 - Topics in French Art, Literature, and Culture (3 Credits)
Prerequisites: Two of the following courses: FREN 311, 312, 326, or 327. French and Francophone Literature and Culture. Topics will vary.

FREN 336 - French and Francophone Literature in Translation (3 Credits)
Prerequisite: Two of the following courses: FREN 311, 312, 326, 327. Taught in English. Topics will vary.

FREN 411 - Stylistics (3 Credits)
Prerequisites: FREN 311 and 312. Analysis and practice of written French styles.

FREN 412 - Translation (3 Credits)
Prerequisites: FREN 311 and 312. Translation theories and techniques.

FREN 481 - Senior Seminar (3 Credits)
Selected topics. Required of and limited to senior majors.

FREN 491 - Individual Study (3 Credits)
Intensive study of one or more authors selected in consultation with instructor. By permission of the department.

FREN 492 - Individual Study (3 Credits)
Intensive study of one or more authors selected in consultation with instructor. By permission of the department.

FREN 499 - Internship (1-12 Credits)
Supervised off-campus experience, developed in consultation with the department. No credit toward major.

Geographic Info Sciences (GISC)

GISC 200 - Introduction to GIS (4 Credits)
An introduction to the theory and application of GIS technology, providing students with the knowledge required to plan and undertake a project that has a GIS component. ArcGIS is used in hands-on practical sessions that illustrate theoretical concepts including the nature of geographical information and the different types of spatial data and tools. Weekly or bi-weekly assignments.

GISC 351 - Spatial Analysis (4 Credits)
Prerequisite: GEG 250 or EESC 205 or GISC 200 or permission of instructor. Concepts and applications of geographic information systems (GIS). Emphasis on the use of GIS as a method for analyzing and solving geographic problems. Practical assignments weekly or bi-weekly.

GISC 440 - Application of Spatial Statistics and Models in GIS (4 Credits)
Prerequisite: GISC 351 or GEG 351A. This course focuses on the application of statistics and quantitative methods in GIS. It emphasizes the development of statistical methodology appropriate for analyzing spatial data, modeling spatial relationships, and exploring data within ArcGIS. Practical assignments weekly or bi-weekly.

GISC 450 - GIS Programming (4 Credits)
Prerequisites: GISC 351 or GEG 351A. Introduction to fundamental concepts of computer programming, OOP concepts, and ESRI's Python Applications Programming Interface (API) ArcPy. Students develop custom tools and solutions that extend core ArcGIS functionality; apply object-oriented programming concepts; and develop Python resources to create applications and tools that perform specific GIS tasks. Includes hands-on programming exercises, where students write scripts and develop custom tools that automate tasks.

GISC 471 - Special Topics (4 Credits)
Prerequisite: Permission of the instructor. Advanced course in Geographic Information Science. Topic selected in advance by instructor.

GISC 482 - Web GIS: Concepts and Applications (4 Credits)
Prerequisites: GISC 351 or GEG 351A. Concepts and basic practical applications of Web GIS. Students will learn how to use the state-of-art technical skills and knowledge to quickly develop Web GIS applications to publish, share, and combine various geospatial resources through the Internet. Practical assignments weekly or bi-weekly.

GISC 491 - Directed Study in GIS (3 Credits)
Prerequisites: At least 12 credit hours of certificate coursework and permission of instructor. Intensive individual research using GIS under the guidance of a faculty member. When taken as capstone to the GIS Certificate it must be in the last term of the GISC program.

GISC 499 - GIS Internship (3 Credits)
Prerequisites: At least 12 credit hours of certificate coursework and permission of instructor. Supervised off-campus experience. When taken as capstone to the GIS Certificate it must be in the last term of the GISC program.

Geography (GEOG)

GEOG 101 - World Regional Geography (3 Credits)
An appreciation of spatial patterns in the distribution of physical and human characteristics of the major regions of the world.

GEOG 102 - Introduction to Human Geography (3 Credits)
An examination of the spatial patterns in human society and their impact on the evolution of past and present landscapes.
GEOG 110 - Introduction to Weather and Climate (4 Credits)
Foundational concepts of physical geography. Concentration on weather, climate, and world vegetation regions. Laboratory.

GEOG 111 - Landform Processes (4 Credits)
Survey of the processes, both tectonic and climatic, that shape the earth's surface. Laboratory.

GEOG 200 - Topics in Geography (1-4 Credits)
Lecture class dealing with a pre-selected topic of current interest. May include laboratory. (May be repeated for credit with change of topic)

GEOG 221A - Geography of Eastern North America (3 Credits)
Regional geography of the eastern United States and Canada, stressing similarities and differences in land, life, and livelihood.

GEOG 222A - Geography of Western North America (3 Credits)
Regional geography of the western United States and Canada, stressing similarities and differences in land, life, and livelihood.

GEOG 231 - Introduction to Planning (3 Credits)
A survey of basic concepts, laws, and methods used in city and regional planning, illustrated with case studies.

GEOG 236 - Globalization and Local Development (3 Credits)
A geographic analysis of the history and current conditions of the world-economy focusing on location theory, globalization, and community economic development.

GEOG 237 - Cities (3 Credits)
An exploration of the complexities and contradictions of city life and urban processes. Includes an introduction to theories and debates about the economic, political, environmental, and cultural roles and meanings of cities and instruction in basic research methods used by urban researchers.

GEOG 240 - Natural Hazards (3 Credits)
Prerequisite: GEOG 110 or permission of instructor. The study of natural hazards - to exclude disasters caused by technological or entirely human construct - from a geographic perspective. After an introduction to the theoretical background to hazards research, individual hazards will be described from the standpoint of physical processes, risk factors, vulnerability of populations in both more and less developed countries, operable mitigation measures and current levels of protection and preparedness. Case studies and numerous examples will clarify these points.

GEOG 241 - Biogeography (3 Credits)
Prerequisite: GEOG 110 or permission of instructor. This course introduces biogeography, the study of the distribution of organisms through space and time, the patterns created by those distributions, and the reasons for them.

GEOG 245 - Environment and Society (3 Credits)
A geographic survey of environmental changes caused by human activities, with emphasis given to resource exploitation, conservation, pollution, and interactions of humans with plant and animal communities.

GEOG 250 - Introduction to Geographic Information Systems and Cartography (4 Credits)
An introduction to the principles of cartography and the use of maps as research tools - with emphasis on the creation of maps using a variety of techniques. Laboratory.

GEOG 252 - Introduction to Quantitative Methods in Geography (3 Credits)
Prerequisite: 6 hours of GEOG or permission of instructor. An introduction to the quantitative methods used by geographers to analyze and interpret geographic data and solve geographic problems. Includes descriptive and inferential statistics, and an exploration of how quantitative research questions and techniques are situated within the broader discipline of geography.

GEOG 301A - Geography of Latin America and the Caribbean (3 Credits)
Regional geography of the lands and peoples of Latin America and the Caribbean, with particular emphasis on the cultural, political, economic, and historical bonds that unify the region.

GEOG 304A - Geography of the Middle East (3 Credits)
Regional geography of the arid-land countries of the Middle East, focusing on the evolution of economic, political, and cultural landscapes.

GEOG 307 - Geography of Asia (3 Credits)
A survey of the human and physical geography of Asia with emphasis on the cultural- economic- and political conditions within Asia and the region's relationships with the rest of the world. The course will often focus on one of Asia's subregions.

GEOG 325 - Dynamic Climatology (3 Credits)
Prerequisite: GEOG 110 or permission of instructor. A study of the atmospheric dynamics that control earth's climates. Dynamic Climatology is designed for those students who seek a more thorough understanding of the atmospheric dynamics that control earth's climates. This course offers a more in-depth treatment of atmospheric circulation and thermodynamics that can be given in an introductory course, yet because GEOG 110 is the only prerequisite, the treatment will be done in a more qualitative, rather than quantitative, way. Topics will begin with an overall model of the atmosphere, moving then to a more detailed look at aspects of circulation such as midlatitude circulations and cyclogenesis. We will continue the course with a discussion of major aspects of the climate dynamics of the continents, and conclude with a discussion of oscillating pressure systems and teleconnections.

GEOG 326 - Glacial Processes and Landscapes (3 Credits)
Prerequisite: GEOG 111 or EESC 112. An investigation of glacial processes and the landforms associated, both directly and indirectly, with glaciation. One weekend field trip may be scheduled.

GEOG 327 - Climate Change (3 Credits)
Prerequisite: GEOG 110 or EESC 111. An examination of the mechanisms and evidence for climate change over various timescales.

GEOG 331 - Race and Place in America (3 Credits)
An analysis of how place and space have shaped our understandings and experiences of race in the United States. Topics include how law has interpreted racialized geographies, segregation, white supremacy groups, and immigration.

GEOG 332 - Migration Politics in a Globalizing World (3 Credits)
This course examines the politics of movement and mobility in international migration through historical, theoretical, and comparative perspectives. We will analyze why people migrate, how different governments and publics respond to their migration, and the kinds of new social, cultural, and political spaces that their interactions create. We will discuss the contemporary debates about migration from a variety of disciplinary perspectives.
GEOG 333 - Planning Seminar (3 Credits)
Prerequisite: GEOG 231, GEOG 237 or HISP 209. This course provides an analysis of planning concepts and practices. Topics addressed include legal aspects of planning and zoning, variances, rezoning, conditional use permits, neo-traditional planning, and issues around public participation. The course emphasizes current, relevant topics and best practices for those interested in a career in planning or a related field.

GEOG 335 - Sacred Spaces (3 Credits)
An examination of the intersection of geography and religion with an emphasis on sacred spaces. The course explores how religions understand, create, and give meaning to sacred space, and includes a review of major theories and methods in the geographic study of religion.

GEOG 337 - The Nature of Cities (3 Credits)
Prerequisite: HISP 209, GEOG 231 or 237. Examination of the multiple intersections of urban and natural environments, including the role of green spaces in cities, political ecology, and environmental justice issues.

GEOG 338 - Geopolitics (3 Credits)
Prerequisite: Junior or Senior status. An analysis of power, ideology in and across space. The class focuses on how geopolitical theories have changed over time and vary across places and introduces students to critical geopolitics.

GEOG 339A - Geography and Development (3 Credits)
An examination of the global geography of development and underdevelopment, including a review of theoretical approaches, spatial and environmental problems of development, and the geographies of colonialism.

GEOG 340B - Remote Sensing and Air Photo Interpretation (4 Credits)
Prerequisite: GEOG 250 or EESC 205 or GISC 200. Analysis of remotely-sensed images with emphasis on the interpretation of aerial photographs and the use of imagery in geographical research. Practical assignments weekly or bi-weekly.

GEOG 351A - Spatial Analysis (4 Credits)
Prerequisite: GEOG 250 or EESC 205 or GISC 200 or permission of instructor. Concepts and applications of geographic information systems (GIS). Emphasis on the use of GIS as a method for analyzing and solving geographic problems. Practical assignments weekly or bi-weekly.

GEOG 355 - Mobile Geographic Information Systems and Global Positioning Systems (4 Credits)
Prerequisite: GEOG 250 or EESC 205 or GISC 200. Concepts and techniques of field mapping using mobile GIS and GPS, including data collection and analysis. Detailed study of technology and application of global positioning systems. Requires fieldwork. Laboratory.

GEOG 360 - Geographic Study Abroad (1-6 Credits)
Travel to a foreign region where students will attend lectures, observe geographic phenomena, and participate in group discussions.

GEOG 361 - Grassroots Development in Guatemala (3 Credits)
This course examines issues of sustainability and development in the central highlands of Guatemala. It includes a 9 day trip over Spring Break and focuses on how efforts to develop ecological understanding, revive traditional Maya ecological practices, and experiment with innovative agroecological techniques can address social needs and enhance food security.

GEOG 363 - Qualitative Methods in Geography (3 Credits)
An examination of the philosophies and techniques of doing qualitative research in geography. Includes data collection and analysis using interviewing, observation, participatory research, visual techniques, cognitive mapping, archival research, and content analysis.

GEOG 365 - Field Methods (4 Credits)
Prerequisite: Permission of instructor. This class focuses on the field methods used in different subfields of Geography, including systematic observation, keeping field notes, survey design, mapping, coding, and analysis. Substantial time in the field required.

GEOG 410 - Advanced Topics in Geography (1-4 Credits)
Advanced seminar dealing with a pre-selected topic of current interest. May include laboratory. (May be repeated for credit with change of topic)

GEOG 485 - Readings in Geography (1-3 Credits)
Directed readings on a selected topic in geography under the guidance of a member of the geography faculty.

GEOG 490 - Senior Seminar in Geography (3 Credits)

GEOG 491A - Individual Study in Geography (1-6 Credits)
Intensive individual study of some geographic issue under the guidance of a member of the geography faculty.

GEOG 494 - Community Engaged Study in Geography (1-6 Credits)
Prerequisite: Permission of the instructor. Intensive individual research of some geographic issue that includes community engagement, under the guidance of a member of the geography faculty.

GEOG 498 - Senior Portfolio (1 Credits)
Prerequisite: Senior status and Geography major. This class provides students with an opportunity to reflect on their work as undergraduate geography students and to assemble samples of their work for graduate school and job applications.

GEOG 499 - Internship (1-6 Credits)
Supervised off-campus experience. Pass/fail only. Does not count toward geography major.

German (GERM)

GERM 101 - Beginning German I (3 Credits)
Grammar, emphasis on gaining rapid comprehension and developing fluency in spoken German. Introduction to reading German. Learning to write German. Students with credit for a higher level course in German may not take this course.

GERM 102 - Beginning German II (3 Credits)
Grammar, emphasis on gaining rapid comprehension and developing fluency in spoken German. Introduction to reading German. Learning to write German. Students with credit for a higher level course in German may not take this course.

GERM 105 - Intensive Beginning German (6 Credits)
This intensive beginner's course introduces students to the German language and emphasizes all four language skills: listening comprehension, speaking, reading, and writing. Information on German life and culture is also incorporated into the process. After the second semester of this course students will be able to communicate on the Novice High level. Summer only.

GERM 201A - Intermediate German I (3 Credits)
Grammar review, concentration on reading for comprehension. Honing of oral skills and writing German. Students with credit for a higher level course in German may not take this course for credit.

GERM 202A - Intermediate German II (3 Credits)
Grammar review, concentration on reading for comprehension. Honing oral skills and writing German. Readings in German 202 focus on global issues. Students with credit for a higher level course in German may not take this course for credit.
GERM 205 - Intensive Intermediate German (6 Credits)
The intermediate course will continue to emphasize all four language
skills in German: listening comprehension, speaking, reading, and writing.
Information on German life and culture is also incorporated into the
process. After the second semester of this intermediate course you
should be able to communicate on the Intermediate Mid level. Students
who have taken GERM 201 are not eligible for this class. Summer only.

GERM 301 - Study Abroad Reflection (1 Credits)
Prerequisite: GERM 202A or equivalent. A reflection course for students
of German to complete after returning from an approved study abroad
program in Germany, Austria, or Switzerland.

GERM 302 - Oral Communication (4 Credits)
Prerequisite: GERM 202A Intensive oral language practice. Designed to
expand the student’s active vocabulary and help the student develop his
or her own style in speaking.

GERM 303 - Advanced Composition (4 Credits)
Prerequisite: GERM 202A. Intensive written language practice. Designed
to expand the student’s active vocabulary, improve use of grammar, and
help the student develop his or her own style in writing.

GERM 304 - Communication through Film (4 Credits)
Prerequisite: GERM 202A. Intensive written and oral language practice
through the medium of film. Designed to expand the student’s active
vocabulary, improve grammar use, and help the student develop his or her
own style.

GERM 313 - German for Professional Use I (4 Credits)
Prerequisite: GERM 302 or equivalent. This course provides students
with the basic communicative skills in the German language as used in
German business and economics. It introduces students to the economic
role of the German-speaking countries in the global economy. Topics
include German economic geography, German business and economics
terminology in finance, the social welfare system, transport system, the
structure of corporations, and the code of behavior in the business world.
Students will develop their skills in listening comprehension, reading
comprehension, speaking and writing.

GERM 325 - German Cultural History (4 Credits)
Recommendation: two German 300-level courses. Survey of the cultures,
civilizations, and traditions of the German-speaking areas, with emphasis
on Germany.

GERM 330 - Methods Seminar: Analyzing Text and Culture (4 Credits)
Prerequisite: GERM 202A or equivalent. Emphasizes texts from the 18th
to the 20th centuries. Close attention paid to analyzing form, content,
motifs, character, and social and cultural background, as well as to
various methodological approaches to text interpretation.

GERM 333 - Women, War and Psychology: German Literature and Culture
between WWI and WWII (4 Credits)
Recommendation: two German 300-level courses. Representative works
of German literature of the twentieth century between the world wars with
a focus on themes of war, psychology, and gender.

GERM 334 - Forward and Never Forget: German Literature 1945-2000 (4 Credits)
Recommendation: two German 300-level courses. Representative works
of German literature of the twentieth century between WWII and today
with a focus on the theme of confronting the Nazi past.

GERM 485 - Seminar in German (4 Credits)
Selected topics in German literature, German cultural studies, or
Germanic linguistics.

GERM 491 - Individual Study (1-6 Credits)
Approval of the instructor.

GERM 492 - Individual Study (1-6 Credits)
Approval of the instructor.

GERM 499 - Internship (1-4 Credits)
Supervised off-campus experience, developed in consultation with the
department. No credit toward major.

Greek (GREK)

GREK 101 - Elementary Greek (3 Credits)
Introduction to the language of ancient Greece. Essentials of grammar
and composition; introduction to translating Greek literature.

GREK 102 - Elementary Greek (3 Credits)
Prerequisite: GREK 101 or equivalent. Introduction to the language of
ancient Greece. Essentials of grammar and composition; introduction to
translating Greek literature.

GREK 201 - Intermediate Greek (3 Credits)
Prerequisites: GREK 101, GREK 102 or equivalent. Review of grammar.
Readings from Greek prose and/or poetry.

GREK 202 - Intermediate Greek (3 Credits)
Prerequisites: GREK 101, GREK 102 or equivalent. Review of grammar.
Readings from Greek prose and/or poetry.

GREK 306 - Homer (3 Credits)
Prerequisite: GREK 202. Selected readings from the Iliad or the Odyssey.
By permission of Classics faculty.

GREK 308 - tragedy (3 Credits)
Prerequisite: GREK 202. Selected plays of Aeschylus, Sophocles, and/or
Euripides.

GREK 309 - Survey of Greek Literature I (3 Credits)
Prerequisite: GREK 202. Survey of ancient Greek literature from the end of
the earliest surviving Archaic texts to the end of the Imperial era. May be
taken in either order.

GREK 311 - Survey of Greek Literature II (3 Credits)
Prerequisite: GREK 202. Survey of ancient Greek literature from the earliest surviving Archaic texts to the end of the Imperial era. May be
taken in either order.

GREK 312 - Reading in Greek Philosophy (3 Credits)
Prerequisite: GREK 202. Selected readings from the ancient Greek
philosophers.

GREK 451 - Special Studies in Greek Literature (3 Credits)
Prerequisite: GREK 202. Reading and study of individual Greek authors or
literary genres.

GREK 452 - Special Studies in Greek Literature (1 Credits)
Prerequisite: GREK 202. Special Studies in Greek Literature.

GREK 491 - Individual Study (1-3 Credits)
Prerequisite: GREK 202. Individual study under the direction of a member
of the staff. By permission of the department.

GREK 492 - Individual Study (1-3 Credits)
Prerequisite: GREK 202. Individual study under the direction of a member
of the staff. By permission of the department.
Health Education (HEED)

HEED 100A - Contemporary Health Issues (3 Credits)
Provides up-to-date information about modern health problems confronting people of all ages. Discussion is encouraged to give students the opportunity to share personal experiences, resource materials, and problem-solving techniques. The impact of personal and environmental health problems on society is also covered.

Health Science (HSCI)

HSCI 120 - Medical Terminology for Health Professionals (3 Credits)
Prerequisite: BSN 1+2+1 or permission of instructor. This course introduces the student to the language of medicine, used by all health professionals, throughout all healthcare settings.

HSCI 210 - Human disease Processes for Health Professionals (3 Credits)
Prerequisites: The student must have been accepted into a BSN degree seeking track. This course builds upon the knowledge learned in the previous study of human anatomy and physiology. The course develops the student's understanding of human disease processes.

HSCI 220 - Dietary Management of Disease Processes for Health Professionals (3 Credits)
Prerequisites: The student must have been accepted into a BSN degree seeking track. This course covers the essentials of dietary management of disease processes to include cultural considerations.

HSCI 240 - Caring Across Cultures for Health Professionals (3 Credits)
Prerequisite: The student must have been accepted into a BSN degree seeking track. This course prepares students to provide health care to people of various cultures. The student will examine cross-cultural conflicts and misunderstandings, as well as examples of culturally competent health care delivery.

HSCI 305 - The Art of Science of Interdisciplinary Care for Health Professionals (3 Credits)
Prerequisite: Permission of Instructor. This course is an analysis of the art and science of practicing interdisciplinary care for health professionals. Writing for personal, academic, and professional purposes is practiced. The development of inter/intra-professional partnerships will be experienced. Inherent values of caring for others are explored. The concept of health promotion and disease prevention will be investigated.

Historic Preservation (HISP)

HISP 100 - Introduction to Historic Preservation (3 Credits)
Survey of the history of historic preservation and the practice of historic preservation with emphasis on the legislation, policies, and methodologies that form our present national, state, and local preservation system.

HISP 105 - The American Built Environment (3 Credits)
Survey of America’s architectural, cultural, and historical resources; analysis of the historic, social, economic, political, and environmental forces from both “the Old World” and “the New World” which have shaped them.

HISP 200 - Introduction to Museum Studies (3 Credits)
Survey of the history, philosophy, and management of history museums, including curatorship and public interpretation.

HISP 205 - Documentation and Field Work (3 Credits)
Prerequisite: HISP 105. Methods of documentation and analysis of historic sites and structures through historical research, measured drawings and photographs.

HISP 206 - Introduction to American Folklore (3 Credits)
General survey of the forms of folklore found in the United States in the twentieth century along with the methodologies and theoretical perspectives used in the analysis of folk forms.

HISP 207 - American Archaeology (3 Credits)
Introduction to field and laboratory methods and interpretive issues of North American archaeology, with emphasis on historical archaeology.

HISP 208 - Introduction to Conservation (3 Credits)
Provides an overview of conservation as a professional discipline with emphasis on its principles, methods, and ethics. Also examines the field's history and current nature and organization.

HISP 209 - Planning History and Practice (3 Credits)
Introduction to the theories, methods and practical applications involved in the field of planning at the state and local level. Introduction to preservation planning.

HISP 302 - Preservation Law (3 Credits)
Prerequisite: HISP 100. Examination of the development and application of preservation law and policy in the United States, through the analysis of case law, legislation, and private techniques.

HISP 303A - Archives and Society (3 Credits)
Examination of the theory and practice of archival work, including the paleography, preservation, and cataloging of manuscript collection.

HISP 305A - Historic Building Technologies (3 Credits)
Prerequisite: HISP 205. Intensive overview of the evolution of American building from early dwellings and towns to the glass and steel towers that dominate post-modern skylines. Special emphasis is given to building technologies and the development of structural systems.

HISP 308 - Cultural Resource Management (3 Credits)
Prerequisite: HISP 100. Examination of how historic preservation services are provided in legal and contractual contexts within the public sector. Topics include resource assessment, organizational management, proposals and budgets, and ethics.

HISP 313 - Museum Education (3 Credits)
Prerequisite: HISP 200 or ARTH 315A. This course gives an introduction to the main theoretical and methodological approaches in the field of museum education, including learning theories, museum interpretation, and development of learner centered program aimed at conveying knowledge and experience to museum visitors of all ages.

HISP 317 - Museum Collections Management (3 Credits)
Prerequisite: HISP 200 or ARTH 315A. This course is an introduction to the principles and practices of collections management in museums. Lectures, class activities, and hands-on projects provide students with a holistic view of collections management, including the care, preservation, and documentation of artifacts. Main course topics include collections management policies, museum registration methods, cataloging, preventive care and conservation, security, insurance, and the ethics and law of collections management.

HISP 320 - Material Culture (3 Credits)
Prerequisite: HISP 205. Interpretation and analysis of material culture in pre-industrial and modern American landscapes, with emphasis on research perspectives and methods.
HISP 323 - Heritage Tourism (3 Credits)
Heritage Tourism defines the modern market-centered approach to Historic Preservation. This seminar explores the larger issues that surround the evolving concepts of tourism from the 19th century to Heritage Corridors and theme parks. Implicit in 'heritage tourism' is the experience of interactions with people different than ourselves. The personal automobile and the democratization of leisure time transformed the tourist experience from an idle of the wealthy, to a passion of the working classes. As a multi-disciplinary study, Historic Preservation has staked its reputation with the public presenting and representing heritage in an authentic experience to the public as crucial to our role as mediators between the objects of the past and their recreation industry that seeks to employ heritage as a tourism engine.

HISP 324 - Urban Design (3 Credits)
Prerequisite: HISP 209 or GEOG 231. Situated at the intersection of architecture and city planning, urban design is both a process and a practical approach to improve the quality of built environments. This course covers history of urban design and then prepares students without prior design training for a studio experience.

HISP 325 - Vernacular Architecture in America (3 Credits)
Prerequisite: HISP 205. A seminar in the research models, methods and theoretical approaches used to study commonplace architecture in the United States.

HISP 327 - Analytical Archaeology (3 Credits)
Prerequisite: HISP 207. Exploration of a selected series of archaeological topics at an advanced, analytical level. Incorporates an examination of how archaeological data are analyzed with respect to research objectives, theoretical concepts, and cultural interpretations. Class format based on student discussion and shared learning.

HISP 345 - Computer Applications in Historic Preservation (3 Credits)
Prerequisite: HISP 205. Introduction to the major applications of computer technology in Historic Preservation, including development of database structures, documentation using vector drawings, and the employment of geographic information systems for spatial analysis. Through projects that are specific to the practice of historic preservation students gain new means of documenting, interpreting, and analyzing cultural resources.

HISP 360 - International Preservation (3 Credits)
Prerequisite: HISP 100. Examination of the origins and programs of major international preservation organizations such as UNESCO, ICOMOS and ICCROM and a survey of international preservation practice and projects in countries around the globe.

HISP 405C - Advanced Methods in Historic Preservation (3 Credits)
Prerequisite: HISP 305A. An intensive survey and research-based study of building resources, with emphasis on the identification and analysis of sites and structures in their geographical, historical, and socio-economic contexts. Focus on assessing and writing National Register of Historic Places nominations.

HISP 461A - Lab in Building Forensics (3 Credits)
Prerequisite: HISP 305A. Examination of the fundamental principles of building forensics related to the effects of time, gravity, humidity, temperature and light on building materials. Fieldwork monitoring and analysis of deterioration in historic buildings, including masonry, wood, metal and coatings.

HISP 462 - Laboratory Methods in Archaeology (3 Credits)
Prerequisite: HISP 207. Laboratory procedures for the processing-identification-analysis-conservation of artifacts with emphasis on quantitative analysis and collections management.

HISP 462A - Laboratory Methods in Archaeology (3 Credits)
Prerequisite: HISP 207. Laboratory procedures for the processing, identification, analysis, and conservation of artifacts, with emphasis on quantitative analysis and collections management.

HISP 463 - Laboratory in Museum Design and Interpretation (3 Credits)
Prerequisite: HISP 200 or ARTH 315A or permission of instructor. Examination of the principles of museum exhibit design and interpretation, including participation in exhibit preparation.

HISP 467 - Field Methods in Archaeology (3 Credits)
Prerequisite: HISP 207 or permission of the instructor. Fieldwork-intensive introduction to the techniques for sampling, excavating, recording, and interpreting archaeological sites. Summer only.

HISP 469 - Laboratory in Preservation Planning (3 Credits)
Prerequisite: HISP 405C. This laboratory course expands on the methods and information learned in HISP 405C by providing students with practical experience in the formulation of preservation plan elements.

HISP 470 - Historic Preservation Abroad (3 Credits)
Introduces students to the historic resources and to the public and private systems for historic preservation in another country or international setting. Participants investigate the principal Scottish preservation organizations, methodologies, and standards. Participants engage in intensive fieldwork and sponsored projects. Summer only.

HISP 471 - Special Studies in Historic Preservation (3 Credits)
Seminar on a topic in historic preservation.

HISP 491 - Individual Study in Historic Preservation (1-3 Credits)
Intensive individual investigation of a significant research problem under the direction of a faculty member.

HISP 499 - Internship in Historic Preservation (1-12 Credits)
Prerequisites: HISP 100, HISP 105, additional course work in Historic Preservation appropriate for the internship, and permission of the instructor. Field experience with a preservation-related institution or group outside the University. Does not meet major requirements.

History (HIST)

HIST 121 - Western Civilization I (3 Credits)
From ancient Near Eastern origins through classical Greece and Rome, the Middle Ages and the Renaissance and Reformation Era to the seventeenth century.

HIST 122 - Western Civilization II (3 Credits)
From the seventeenth century through the Age of Absolutism, the Enlightenment, and the French Revolution to the era of nationalism and industrialism and the modernism of the twentieth century.

HIST 131 - American History to 1865 (3 Credits)
The Age of Discovery and the Colonial Era through the American Revolution, nation building, the rise of the party system, slavery, and the Civil War.
HIST 132 - American History Since 1865 (3 Credits)
Reconstruction, the emergence of industrialism, the development of world power status through the World Wars, and post-1945 trends.

HIST 141 - Asian Civilization I (3 Credits)
Asian civilization from its origins in India, China, Japan, and other societies through 1500 AD. Emphasis on social, intellectual, and technological change in the development of the culture and history of the area.

HIST 142 - Asian Civilization II (3 Credits)
Asia in the modern era, 1500 AD to present, the age of Western expansion and penetration and the social, political, economic, and intellectual transformation of the nineteenth and twentieth centuries.

HIST 190 - Great Lives: Biographical Approaches to History and Culture (3 Credits)
Examination of various historical and culture developments through the lives of notable individuals from ancient times to the present; specific lives change each semester and cover a wide range of areas of accomplishment. Formerly taught as IDIS 300F and Hist 200X. May not receive credit for Hist 190 if completed either 300F or 200X.

HIST 200 - Topics in History (3 Credits)
Listed in the Schedule of Courses, chosen according to timely interest.

HIST 201 - First-Year Seminar in European History (3 Credits)
Topical seminar for freshmen who enter with a score of 4 or higher on AP European history.

HIST 202 - First-Year Seminar in American History (3 Credits)
The course is designed for first-year students with requisite AP credit, the purpose being to introduce them at the outset to the richness and diversity of historical inquiry. Specific issues will vary from semester to semester according to the expertise of the course instructor, but all topics will be chosen so as to acquaint students with a broad range of historical approaches—e.g.: social, cultural, political, diplomatic, and intellectual history. Moreover, the course will emphasize historical interpretation and will require students to employ the basic skills of the discipline, notably research and communication, both written and oral.

HIST 297 - History Colloquium (3 Credits)
Prerequisites: HIST 121 and HIST 122 OR HIST 131 and HIST 132 OR HIST 141 and HIST 142 and major status. Introduction to what history is and what historians do with a focus on historiography, speaking and writing.

HIST 298 - History Practicum (3 Credits)
Prerequisite: HIST 297. Introduction to what history is and what historians do with a focus on research, speaking and writing.

HIST 300 - Topics in History (3 Credits)
Listed in the Schedule of Courses, chosen according to timely interest.

HIST 303A - The American South (3 Credits)
Slavery and the plantation system, rise of sectionalism, Civil War and Reconstruction, the era of segregation, and the civil rights movement.

HIST 304 - The Civil War (3 Credits)
Development of Southern nationalism and the Confederacy; emphasis on social, economic, and political as well as military aspects of the war.

HIST 305 - The American West (3 Credits)
Exploration of interactions among various peoples who have lived along the American frontier and/or the American "West."

HIST 307 - Native American History (3 Credits)
Overview of Native American experiences in North America, with a focus on the pre-contact era to the Battle of Wounded Knee in 1890; also addresses 20th-century and contemporary Native American experiences and issues.

HIST 308 - US Labor History (3 Credits)
Study of work and labor in the United States; emphasis on economic, political, social, and cultural changes in work and the labor movement.

HIST 310 - US Urban History (3 Credits)
History of cities and urban life in the United States from the colonial period to twentieth century.

HIST 313 - African American History through 1865 (3 Credits)
A survey of the African American experience in the British colonies of North America and in the early United States from African roots through the Civil War, with a focus on the experience of both slaves and free blacks.

HIST 314 - African American History since Slavery (3 Credits)
A survey of the African American experience since emancipation in 1865; covers segregation and lynching, black nationalism, the Great Migration, and the civil rights movement.

HIST 315 - U.S. Immigration History (3 Credits)
This course explores the experiences of immigrants in the United States and the creation of ethnic identity from the colonial period to the present.

HIST 318 - The American Revolution (3 Credits)
Overview of the cultural, economic, political and social factors that fueled the American colonies movement toward rebellion and independence.

HIST 319 - The Early American Republic (3 Credits)
Cultural, social, political, and economic history of the period between the American Revolution and the Civil War.

HIST 320 - The Gilded Age (3 Credits)
A survey of the period from the Civil War to the turn of the century; covers such topics as urbanization, industrialization, immigration, reform movements, and developments in law, family, recreation, race, and labor.

HIST 321 - The Progressive Era (3 Credits)
A survey of the first quarter of the twentieth century; covers reform efforts and World War I, as well as developments in law, recreation, race, business, and labor.

HIST 322 - US Environmental History (3 Credits)
This course considers interactions between human populations and their physical environments from early arrivals in North America through the 20th century, addressing the impacts of this exchange on both culture and nature.

HIST 323 - Colonial America (3 Credits)
This course considers how people of Native American, European, and African descent shaped and were shaped by colonial America's environmental, social, cultural, and economic realms, and how those experiences changed between the 16th and 18th centuries.

HIST 324 - Chinese History through Film (3 Credits)
This course explores the intersection of Chinese history and cinema during the twentieth and early twenty-first centuries. Themes of exploration include revolution, gender, sexuality, socio-economic class, as well as the dynamics of globalization, among others (e.g., humor, violence.) Students will also build skills in analysis, speaking, writing, and digital fluencies.

HIST 325 - Technology and Culture (3 Credits)
Development of American technology and its relation to U.S. culture from the colonial period to the present.
HIST 326 - History of Manhood in the US (3 Credits)
Gendered history of men and masculinity in the United States from the colonial period to the present.

HIST 327 - US Women's History to 1870 (3 Credits)
Significant cultural, economic, and political developments that shaped the lives of women in the United States from the pre-colonial period to the passage of the 15th Amendment.

HIST 328 - US Women's History Since 1870 (3 Credits)
This course is a survey of the history of women in the United States from 1870 to the present. It examines the significant cultural, economic, and political developments that shaped the lives of American women, placing gender at the center of historical analysis. The course also stresses the variety of women's experiences, acknowledging the importance of race, ethnicity, and class in shaping female lives.

HIST 329 - U.S. History and Film (3 Credits)
This course examines historically oriented motion pictures as both primary and secondary sources of information about the history of the U.S. The course examines the relative successes or failures that major films have had in portraying the past, and analyzes how present events, cultures, and attitudes shape our view of the past.

HIST 331A - History of Ancient Greece (3 Credits)
Greek history from Mycenae and Homer to the Hellenistic kingdoms; emphasis on primary source criticism.

HIST 332 - History of Ancient Rome (3 Credits)
Mythic origins of the city to the Barbarian invasions; emphasis on primary source criticism.

HIST 334 - Early Modern European Women's History (3 Credits)
Explores key areas of European women's lives including family life, religion, sexuality, and witchcraft, from 1300-1700.

HIST 335 - The Renaissance (3 Credits)
Provides an in depth look at the intellectual, political, social, and artistic developments in Europe known as the Renaissance.

HIST 336 - The Reformation (3 Credits)
Provides an in depth look at the religious, intellectual, and social developments of the sixteenth and seventeenth centuries.

HIST 337 - Medieval Islamic Civilization (3 Credits)
This course traces the articulation and development of Islamic Civilization from the appearance of Islam in the Arabian Peninsula in the 7th century CE to the spread of this civilization impulse throughout much of Eurasia and Africa by the 13th century CE.

HIST 338 - From Mongols to Ottomans (3 Credits)
This course traces the major developments that shaped the Nile to Oxus region from roughly the 13th to the 18th centuries. This period witnessed several transitions which shaped the background to the modern world in Eurasia, following the Mongol Irruption and closing with the stabilization of the “classical” Ottoman state.

HIST 339 - Modern Middle East History (3 Credits)
This course traces the major cultural, political and economic developments that have shaped the modern Middle East from the 19th century to the present time.

HIST 341 - Europe in the Middle Ages I (3 Credits)
Conversion of Constantine to the last Viking raids.

HIST 342 - Europe in Middle Ages II (3 Credits)
Investiture crisis to the Italian Renaissance.

HIST 349 - History of the British Isles (3 Credits)
Ireland, England, and Wales from prehistory to the 20th century, emphasizing interaction of cultures in the British Isles and throughout the British Empire.

HIST 354 - History of France (3 Credits)
Restoration Era to de Gaulle.

HIST 358 - History of Russia II (3 Credits)
The last Romanovs, Revolution, and Soviet Period.

HIST 360 - History of Spain (3 Credits)
The history of Spain and its political, economic, and social evolution.

HIST 361 - History of Latin America I (3 Credits)
Native cultures, Spanish conquest, and colonial institutions.

HIST 362 - History of Latin America II (3 Credits)
Nineteenth and twentieth centuries.

HIST 364 - History of Japan (3 Credits)
This course explores Japanese history from pre-modern times to the present. We focus on specific topics, including the rise of new state forms, nationalism and democracy, as well as industrialization, colonialism, the Asia Pacific War and its consequences, and finally post-war changes, “lost decades,” and current-day dynamics.

HIST 365 - History of China I (3 Credits)
Social, political, and intellectual development from the earliest times to the present; emphasis on the rise of modern nationalism, Maoist period.

HIST 366 - History of China II (3 Credits)
Social, political, and intellectual development from the earliest times to the present; emphasis on the rise of modern nationalism and Maoist period.

HIST 368 - Gender in Chinese History (3 Credits)
An exploration of the role of gender and family in Chinese history, from imperial times to present.

HIST 370 - History of Socialism (3 Credits)
Global history of socialist ideas, movements, and countries from the 19th century to the present.

HIST 371 - European Diplomatic History I (3 Credits)
Development of the modern state system from the Thirty Years War to the middle of the nineteenth century.

HIST 372 - European Diplomatic History II (3 Credits)
From the unification of Germany through two World Wars to the Cold War.

HIST 375 - Military History (3 Credits)
The art of war and its impact on society from the seventeenth century to the present; analysis of military developments in terms of organization, technology, and strategy.

HIST 377A - The Second World War 1939-1945 (3 Credits)
In-depth study of the origins, conduct, and consequences of the war with emphasis on its political, diplomatic, economic, and military aspects.

HIST 380 - United States Since 1945 (3 Credits)
Emphasis on major issues of the postwar era, including the Cold War, McCarthyism, civil rights movement, Vietnam, black militancy, and feminism.

HIST 381 - Europe Since 1945 (3 Credits)
From the end of the Second World War to the present with emphasis on the origins of the Cold War, national developments, the Common Market, colonial independence movements, and the collapse of the Soviet empire.
HIST 385 - Arab-Israeli Conflict (3 Credits)
Surveys the development and evolution of what is commonly referred to as the "Arab-Israeli conflict" from the mid-19th century to the present. Formerly taught as Hist 200A1.

HIST 387 - Turkey from Empire to Republic (3 Credits)
This course covers the history of Modern Turkey and its transition as a society and political unit from an imperial Ottoman to a republican Turkish reality. While political, cultural, and religious topics are covered, the primary focus is historical, interrogating how Turkish society evolved in response to a series of domestic, regional, and international challenges in the past century and a half.

HIST 390A - The United States and Vietnam (3 Credits)
Political, diplomatic, military, economic, and cultural study of Vietnam and of the United States' role in Indochina.

HIST 395 - U.S. History and Popular Culture (3 Credits)
This course explores the history of the United States through popular culture. Topics include fashion, food ways, television, movies, and music.

HIST 416 - American Legal History (3 Credits)
A study of politics, society, and economics through the mirror of law. Covers such issues as property, the family, and the legal profession.

HIST 419 - The Great War in the Middle East (3 Credits)
Prerequisites: HIST 297 and HIST 298. This seminar examines the history and multiple legacies of World War I for the Middle East. As such, the class explores the diplomatic background, imperial goals, military imperatives, personal experiences, negotiated settlement legacies, and evolving historiography of the conflict.

HIST 420 - The Great War, 1914-1918 (3 Credits)
Prerequisites: HIST 298 and junior or senior status. The war's origins, its political and military leadership, the various land and sea campaigns, war poetry, the war's cultural legacy, the role of women, and peacemaking.

HIST 421 - Nazi Germany (3 Credits)
Prerequisites: HIST 298 and junior or senior status. German history from 1933 to 1945, including Hitler's rise to power, the causes of the 1939 war, the campaigns of World War II, the Holocaust, war crimes, and continuing Nazi legacy.

HIST 425 - Public History Seminar (3 Credits)
Prerequisite: AMST 306 or ARTH 315A or HISP 200 or HIST 298. Course familiarizes students with best practices in public history as practiced in the United States and the principles of public history interpretation. Student participate in research and exhibit preparation in cooperation with a community partner.

HIST 426 - Nineteenth-Century Am Families (3 Credits)
Prerequisites: HIST 298 or 299 and junior or senior status or permission of instructor. U.S. family from the Revolution through the early 20th century comparing idealized to actual families by exploring regional, class, and ethnic differences.

HIST 427 - History of the Information Age (3 Credits)
Prerequisite: HIST 298 and junior or senior status or permission of instructor. The digital humanities, history and new media, and the creation of online historical resources. Generally based in the history of the US, but it ranges more widely as appropriate.

HIST 428 - Digital History (3 Credits)
Prerequisite: HIST 298 and junior or senior status or permission of instructor. The digital humanities, history and new media, and the creation of online historical resources.
HIST 485 - Historical Research (3 Credits)
Prerequisites: HIST 298, senior status and faculty approval of research topic. Capstone research and writing course involving the in-depth investigation of a subject under close supervision by a member of the department.

HIST 486 - Historical Research Abroad (3 Credits)
Prerequisites: HIST 298 and junior or senior status and faculty approval of research topic. Alternative capstone research and writing course involving in-depth investigation of a subject in foreign archives under close supervision by a member of the department.

HIST 491 - Individual Study (1-4 Credits)
Individual investigation of a subject of historical significance, directed by a member of the department.

HIST 499B - Internship (1-12 Credits)
Supervised off-campus experience, developed in consultation with the department. No more than 3 credits may be counted in the major.

**Honors (HONR)**

HONR 002 - Honors Leadership (0 Credits)
The purpose of the leadership component of the honors program is to provide students the opportunity to develop leadership skills to help promote/support the honors program. Prerequisite: Member of Honors Program.

HONR 003 - Honors-Co-curricular Events (0 Credits)
Participation in co-curricular activities exposes students to scholarship and learning opportunities outside of the classroom. Honors students are required to participate in at least one co-curricular activity per semester. Prerequisite: Member of Honors Program.

HONR 004 - Honors Portfolio (0 Credits)
Honors Program Portfolio - each Honors Scholar is required to assemble an electronic portfolio of Honors Program work. Prerequisite: Honors Program Scholar.

HONR 005 - Honors Capstone Preparation (0 Credits)
A workshop series that informs students about the process, expectations and deadlines for the required Honors capstone project. Must be completed a minimum of one semester before the capstone experience.

HONR 201 - Honors Service Learning (1 Credits)
Supervised on-campus or off-campus mentored service learning project developed in consultation with the Honors Program staff.

HONR 491 - Honors Individual Study (1-4 Credits)
Honors Individual Study - Individual Study under the direction of a faculty member. Prerequisite: Honors Program Committee permission.

**Interdisciplinary Studies (IDIS)**

IDIS 101 - Scientific Reasoning and Practices (3 Credits)
This course will prepare students for success in a science lab course by developing critical thinking and scientific reasoning skills and by providing experience with laboratory experiments.

IDIS 191 - Liberal Arts and World of Work (1 Credits)
This course is for first and second year students and focuses on the connections between the liberal arts, disciplinary pathways, and the world of work. Students explore and evaluate their own interests, values, strengths and skills while examining possible connections to academic programs and employment opportunities as the foundation of the career and professional development planning process.

IDIS 193 - Personal Development for Life and Career (1 Credits)
This course is for students who are preparing to start their strategic job search and is designed to support them as they seek to understand, assess, and refine their professional identity. Offered as pass/fail only.

IDIS 195 - Life and Career after UMW (1 Credits)
This course is for seniors who are preparing for their post-college transition to the world of work and independent living. Offered as pass/fail only.

IDIS 204 - International Cinema (3 Credits)
Study of the development of world cinema from the late nineteenth century to the present.

IDIS 230 - Sports Law (3 Credits)
This course is a study of the legal principles underlying business relationships in sports. The course introduces law that affects sports and the business of sports including regulations of amateur athletics, public regulation of sports activities, legal relationships in professional sports, enforcement of professional sport contract, liability for injuries, and anti-trust aspects of sports activities.

IDIS 300 - Interdisciplinary Topics (3 Credits)
Topics offered under this heading are designed to supplement and enhance the programs of various departmental majors.

IDIS 300N - Intro to Disability Studies (3 Credits)
Topics offered under this heading are designed to supplement and enhance the programs of various departmental majors.

IDIS 301 - Sport Psychology (3 Credits)
Prerequisite: PSYC 100. This course investigates the application of psychological principles to sport and sport performance.

IDIS 307 - How Things Work: Engineering and the Design Process (3 Credits)
This course provides an introduction to the E component of STEM, engineering. Engineering and its associated design process provide the methodology for applying scientific and mathematic principles, as well as technology in developing and testing solutions to practical problems.

IDIS 350 - Study Abroad (1-6 Credits)
Interdisciplinary study of a selected area abroad, combining lectures, readings, discussion, and experiential learning.

IDIS 400 - Urban Research Seminar (3 Credits)
Prerequisite: HISP 209 or GEOG 231 or GEOG 237 or permission of the instructor. Provides an opportunity to explore an urban issue in-depth and to conduct independent research related to urban studies. This class is the capstone course for students completing the Urban Studies minor and is open to other students only with the permission of the instructor.

IDIS 407 - Field Project in STEM Education (4 Credits)
Prerequisite: IDIS 307 and Senior class standing. This course provides the capstone experience for the Interdisciplinary Science Studies major. It is a project-based course, with the focus on the implementation of STEM concepts and principles in solving a practical, real-world problem.

IDIS 483 - Peer Mentorship (1 Credits)
Permission of instructor. Students in the course will develop their skills with a variety of digital tools and technologies used at the University for the purpose of providing peer support for the First-Year Seminar. No more than 4 credits can count toward the 120 hours of graduation.
IDIS 491 - Individual Study (1-3 Credits)
This individual study is only available for students who have an approved Special Major Program. Individual investigation of a subject appropriate to the special major, directed by a member of the faculty. The registration form must be signed by both the directing faculty and the official advisor of the student's special major.

IDIS 499 - Internship (1-6 Credits)
Supervised off-campus experience, directed by a member of the faculty.

**International Affairs (INAF)**

INAF 471 - International Affairs Seminar (3 Credits)
Intensive reading and group discussion of selected topics in international affairs.

INAF 491 - Individual Study (3 Credits)
Directed individual research on approved problems in international affairs.

INAF 499 - Internship (1-12 Credits)
Supervised off-campus experience. Up to 6 credits can be applied to major.

**Italian (ITAL)**

ITAL 101 - Beginning Italian I (3 Credits)
Grammar review, reading, oral work, laboratory use.

ITAL 102 - Beginning Italian II (3 Credits)
Grammar, composition, conversation, reading, laboratory use. Students with credit for a higher level course in Italian may not take this course for credit.

ITAL 201 - Intermediate Italian I (3 Credits)
Grammar review, reading, oral work, laboratory use. Students with credit for a higher level course in Italian may not take this course for credit.

ITAL 202 - Intermediate Italian II (3 Credits)
Grammar review, reading, oral work, laboratory use. Students with credit for a higher level course in Italian may not take this course for credit.

ITAL 291 - Studies in Language I (3 Credits)
Prerequisite: ITAL 202. Reading, conversation, and composition in Italian with emphasis on communication and analysis of language through lectures and discussions.

ITAL 292 - Studies in Language II (3 Credits)
Prerequisite: ITAL 291. Reading, conversation, and composition in Italian with emphasis on communication and analysis of language through lectures and discussions.

ITAL 300 - Topics in Italian Culture (3 Credits)
Important literary works and authors, ideas, movements, and institutions in Italian culture.

ITAL 316 - Italian Society & Civilization (3 Credits)
Literary, social, and cultural history of the Italian people from the Renaissance to the 20th century.

ITAL 338 - Modern Italian Literature (3 Credits)
A study of modern Italian works, including selections from Ungaretti, Moravia, Carlo Levi, Buzzati, Silone, Pasolini, Calvino, and others.

ITAL 395 - Italian Literature in Translation: Dante's Divine Comedy (3 Credits)
Taught in English. A study of the Divine Comedy in its historical and cultural background.

ITAL 396 - Italian Literature in Translation: Masterpieces of the Renaissance (3 Credits)
Taught in English. A study of major Renaissance authors. Petrarch, Boccaccio, Cellini, Ariosto, Castiglione, Tasso, Machiavelli, etc.

ITAL 491 - Individual Study (3 Credits)
Intensive study of one or more authors selected by student in consultation with the department.

ITAL 492 - Individual Study (3 Credits)
Intensive study of one or more authors selected by student in consultation with the department.

ITAL 499 - Internship (1-12 Credits)
Supervised off-campus experience, developed in consultation with the department.

**Latin (LATN)**

LATN 101 - Elementary Latin (3 Credits)
Essentials of Latin grammar and introduction to translating Latin literature.

LATN 102 - Elementary Latin (3 Credits)
Prerequisite: LATN 101 or equivalent. Essentials of Latin grammar and introduction to translating Latin literature.

LATN 201 - Intermediate Latin (3 Credits)
Prerequisites: LATN 101 through LATN 102 or equivalent. Continued study of Latin grammar and composition, and readings from Latin prose and/or poetry.

LATN 202 - Intermediate Latin (3 Credits)
Prerequisites: LATN 101 through LATN 102 or equivalent. Continued study of Latin grammar and composition, and readings from Latin prose and/or poetry.

LATN 305 - Survey of Latin Literature I (3 Credits)
Prerequisite: LATN 202, four units of secondary school instruction in Latin, or placement by departmental exam. Survey of Latin literature from the earliest inscriptions to the end of secular Roman writing. Introduction to materials and methods for the study of classical literature. LATN 307 can be taken before LATN 305.

LATN 307 - Survey of Latin Literature II (3 Credits)
Prerequisites: LATN 202, four units of secondary school instruction in Latin, or placement by departmental exam. Survey of Latin literature from the earliest inscriptions to the end of secular Roman writing. Introduction to materials and methods for the study of classical literature. LATN 307 may be taken before LATN 305.

LATN 352A - Roman Drama (3 Credits)
Prerequisites: LATN 202, four units of secondary school instruction in Latin, or placement by departmental exam. Selected plays from Plautus, Terence, and/or Seneca.

LATN 353 - Cicero (3 Credits)
Prerequisites: LATN 202, four units of secondary school instruction in Latin, or placement by departmental exam. Readings selected from Cicero's letters, orations, and/or philosophical works. Previously taught as LATN 301. Do not register for this course if you have successfully completed LATN 301.

LATN 354 - Lyric & Elegiac Poetry (3 Credits)
Prerequisites: LATN 202, four units of secondary school instruction in Latin, or placement by departmental exam. Readings from Catullus, Propertius, and Tibullus.
LATN 355 - Roman Historical Writing (3 Credits)
Prerequisites: LATN 202, four units of secondary school instruction in Latin, or placement by departmental exam. Selected readings from Roman historians.

LATN 356 - Vergil (3 Credits)
Prerequisites: LATN 202, four units of secondary school instruction in Latin, or placement by departmental exam. Readings from the Eclogues, Georgics and/or Aeneid.

LATN 357 - Horace (3 Credits)
Prerequisites: LATN 202, four units of secondary school instruction in Latin, or placement by departmental exam. Readings from the Odes and Epodes.

LATN 358 - Ovid (3 Credits)
Prerequisites: LATN 202, four units of secondary school instruction in Latin, or placement by departmental exam. Selected readings from Ovid's poems.

LATN 425 - Latin Tutoring Practicum (3 Credits)
Advanced students in Latin serve as tutors in introductory and/or intermediate level Latin classes, assisting others in preparing for exams and projects, organizing small-group work, and reviewing vocabulary, principal parts of verbs, and principles of grammar and syntax.

LATN 430A - Advanced Latin Grammar and Composition (3 Credits)
Prerequisites: LATN 202, four units of secondary school instruction in Latin, or placement by departmental exam. An in depth study of Latin grammar through composition. Required of all Classics majors concentrating in Latin.

LATN 432 - Roman Philosophical Thought (3 Credits)
Prerequisites: LATN 202, four units of secondary school instruction in Latin, or placement by departmental exam. Readings from Lucretius and/or Seneca.

LATN 434 - Roman Satire (3 Credits)
Prerequisites: LATN 202, four units of secondary school instruction in Latin, or placement by departmental exam. Readings selected from the satires of Horace and/or Juvenal.

LATN 451 - Special Studies in Latin Literature (3 Credits)

LATN 452 - Special Studies in Latin Literature (3 Credits)

LATN 491 - Individual Study in Latin (1-3 Credits)
Individual study under the direction of a member of the staff. By permission of the Classics faculty.

LATN 492 - Individual Study in Latin (1-3 Credits)
Individual study under the direction of a member of the staff. By permission of the Classics faculty.

Leadership (LRSP)

LRSP 201 - Accounting for Managers (3 Credits)
This course covers financial accounting concepts and provides an introduction to managerial accounting concepts. Emphasis is placed on understanding how economic transactions impact financial statements. The accounting equation model as well as the financial statements model is used for this purpose. Vertical analysis, horizontal analysis and ratios are used to evaluate a company's performance. Managerial accounting is introduced and contrasted with financial accounting. Topics include: the accounting equation, elements of financial statements including public disclosures of Notes to Financial Statements and Management Discussion and Analysis, filings with the SEC, financial ratios and analysis as well as budgeting. (Credit is not granted for both LRSP 201 and ACCT 201.)

LRSP 305 - Public Sector Management (3 Credits)
Provides an overview of the theoretical foundations, structures, and processes of public and nonprofit organizations; their historical development and socioeconomic environment; and the complexities of managing in public and nonprofit organizations.

LRSP 308 - Management and Marketing Modules (3 Credits)
This course is intended to introduce students to essentials of management and marketing concepts. It introduces management theory and practice as a unified body of knowledge and addresses the historical development of management theory; the purpose and nature of organizations; management/organization functions, strategies and structures; and a sample of challenges facing management in contemporary organizations. Emphasis is placed on the roles of executives managing organizations, improving their performances and achieving desired operating results/outcomes. From a marketing manager's perspective, this course builds upon the foundation of marketing knowledge found in the classical strategic factors of price, product, place, and promotion. In addition, contemporary competitive factors of quality, speed, innovation and customer service are considered. Attention is given to developing a knowledge base of fundamental marketing research techniques, a basic understanding of free market economics, and the importance of marketplace information to marketing practices. Only MBA students may register for this course. Credit is not awarded for LRSP 308 and any of the following courses: LSRP 311, LSRP 412, BUAD 300, and BUAD 310.

LRSP 311 - The Management Process (3 Credits)
This course examines management theory and practice as unified body of knowledge. The course covers historical development of management theory, the nature and purpose of organizations, and the functions, strategies, structures, and a sampling of challenges facing management in contemporary organizations. Emphasis is placed on the roles of executives managing organizations, improving their performance, and achieving desired operating results. Experiential exercises, cases, and other strategies are applied to enhance learning the theory, and acquire, enhance, and integrate key management skills related to managing contemporary work organizations.

LRSP 316 - Quantitative Methods and Statistics Modules (3 Credits)
The ability to work with and effectively use quantitative data to make decisions is a fundamental skill in every management function. This course will provide students with fundamental quantitative skills for analyzing data and making good decisions. Specifically, this course will provide a fundamental understanding of probability and develop skills in quantitative problem structuring, basic forecasting methods, and basic optimization techniques for planning and resource allocation.
LRSP 331 - Organizational Behavior (3 Credits)
Examines human behavior in work organizations from the perspective of the practicing manager. Individual and group behavior as critical factors in developing ethical work practices and successful communications, motivation, leadership, and culture. Assessment of internal and external environments as they relate to interpersonal skills and needs in a dynamic world.

LRSP 343 - Leadership Theory & Practice (3 Credits)
This course involves study of contemporary leadership theory, with emphasis on practical application of those theories. Students have opportunities to explore personal leadership styles, learn how to modify them, how to apply them effectively in their work, and write a personal vision statement. Characteristics of effective leaders, contemporary leadership models, strategic leadership, ethics, power, politics, influence tactics, teamwork, motivation and coaching skills, creativity and innovation, communication, and conflict resolution, are discussed. Experiential exercises, cases, and other strategies are applied to enhance learning theory and acquire, enhance, and integrate leadership skills related to leading contemporary work organizations.

LRSP 406 - Human Resource Management (3 Credits)
This course examines the principles and practices of human resource management, including recruiting, hiring, orienting, training, developing, disciplining, rewarding and recognizing employees. The evolving strategic role of human resource professionals and HR practices are delineated and discussed.

LRSP 407 - Employment Law (3 Credits)
Prerequisite: BPST 314 or equivalent. This course emphasizes federal employment statutes including Title VII, Fair Labor Standards, American with Disabilities Act, Family Medical Leave Act, Age Discrimination in Employment, and other federal statutes. Cases are used to illustrate the various federal courts’ interpretation of the federal statutes. Federal agencies such as Equal Employment Commission and Department of Labor guidelines are also studied.

LRSP 412 - Marketing for Managers (3 Credits)
From a marketing manager’s perspective, this course builds upon the foundation of marketing knowledge found in the classical strategic factors of price, product, place, and promotion. In addition, contemporary competitive factors of quality, speed, innovation and customer service are considered. Additional topics include service strategy, development of service systems, differentiating services from products, the role of the internet, and the application of key marketing concepts to a variety of profit and nonprofit organizations. Attention is given to developing a knowledge base of fundamental marketing research techniques, a basic understanding of free market economics, and the importance of marketplace information to marketing practices.

LRSP 433 - Production/Operations Management (3 Credits)
Prerequisites: LRSP 316 and LRSP 305 or LRSP 311 or equivalents. This course examines current concepts and methods of managing operations and production for the manufacturing and service industries. It presents quantitative and qualitative techniques for product and service design, process analysis, job design and measurement, facility layout, waiting line management, material and customer requirements, control, and scheduling. This course also explains concepts and models of supply chain management and total quality management focusing on Six Sigma.

LRSP 434 - International Management (3 Credits)
Prerequisites: LRSP 311 and LRSP 412 or equivalents. This course studies the role of managers in global markets and international organizational settings. Topics in this class include the following areas: the external economic and political environment, international strategic planning, partnerships and alliances, global human resource management, managing technology, product and service design, and ethics and leadership as a global manager. This course utilizes innovative learning techniques and case study analysis from a variety of national, multinational, and global firms.

LRSP 435 - Leadership, Innovation, and Creativity (3 Credits)
Prerequisite: LRSP 331 or LRSP 343 or equivalent. This course focuses on the role of leaders in developing an innovative organization and managing creative employees. Topics include the creative/innovation process, management of innovation, and the individual and team-based skills necessary for organizational success in an increasingly global, competitive environment.

LRSP 460 - Leadership Strategy and Policy (3 Credits)
Prerequisite or corequisite; senior status, BPST 314, and LRSP 311, LRSP 316, LRSP 344, LRSP 406, and LRSP 412 or equivalents for each aforementioned course. This course studies the formulation and direct application of strategy at the business and corporate levels. Emphasis is given to the role of leadership in strategic planning and thinking. Through the use of a variety of instructional techniques, e.g., computer-based simulations and case studies, students learn to make critical leadership decisions concerning organizational policy, competitiveness, operational and marketing tactics, and the role of corporate governance while addressing ethical considerations.

LRSP 471 - Special Topics (3-6 Credits)
Selected topics will reflect faculty specialization or program needs. The purpose of this course is to provide opportunities for concentrated study or to equip students with specialized knowledge and competencies that will be required of leaders. May be repeated for credit with a change in topic.

LRSP 491 - Directed Study (3 Credits)
This is an individual study under faculty direction on a topic of relevance to the LRSP concentration.

LRSP 499 - Internship (1-6 Credits)
Internships offer students opportunities to experience various fields of employment while working with a variety of organizations on important and challenging projects. These experiences augment classroom learning while allowing on-the-job training. Interested students should contact the program director for further information about internship opportunities.
Linguistics (LING)

LING 101B · Introduction to Linguistics (3 Credits)
Introduction to fresh perspectives on linguistic theory and applications. The course focuses on such diverse topics as animal communication, child language acquisition, human speech, language variation and change, and language as human interaction.

LING 205 · Writing Systems of the World (3 Credits)
An introduction to the major writing systems of the world, exploring the linguistic structure, history, and social context of various writing systems, including Chinese, Japanese, cuneiform hieroglyphic, semitic languages, English, the Greek and Roman alphabets, and more. In addition, students will learn about the decipherment of the rosetta Stone, Linear B, and Mayan.

LING 251 · Issues in Linguistics (3 Credits)
Significant topics in linguistics. Specific topics vary.

LING 301A · Introduction to Psycholinguistics (3 Credits)
Prerequisite: LING 101B. An introduction to the mental and biological systems that enable human beings to communicate with language. Topics in psycholinguistics include the biological evolution of language, child language acquisition, speech and language processing, bilingualism, aphasia and dyslexia.

LING 302 · Introduction to Sociolinguistics and Anthropological Linguistics (3 Credits)
Prerequisite: LING 101B. The course examines the relationship between language and society. At the micro level, the emphasis is on social interaction and the ways language reflects and shapes class, culture, gender, ideology, and conversational style. At the macro level, topics include language maintenance and shift; multilingualism; language variation; language, racism and ethnicity; and language and education.

LING 305A · Linguistics & Text (3 Credits)
Prerequisite: LING 101B. The application of linguistic methods and theories to the analysis of texts in English.

LING 307 · Language and Gender (3 Credits)
Prerequisite: LING 101B. This course focuses on research that investigates the relationship between gender and language use in a variety of contexts from talk at work and in the classroom, to talk at home. It explores how speakers (or writers) create and reflect images of masculinities and femininities in their discourse and the forces shaping these identities.

LING 308 · Language and Race (3 Credits)
Prerequisite: LING 101B. This course examines linguistic practices and language ideologies of various ethnoracial groups in the U.S. as well as exploring the influence of historical events and sociocultural forces on sociolinguistic phenomena.

LING 309 · Introduction to Phonology (3 Credits)
Prerequisite: LING 101B. An introduction to phonology - the sound patterns of language - with emphasis on both English and a variety of languages. Topics include the relation between phonetics and phonology, the role of distinctive features (the atoms of sound), types of common sound alternations and sound changes, and prosodic phenomena such as stress, rhythm, and intonation. Students will learn to describe patterns, and argue for an analysis. In addition, the course will relate theoretical findings to practical applications.

LING 310 · History of the English Language (3 Credits)
Prerequisite: LING 101B. A history of the English language, with a focus on both the linguistic changes and the sociohistorical influences related to those changes. From Indo-European times and characteristics of Germanic languages, through Old and Middle English, up to modern dialects and current developments of American, British, and World Englishes, students will learn about and analyze the changes and cultures of each period.

LING 311 · Introduction to Morphology (3 Credits)
Prerequisite: LING 101B or permission of instructor. An introduction to work formation. The course will examine in detail how English and a fascinating variety of languages build existing words from simpler parts, and how they coin new words. Topics include affixation, analogy, compounding, reduplication, and use of templates, and other types of word formation. Questions to be examined include the definition of "word", the relation of morphology to other aspects of language, the role of psychological factors in a linguistic analysis and the role of morphology in language change, dialect variation, and language acquisition.

LING 375 · Special Studies (3 Credits)
Prerequisite: LING 101B or permission of instructor. Studies of significant topics in linguistics. Consult Schedule of Courses for specific topic.

LING 470 · Seminar in Linguistics (3 Credits)
Advanced work in selected topics in linguistics.

LING 491 · Individual Study in Linguistics (3 Credits)
Individual study under the guidance of a member of the staff. By permission of the department. Only three credits may be counted toward the English major.

LING 492 · Individual Study in Linguistics (3 Credits)
Individual study under the guidance of a member of the staff. By permission of the department. Only three credits may be counted toward the English major.

LING 499 · Internship (1-6 Credits)
Supervised off-campus experience, developed in consultation with the department. Up to three credits may be counted toward the English major.

Management (MGMT)

MGMT 301 · Principles of Management (3 Credits)
An integrative approach to organizational concepts, principles, philosophy, and theory in public, private, and not-for-profit organizations is emphasized. Current decision-making approaches utilizing theories of organizational behavior, general systems and contingency theories are linked to the managerial functions of planning, organizing, leadership, and control.

MGMT 345 · Organizational Behavior (3 Credits)
Prerequisites: MGMT 301 or equivalent; and College of Business major or permission of the Associate Dean for Faculty. This course explores the behavioral aspects of organizations, presenting concepts, theories, research, and research techniques that can be applied to enhance understanding of people in organizations. Topics include personnel selection and placement, job and work environments, worker motivation, job satisfaction, and the organizational and social context of human work. Cross-listed as PSYC 385.
MGMT 346 - Human Resource Management (3 Credits)
Prerequisite: MGMT 301 or equivalent; and business administration major or permission of the Associate Dean for Faculty. The philosophy, principles, and policies needed to develop effective personnel management and industrial relations programs in business, governmental, and not-for-profit organizations are developed and discussed. Cross-listed as PSYC 386.

MGMT 347 - Organizational Development and Change (3 Credits)
Prerequisite: Business administration major and MGMT 301 or equivalent; or permission of the Associate Dean for Faculty. This course develops a system-wide application of behavioral science methods, theories, and accumulated knowledge to the change and reinforcement of organizational strategies, structures, and processes for improving organizational effectiveness. Cross-listed as PSYC 387.

MGMT 420 - Negotiation (3 Credits)
Prerequisite: BUAD 350, senior status; and business administration major or permission of the Associate Dean for Faculty. An exploration of negotiation techniques and strategies, including: understanding opponents, determining needs and identifying objectives, and managing concessions and power dynamics, all with an eye towards maintaining goodwill and building long-term, productive professional relationships. The course will cover individual, group, multi-party, agented, and cross-cultural negotiations, through theoretical study and practical application.

MGMT 421 - Entrepreneurial Venture Creation (3 Credits)
Prerequisite: ACCT 101, ACCT 102; BLAW 201; DSCI 259 or DSCI 352; MGMT 301; MKTG 301; and College of Business major or permission of the Associate Dean for Faculty. This course introduced entrepreneurship to students as creating something new that adds value to others. Entrepreneurial Venture Creation focuses on the knowledge, skills, and processes required for starting a new business. Strategies and approaches for creating, managing, and marketing a new firm are emphasized throughout the course. Cross listed as MKTG 421.

MGMT 422 - The Origins and Evolution of Business (3 Credits)
This class examines how the vision of individuals and groups combined with innovations, large and small, can affect the business environment and the culture and how the availability of those innovations can create business opportunities while often influencing social change. Cross listed as MKTG 422.

MGMT 425 - Leadership Theory and Practice (3 Credits)
Prerequisite: MGMT 301 or equivalent; and College of Business major or permission of the Associate Dean for Faculty. This course involves study of contemporary leadership theory, with emphasis on practical application of those theories. Characteristics of effective leaders, contemporary leadership models, strategic leadership, ethics, power, politics, influence tactics, teamwork, motivation and coaching skills, creativity and innovation, communication, and conflict resolution, are discussed. Students have the opportunity to explore personal leadership styles, learn how to modify them, how to apply them effectively in their work, and write a personal vision statement. Experiential exercises, cases, and other strategies are applied to enhance learning theory and acquire, enhance, and integrate leadership skills related to leading contemporary work organizations.

MGMT 427 - Leadership and Social Justice (3 Credits)
Senior status; and College of Business major or permission of the Associate Dean for Faculty. This course explores social injustice at the macro and micro business and social levels, including poverty, race and culture, and gender. The key will be in students learning that social justice is a business, not just a passion, and requires leaders with strengths in both. Students will work in the community to put this into practice.

MGMT 440 - Introduction to Project Management (3 Credits)
Prerequisite: MGMT 301 or equivalent; and College of Business major or permission of the Associate Dean for Faculty. This course provides a comprehensive overview of project management. The course addresses the framework, culture, principles, and basic techniques of project management. The course reviews the general stages of a project and describes how the stages interrelate. Basic tools of project management, such as work breakdown structure, scheduling, earned value analysis, and risk management are introduced and used in student assignments. The elements of project management critical to the success of a project are also identified and explained.

MGMT 460 - Creative Thinking for Managers (3 Credits)
The course's objective is to develop an understanding of the role of creativity and critical thinking in management. Management is decision making and most non-routine decisions rely on incomplete information and require novel, cogent, and compelling decisions. This course will help to temper the theoretical education of future managers.

MGMT 490 - Strategic Management (3 Credits)
Prerequisite: BLAW 201, BUAD 350, FINC 301, MGMT 301, MKTG 301; and Business Administration major or permission of the Associate Dean for Faculty. Prerequisite: BLAW 201, BUAD 350, FINC 301, MGMT 301, MKTG 301; and Business administration major or permission of the Associate Dean for Faculty. A capstone course designed to integrate the student's study of management. Advanced case studies and simulations prove a series of integrating experiences where students assume the role of the chief executive officer in a variety of organizational sectors (private, public, not-for-profit). Students are required to make managerial decisions concerning formulation of policy, strategy and tactics along with ethical considerations in organizations' multifaceted relationships with the external environment.

Management Information Systems (MIST)

MIST 201 - Management Information Systems and Applications (3 Credits)
The purpose of this course is to examine the technical, business and management aspects of management information systems through the study of MIS theory and concepts. Emphasis is placed on how and why different types of information systems have become an essential part of organizations. Students gain experience solving real world business problems using different information systems applications throughout the course.

MIST 301 - Principles of Knowledge Management Systems (3 Credits)
Prerequisite: MIST 201 or equivalent; and business administration major or permission of the Associate Dean for Faculty. The design and implementation of knowledge management systems that support a variety of business areas are emphasized. Management challenges associated with collecting, organizing and sharing knowledge are discussed in detail.

MIST 350 - Database Management Systems (3 Credits)
Prerequisite: MIST 201 or equivalent; and business administration major or permission of the Associate Dean for Faculty. The importance of relational databases in business environments is emphasized and demonstrated through real-world case studies and exercises. Students gain experience in planning, designing, developing and implementing business application databases for different business purposes such as modeling and decision making.
MIST 411 - Information Security (3 Credits)
Prerequisite: MIST 201 or equivalent; and business administration major or permission of Associate Dean for Faculty. This course provides an understanding of the concepts involved in securing information, both from a technical and business perspective. Skills required to analyze and evaluate the security of information from a variety of viewpoints are presented. Current research is used to discuss management issues associated with creating policies and implementing procedures for information security in organizations. Cross-listed as MMIS 540.

MIST 444 - Ethical Hacking (3 Credits)
Prerequisite: MIST 411 or equivalent. This course introduces students to penetration testing methods that can be used in an ethical hacking situation. Students learn in interactive environments where they scan, test, hack and secure their own systems, and gain experience with essential security systems. Topics include perimeter defenses, scanning and attacking students’ networks, escalating privileges, and steps to secure a system. Students learn about intrusion detection, policy malware, DoS and DDoS attacks, and buffer overflows. (Credit is not awarded for both MIST 444 and MMIS 544.)

MIST 450 - Systems Analysis & Design (3 Credits)
Prerequisite: MIST 201 or equivalent; and business administration major or permission of the Associate Dean for Faculty. This course examines systems analysis theory and concepts that are used to design and analyze different types of information systems from a technical and business perspective. System analysis techniques and design processes used by organizations are presented. The complexity of analyzing and designing information systems to support current and future business.

MIST 455 - Project Management for IT (3 Credits)
Prerequisite: MIST 201 or equivalent; and business administration major or permission of the Associate Dean for Faculty. This course covers methods for the analysis, design, and implementation of information technology projects from a project management and information systems perspective. Topics include investigating hardware and software needs, cost estimating, scheduling, and human resource management. Students are required to design feasibility plans based on current research. Principles, methods, tools and techniques available to assist managers in planning, implementing, and controlling projects are also discussed. Practical projects and the implications for managers are addressed.

Marketing (MKTG)

MKTG 301 - Principles of Marketing (3 Credits)
Prerequisite: ECON 201B or ECON 202B; and junior status. The place of marketing in the global economy and the policies and practices of marketing institutions are explored. Major topics included are marketing functions, organization, research, merchandising, channels of distribution and transportation. Also, problems concerning ethics and social responsibility in the marketing arena are discussed.

MKTG 411 - Marketing Research (3 Credits)
Prerequisite: DSCI 259 or 352 or equivalent; MKTG 301 or equivalent; and business administration major or permission of the Associate Dean for Faculty. Research in marketing is used as a tool to identify, collect, and analyze data relevant to decision-making for businesses. Relevant statistical software is used to analyze client data. Ethical considerations related to research findings also are discussed.

MKTG 417 - Digital Marketing (3 Credits)
Prerequisites: MKTG 301. A study of digital marketing platforms and digital commerce. Social media platforms such as Instagram, Facebook, and YouTube are explored along with digital commerce via Google and dropshipping. Students create their own social media advertisement for an actual digital commerce website.

MKTG 420 - Negotiation (3 Credits)
Prerequisite: BUAD 350, senior status; and business administration major or permission of the Associate Dean for Faculty. An exploration of negotiation techniques and strategies, including: understanding opponents, determining needs and identifying objectives, and managing concessions and power dynamics, all with an eye towards maintaining goodwill and building long-term, productive professional relationships. The course will cover individual, group, multi-party, agented, and cross-cultural negotiations, through theoretical study and practical application.

MKTG 421 - Entrepreneurial Venture Creation (3 Credits)
Prerequisite: ACCT 101, ACCT 102; BLAW 201; DSCI 259 or DSCI 352; MGMT 301; MKTG 301; and College of Business major or permission of the Associate Dean for Faculty. This course introduced entrepreneurship to students as creating something new that adds value to others. Entrepreneurial Venture Creation focuses on the knowledge, skills, and processes required for starting a new business. Strategies and approaches for creating, managing, and marketing a new firm are emphasized throughout the course. Cross listed as MGMT/MKTG 421.

MKTG 422 - The Origins and Evolution of Business (3 Credits)
This class examines how the origins of individuals and groups combined with innovations, large and small, can affect the business environment and the culture and how the availability of those innovations can create business opportunities while often influencing social change. Cross listed as MGMT 422.

MKTG 430 - Professional Selling (3 Credits)
Prerequisite: MKTG 301 or equivalent; College of Business major or minor; or permission of the Associate Dean for Faculty. Professional Selling focuses on the knowledge, skills, and processes required for effective professional relationship selling. Strategies and approaches for creating, communicating, and delivering value to initiate, develop and expand customer relationships are emphasized throughout the course.

MKTG 440 - Promotion Management (3 Credits)
The course provides an overall perspective of rapidly developing communication function of marketing with respect to consumers, technology, and media. It views promotion from a manager’s perspective and allows students to explore the importance of integrated marketing communications which emphasizes coordination of traditional, digital, and emerging media as well as other promotional elements to achieve an efficient and effective communication plan.

MKTG 450 - Consumer Behavior (3 Credits)
Prerequisite: MKTG 301 or equivalent; and business administration major or permission of Associate Dean for Faculty. This course examines the contributions of behavioral sciences toward understanding and predicting consumer behavior, especially as it pertains to the decision-making process. It is vital for marketers and managers to understand why different people make different decisions in the same circumstances in order to better serve them. This course looks at the empirical evidence from a variety of sources on why various segments behave as they do.
MKTG 460  -  International Marketing  (3 Credits)
Prerequisite: MKTG 301 or equivalent; and business administration major or permission of Associate Dean for Faculty. The focus of this course is to understand the challenges companies face in conducting the international marketing. Students explore various strategies to successfully manage international marketing efforts, including analysis of world markets, consumer behavior, foreign environments, and the marketing management methods required to meet the demands of the global marketplace. The problems of foreign competition, diminishing U.S. market share, and US economy's interdependence with world markets are covered. Also assessed are different foreign market entry strategies.

MKTG 471  -  Seminars in Marketing  (1-3 Credits)
Special topics of interest to faculty and students are discussed in individual seminars which focus on marketing.

MKTG 472  -  Marketing Seminar Abroad  (3 Credits)
Special topics of interest to staff and students pertaining to how marketing is conducted in one or more countries outside the United States are explored in depth in individual seminars. In order to receive credit for this class, students must also travel to the country as part of a class trip with the instructor.

MKTG 490  -  Marketing Strategy  (3 Credits)
Prerequisite: MKTG 301; and business major or marketing minor or permission of the Associate Dean for Faculty. This course serves as a capstone survey of the major topics in contemporary marketing. Topics included are delineation of market targets, the development and implementation of the marketing mix, the control and analysis of the total marketing effort, strategy, strategic decision-making tools, ethics, as well as comprehensive case studies or the use of a comprehensive simulation.

MKTG 491  -  Individual Study in Marketing  (1-3 Credits)
Directed by a marketing faculty member, students conduct individual research focusing on an approved topic of interest in marketing.

MKTG 499  -  Marketing Internship  (1-3 Credits)
A supervised work experience in a sponsoring organization developed with, and under the supervision of, a marketing faculty member. A maximum of 3 hours of 499 classes in the College of Business may be used toward the upper-level elective requirement for any of the majors in the College of Business.

Mathematics (MATH)

MATH 000  -  Experiential Learning in Math  (0 Credits)
Open to qualified students by permission of the department. Supervised on-campus or off-campus experiential learning activity developed in consultation with the department.

MATH 110  -  Finite Mathematics with Applications  (3 Credits)
Includes topics such as sets, counting techniques, voting theory, probability, and graph theory, together with their applications. Other topics may include fair division and logic.

MATH 111  -  Precalculus  (3 Credits)
Emphasis on elementary functions including rational, exponential, logarithmic and trigonometric functions. Designed for students who intend to take calculus.

MATH 115A  -  Introduction to Mathematical Modeling  (3 Credits)
Emphasis on environmental issues such as population, growth, pollution, natural disasters, epidemics, genetics, and patterns in nature. Mathematical topics include linear functions, linear regression, curve fitting, probability models, and difference equations.

MATH 120  -  Quantitative Reasoning for Decision-Making  (3 Credits)
Designed to give students the quantitative skills necessary in making informed decisions as an engaged citizen. Topics include ratios, percentages, growth and decay, and basic statistics in the context of sustainability, health and nutrition, financial literacy, and other aspects of society.

MATH 121  -  Calculus I  (4 Credits)
First course in calculus. Topics include limits, derivatives and their applications, antiderivatives, definite integrals, the fundamental theorems of calculus, the substitution rule for integrals, and transcendental functions.

MATH 122  -  Calculus II  (4 Credits)
Prerequisite: MATH 121. Topics include techniques and applications of integration, sequences, and series.

MATH 201  -  Introduction to Discrete Mathematics  (3 Credits)
Designed to prepare prospective mathematics majors for advanced study in the field by introducing them to a higher level of mathematical abstraction. Topics include sets and logic, functions and relations, methods of mathematical proof including mathematical induction, and elementary counting techniques. (Prospective mathematics majors should take this course during their freshman year.)

MATH 204  -  Mathematical Concepts and Methods I  (4 Credits)
Prerequisite: EDUC 351A and EDUC 388. Mathematical concepts and methods of teaching for the elementary school. Topics include number systems and their properties, problem solving, and topics in number theory. Course intended for students certifying to teach grades PreK-6. Significant field experience required.

MATH 205  -  Selected Topics in Mathematics  (1-3 Credits)
Prerequisite: Course dependent. Opportunity for additional study of lower-level topics in mathematics.

MATH 207  -  History of Mathematics  (3 Credits)
The history of mathematics begins with the early numbering systems and mathematics of the Egyptians and the Babylonians. The course then turns to the Greeks and their emphasis on logical deduction and geometry. The Arabs develop algebra in the Middle Ages, and calculus is created during the Age of Reason. The development of individual branches of mathematics then is studied (probability, number theory, non-Euclidean geometry, set theory, and topology). The course ends with the Computer Age and implications for the future.

MATH 224A  -  Multivariable Calculus  (4 Credits)
Prerequisite: MATH 122. Topics include parametric equations, vectors, polar, cylindrical, and spherical coordinates, vector-valued functions, functions of several variables, partial derivatives, multiple integrals, and vector calculus.

MATH 253  -  Introduction to Cryptography  (3 Credits)
Prerequisites: MATH 201 or CPSC 284. An introduction to standard encryption schemes and the relevant mathematics, including the classical symmetric ciphers, Diffie-Hellman key exchange, and modern public key encryption systems. Also includes cryptanalysis techniques in the context of standard message attacks. Credit for only one of MATH 253 or MATH 453 may count toward degree requirements.
MATH 300 - Linear Algebra (3 Credits)
Prerequisites: MATH 122 and either MATH 201 or CPSC 284. An introduction to linear algebra. Usually includes matrix algebra, systems of equations, vector spaces, inner product spaces, linear transformations, and eigenspaces.

MATH 312 - Differential Equations (3 Credits)
Prerequisite: MATH 122. Ordinary differential equations which may include Laplace transformations, linear differential equations, applications, approximations, and linear systems of equations.

MATH 321 - Number Theory (3 Credits)
Prerequisite: MATH 201 or CPSC 284. An elementary, theoretical study of the properties of the integers.

MATH 325 - Discrete Mathematics (3 Credits)
Prerequisite: MATH 201 or CPSC 284. Includes topics such as discrete probability, graph theory, recurrence relations, topics from number theory, semigroups, formal languages and grammars, finite automata, Turing machines, and coding theory.

MATH 330 - Foundations of Advanced Mathematics (3 Credits)
Prerequisites: MATH 122 and either MATH 201 or CPSC 284. Introduction to mathematical reasoning and rigor. Includes topics such as basic logic, set theory, mathematical induction, relations, functions, sequences, cardinality, elementary number theory, and axiomatic construction of the real numbers. Emphasis placed on reading mathematics, understanding mathematical concepts, and writing proofs.

MATH 351A - Numerical Analysis I (3 Credits)
Prerequisite: MATH 300 or MATH 312. MATH 351 introduces the theory and applications of the basic computational techniques of numerical approximation. Topics include an introduction to computer programing and algorithms, root finding, interpolation, polynomial approximation, numerical differentiation and integration, and numerical linear algebra. Only in sequence.

MATH 352A - Numerical Analysis II (3 Credits)
Prerequisite: MATH 351A. Expands on the basic approximation techniques to include scientific computing. Topics include methods of simulation, initial value problems and boundary value problems for ordinary/partial differential equations, applications in science and engineering. Only in sequence.

MATH 361 - Topics in Mathematics (3 Credits)
Prerequisite: course dependent. Opportunity for additional study of mathematical topics.

MATH 372A - Modern Geometry (3 Credits)
Prerequisite: MATH 300. Axiomatic development of various geometries including modern Euclidean and non-Euclidean geometry, finite geometries, hyperbolic geometry, and elliptic geometry. Topics could also include convexity, transformational geometry, projective geometry, and constructability.

MATH 411 - Chaotic Dynamical Systems (3 Credits)
Prerequisite: MATH 122. Chaotic dynamical systems including iteration, graphical analysis, periodic points, bifurcations, the transition to chaos, fractals, Julia sets and the Mandelbrot set.

MATH 412 - Complex Variables (3 Credits)
Prerequisite: MATH 300. Analytic functions, Cauchy-Riemann conditions, integration, power series, calculus of residues, conformal mappings, and applications.

MATH 421 - Applied Partial Differential Equations (3 Credits)
Prerequisites: MATH 224A and MATH 312. This course introduces three main types of partial differential equations (PDEs): parabolic, elliptic, and hyperbolic as well as mathematical and computational tools for solving PDEs. It balances mathematical rigor, computational techniques, and real-world applications. Topics include heat equation, method of separation of variables, Laplace's equation, Fourier series, wave equation, finite difference/element methods, and highdimensional PDEs.

MATH 431 - Abstract Algebra (3 Credits)
Prerequisites: MATH 300 and MATH 330. Mathematical systems including groups, rings, fields, and vector spaces. Only in sequence.

MATH 432 - Abstract Algebra (3 Credits)
Prerequisite: MATH 431. Mathematical systems including groups, rings, fields, and vector spaces. Only in sequence.

MATH 441A - Topology (3 Credits)
Prerequisite: MATH 300 and MATH 330. Includes topics from point-set topology such as continuity, connectedness, compactness, and product and quotient constructions.

MATH 453 - Mathematical Cryptography (3 Credits)
Prerequisite: MATH 431. A rigorous development of modern encryption techniques from the group theory perspective, including private and public-key systems, key exchange protocols, and digital signature schemes. Includes cryptanalysis by both classical message attacks and collisions. Credit for only one of MATH 253 or MATH 453 may count toward degree requirements.

MATH 461 - Topics in Mathematics (3 Credits)

MATH 471 - Real Analysis (3 Credits)
Prerequisites: MATH 300 and MATH 330. A rigorous, real analysis approach to the theory of calculus. Only in sequence.

MATH 472 - Real Analysis (3 Credits)
Prerequisite: MATH 471. A rigorous, real analysis approach to the theory of calculus. Only in sequence.

MATH 481 - Theory of Interest (3 Credits)
Prerequisite: MATH 122. This course introduces the mathematical concepts underlying the theory of interest. Topics include measurement of interest (including accumulated and present value factors), annuities, yield rates, amortization schedules and sinking funds, bonds and related securities, derivative instruments, and hedging and investment strategies.

MATH 491B - Directed Study (1-3 Credits)
Individual study beyond the scope of normal course offerings, done under the direction of a faculty member. May lead to graduation with Honors in Mathematics.

MATH 491H - Directed Study Honors (1-3 Credits)

MATH 492A - Directed Study (1-3 Credits)
Individual study beyond the scope of normal course offerings, done under the direction of a faculty member. May lead to graduation with Honors in Mathematics.

MATH 492H - Directed Study Honors (1-3 Credits)

MATH 499 - Internship (1-12 Credits)
Supervised off-campus experience, developed in consultation with the department. Does not count in the major program.
Military Science (MSCI)

MSCI 101 - Leadership Skills I: Leadership and Personal Development (1 Credit)
101 - Leadership Skills I: Leadership and Personal Development (1)
Introduces leadership values and ethics; responsibilities of officer/civilian; the organization, customs, and traditions of the US Army; time management; and physical well-being. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

MSCI 102 - Leadership Skills II: Introduction to Tactical Leadership (1 Credit)
Leadership Skills II: Introduction to Tactical Leadership (1) Introduces leadership principles, dimensions, styles, and assessment, among other varied topics. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

MSCI 201 - Leadership Skills III: Foundations of Leadership (1 Credit)
201 - Leadership Skills III: Foundations of Leadership (1) Prerequisite: MSCI 102 or approval of professor of military science. Covers leadership skills, such as values and ethics, how to communicate, how and when to make decisions, how to engage in creative problem solving, and how to plan and organize. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

MSCI 202 - Leadership Skills IV: Foundations of Tactical Leadership (1 Credit)
Leadership Skills IV: Foundations of Tactical Leadership Prerequisite: MSCI 201. Builds on the leadership skills developed in Leadership Skills III with additional emphasis on communication, team building, and team leadership. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

MSCI 301 - Applied Leadership I: Adaptive Team Leadership (1 Credit)
301 - Applied Leadership I: Adaptive Team Leadership (1) Prerequisite: MSCI 202. Applied leadership with an introduction to the principles of physical fitness and healthy lifestyle; counseling as means of subordinate development; problem solving; operational analysis, development, and execution; and methods for preparing and presenting instruction. Students are given an introduction to the Leader Development Program that is used to evaluate their leadership performance and provide students with development feedback. Some weekend training required. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

MSCI 302 - Applied Leadership II: Leadership in Changing Environments (1 Credit)
Applied Leadership II: Leadership in changing Environments (1) Prerequisite: MSCI 301. Applied leadership covering the models of communications (verbal and non-verbal), technology to communicate, how to prepare and conduct formal briefings, and introduction to the Army branches, diversity and equal opportunity training, ethical decision making, and group cohesion and dysfunction. Some weekend training required. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

MSCI 401 - Leadership and Management: Developing Adaptive Leaders (1 Credit)
401 - Leadership and Management: Developing Adaptive Leaders (1) Prerequisite: MSCI 302. Considered the "transition to lieutenant" phase in which managerial theories are applied to personnel, training, and logistics management situations. Students have command and staff responsibilities and receive hands-on experience operating as a management team. Includes a laboratory in applied science, common military tasks, and physical fitness.

MSCI 402 - Leadership and Ethics: Leadership in a Complex World (1 Credit)
Leadership and Ethics: Leadership in a Complex World (1) Prerequisite: MSCI 401. Continuing the "transition to lieutenant" phase of ROTC, examines ethics of military environment to include customs, ethical codes and decision making, constraints, and appeals to moral principles. American judicial system is also examined, with emphasis on the uniform Code of Military Justice. Command and staff responsibilities are assigned to students for hands-on experience operating as a management team for the cadet corps. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

Modern Language and Literature (MDFL)

MDFL 201 - World Literature in Cultural Context (3 Credits)
World literature in context—an introduction to literature from Western and non-Western perspectives. Themes and literary techniques from a variety of authors. In English. Other Modern Foreign Language courses are listed separately under a heading for each language. See: Arabic, Chinese, French, German, Italian, and Spanish.

Music (MUSC)

MUSC 473 - Special Studies in Music (3 Credits)
Study of a specialized musical topic.

MUSC 490 - Music Seminar (3 Credits)
Capstone research, creative, and/or performance project required under close supervision of department faculty, with written and oral presentation.

Music Education (MUED)

MUED 100 - Introduction to Music Education (3 Credits)
An introduction to music education techniques at multiple levels: elementary, middle, and high school. Students learn lesson planning for the music classroom, rehearsal techniques for vocal and instrumental ensembles, rhythm teaching, and music assessment and evaluation.

Music History and Literature (MUHL)

MUHL 151A - Great Musical Masterworks (3 Credits)
A music literature course which adopts a "great books" approach. The students will study in depth approximately a dozen works, drawn from several periods of music history. The compositions increase in complexity as the semester progresses.

MUHL 152 - Music and Society (3 Credits)
A course which deals with music as a mirror of the times in which it was created. Music to be studied will be chosen for its close association with some of the most profound social issues of Western society. The topics chosen for study will include at least two centuries and two continents.

MUHL 153 - Women in Opera (3 Credits)
A critical examination of the significance of women as performers, characters, patrons, and critics in relation to opera's multiple identities as musical genre, dramatic medium, social event, and political catalyst.
MUHL 154 - Musics of the World (3 Credits)
A course which deals with an investigation of the roles of music, its
distinguishing features, and performance traditions in eight to ten
geographic regions. The examination of the diffusion and assimilation of
cultural elements allows students to learn the essential aspects of each
of the cultures under consideration and to appreciate how they differ
from a Western perspective.

MUHL 156 - American Music (3 Credits)
A study of the developments in American Music provided by America's
various ethnicities that focus on genre, composer, and/or era.

MUHL 261 - Topics in Vocal Music (3 Credits)
An exploration of chiefly vocal repertories focusing on genre, composer,
and/or era.

MUHL 262 - Topics in Instrumental Music (3 Credits)
An exploration of chiefly instrumental repertories focusing on genre,
composer, and/or era.

MUHL 263 - Mozart (3 Credits)
A study of the life and major works of Wolfgang Amadeus Mozart.

MUHL 273 - Spec Stud Music Hist & Lit (3 Credits)
Studies of a topic in music history or literature.

MUHL 362 - Beethoven (3 Credits)
Biographical and analytical studies pertaining to Ludwig von Beethoven.

MUHL 368 - History of Jazz (3 Credits)
The development of jazz. ragtime, blues, dixieland, boogie-woogie, and
later styles, which evolved in the genre.

MUHL 375 - Music Hist. I: Genre and Form (3 Credits)
Prerequisite: MUTH 191. A chronological survey of select genres across
several centuries and in different musical styles, focusing on the non-
musical factors which effected musical evolution. Analysis and research.

MUHL 376 - Music History II: Narratives and Ideologies (3 Credits)
Prerequisite: MUTH 191. A historical examination of evolving
technologies of music production and dissemination; of changing
sources of patronage of composers and performers; and of how music
history came to be written (the creation of the Western canon) and the
consequences for those privileged or silenced. Research.

MUHL 473 - Special Studies in Music History and Literature (3 Credits)
Studies of a topic in music history or literature.

MUHL 491 - Individual Study (1-3 Credits)
Individual study is under the direction of a Music Department faculty
member. Details may be obtained from the chair. Project required. By
permission of the department.

MUHL 492 - Individual Study (1-3 Credits)
Individual study is under the direction of a Music Department faculty
member. Details may be obtained from the chair. Project required. By
permission of the department.

MUHL 499 - Internship (1-3 Credits)
Supervised off-campus experiences, developed in consultation with the
Department of Music and the off-campus agency. By permission only.

Music Performance (MUPR)

MUPR 201 - Class Voice I (1 Credits)
Class instruction through the intermediate performance level. Emphasis
on the fundamentals of vocal technique through performance.
Foundational experience appropriate for continued private voice study.
Audition required for placement.

MUPR 202 - Class Voice II (1 Credits)
Prerequisite MUPR 201. Class instruction through the intermediate
performance level, emphasizing fundamentals of vocal technique through
performance as preparation for private vocal study.

MUPR 205A - Class Piano I (1 Credits)
Class instruction for beginners through the intermediate level. 205
and 206 deal with fundamental performance techniques. The ability
to read music is anticipated. 207 emphasizes musical expression and
preparation for private piano study. Audition required for placement.

MUPR 206 - Class Piano II (1 Credits)
Class instruction for beginners through intermediate level. 205 and 206
deal with fundamental performance techniques. The ability to read music
is anticipated. 207 emphasizes musical expression and preparation for
private piano study. Audition required for placement.

MUPR 207A - Class Piano III (1 Credits)
Class instruction for beginners through the intermediate level. 205
and 206 deal with fundamental performance techniques. The ability
to read music is anticipated. 207 emphasizes musical expression and
preparation for private piano study. Audition required for placement.

MUPR 214 - Class Woodwinds (1 Credits)
Beginning group study in performance techniques of woodwind
instruments. Recommended for music majors seeking teaching
certification in the instrumental area and for students interested in
composition.

MUPR 215 - Class Guitar I (1 Credits)
Beginning group study in performance techniques of guitar.
Recommended for students with no prior music reading and performing
experience. Class Guitar I is an introduction to playing chords, reading
music, interpreting charts, and developing basic skills needed to
understand various published methods on learning the guitar..

MUPR 216 - Class Guitar II (1 Credits)
Prerequisite: MUPR 215. Class Guitar II is an intermediate group study
in performance techniques of guitar. This course is recommended
for students who have successfully completed Class Guitar I or by
permission of instructor. Students must possess basic music reading and
playing skills. Class Guitar II is an introduction to more complex rhythms,
playing barre chords, reading music in 2nd, 3rd, and 4th positions.
Students will expand their repertoire, knowledge of scales, arpeggios and
various performance techniques to augment their proficiency.

MUPR 223 - Class Brass (1 Credits)
Beginning group study in performance techniques of brass instruments.
Recommended for music majors seeking teaching certification in the
instrumental area and for students interested in composition.

MUPR 225A - Class Percussion (1 Credits)
Beginning group study in performance techniques of percussion
instruments. Recommended for music majors seeking teaching
certification in the instrumental area and for students interested in
composition.

MUPR 235 - Class Strings (1 Credits)
Beginning group study in performance techniques of string instruments.
Recommended for music majors seeking teaching certification in the
instrumental area and for students interested in composition.
MUPR 254 - Chamber Choir (1 Credits)
Mixed voices performing representative repertoire of all periods of music. Open by audition. In cooperation with local community musicians.

MUPR 260 - Instrumental Ensemble: String (1 Credits)
Opportunity to study and perform specialized string repertoire. Open by audition.

MUPR 261 - Guitar Ensemble (1 Credits)
Opportunity to study and perform specialized guitar repertoire. Open by audition.

MUPR 262 - Flute Ensemble (1 Credits)
Opportunity to study and perform specialized repertoire for flute choir. Open by audition.

MUPR 265 - Jazz Improvisation Workshop (1 Credits)
Opportunity to study and perform specialized repertoire in the jazz genre. Open by audition.

MUPR 268 - Brass Ensemble (1 Credits)
Opportunity to study and perform specialized brass repertoire. Open by audition.

MUPR 270 - Percussion Ensemble (1 Credits)
Opportunity to study and perform specialized repertoire. Open by audition.

MUPR 275 - World Music Workshop (Topics) (1 Credits)
Ensemble exploring a specific vocal/instrumental repertory from outside of the Western classical/jazz tradition; focus varies from year to year.

MUPR 301 - Private Voice (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 305A - Private Piano (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 309 - Private Harp (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 310 - Private Organ (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 311 - Private Flute (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 312 - Private Oboe (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 313A - Private Clarinet (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 314 - Private Bassoon (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 315 - Private Saxophone (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 321A - Private French Horn (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 322 - Private Trumpet (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 323A - Private Trombone (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 324 - Tuba/Euphonium (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 325A - Private Percussion (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 331A - Private Violin (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 332 - Private Viola (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 332B - Private Cello (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 334 - Private Contrabass (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 335 - Private Guitar (1 Credits)
One half-hour lesson per week. Auditions required for entrance into all private lessons and ensembles.

MUPR 336 - Private Composition (1 Credits)
Prerequisite: Permission of Instructor.

MUPR 344C - Ins Ensbl:Clarinet (1 Credits)
Prerequisites: MUTH 291, and MUTH 292. The principles and techniques of conducting, including score reading, classroom/rehearsal methods, and analysis, program planning, and workshop experience.

MUPR 349 - Conducting Practicum (1 Credits)
Prerequisite: MUPR 347A. Advanced private instruction in conducting, score reading, music pedagogy, and rehearsal techniques in a specialized area (choral, orchestral, band, jazz, etc.).

MUPR 350 - Fredericksburg Singers (1 Credits)
Mixed voices performing representative repertoire of all periods of music. Open by audition. In cooperation with local community musicians.

MUPR 352 - UMW Chorus (1 Credits)
Treble voices performing representative repertoire of all periods of music. Open by audition.

MUPR 356 - UMW Jazz Ensemble (1 Credits)
Opportunity to study and perform specialized repertoire in the jazz genre. Open by audition.
One hour lesson or two half-hour lessons per week. Auditions required for entrance into all private lessons and ensembles.

- MUPR 401 - Private Voice (2 Credits)
- MUPR 405 - Private Piano (2 Credits)
- MUPR 409 - Private Harp (2 Credits)
- MUPR 410 - Private Organ (2 Credits)
- MUPR 411 - Private Flute (2 Credits)
- MUPR 412 - Private Oboe (2 Credits)
- MUPR 413 - Private Clarinet (2 Credits)
- MUPR 414 - Private Bassoon (2 Credits)
- MUPR 415 - Private Saxophone (2 Credits)
- MUPR 416 - Private French Horn (2 Credits)
- MUPR 422 - Private Trumpet (2 Credits)
- MUPR 423A - Trombone (2 Credits)
- MUPR 424 - Tuba/Euphonium (2 Credits)
- MUPR 425 - Private Percussion (2 Credits)
- MUPR 431 - Private Violin (2 Credits)
- MUPR 432 - Private Viola (2 Credits)
- MUPR 433A - Private Cello (2 Credits)
- MUPR 434 - Private Contrabass (2 Credits)
- MUPR 435 - Private Guitar (2 Credits)
- MUPR 436 - Private Composition (2 Credits)
- MUPR 438 - Private Piano (2 Credits)
- MUPR 439 - Private Harp (2 Credits)
- MUPR 440 - Private Organ (2 Credits)
- MUPR 441 - Private Flute (2 Credits)
- MUPR 442 - Private Oboe (2 Credits)
- MUPR 443 - Private Clarinet (2 Credits)
- MUPR 444 - Private Bassoon (2 Credits)
- MUPR 445 - Private Saxophone (2 Credits)
- MUPR 446 - Private French Horn (2 Credits)
- MUPR 447 - Private Trumpet (2 Credits)
- MUPR 448 - Private Trombone (2 Credits)
- MUPR 449 - Private Tuba/Euphonium (2 Credits)
- MUPR 450 - Private Percussion (2 Credits)
- MUPR 451 - Private Violin (2 Credits)
- MUPR 452 - Private Viola (2 Credits)
- MUPR 453 - Private Cello (2 Credits)
- MUPR 454 - Private Contrabass (2 Credits)
- MUPR 455 - Private Piano (2 Credits)
- MUPR 456 - Private Harp (2 Credits)
- MUPR 457 - Private Organ (2 Credits)
- MUPR 458 - Private Flute (2 Credits)
- MUPR 459 - Private Oboe (2 Credits)
- MUPR 460 - Private Clarinet (2 Credits)
- MUPR 461 - Private Bassoon (2 Credits)
- MUPR 462 - Private Saxophone (2 Credits)
- MUPR 463 - Private French Horn (2 Credits)
- MUPR 464 - Private Trumpet (2 Credits)
- MUPR 465 - Private Trombone (2 Credits)
- MUPR 466 - Private Tuba/Euphonium (2 Credits)
- MUPR 467 - Private Percussion (2 Credits)
- MUPR 468 - Private Violin (2 Credits)
- MUPR 469 - Private Viola (2 Credits)
- MUPR 470 - Private Cello (2 Credits)
- MUPR 471 - Private Contrabass (2 Credits)

One hour lesson or two half-hour lessons per week. Auditions required for entrance into all private lessons and ensembles.

- MUPR 473 - Special Studies in Music Perf (3 Credits)

Special studies of a topic in music performance.

- MUPR 491 - Individual Study (1-3 Credits)

Individual study is under the direction of a music department faculty member. Details may be obtained from the chair. Project required. By permission of the department.

- MUPR 492 - Individual Study (1-3 Credits)

Individual study is under the direction of a music department faculty member. Details may be obtained from the chair. Project required. By permission of the department.

- MUPR 499 - Internship (1-3 Credits)

Supervised off-campus experiences, developed in consultation with the Department of Music and the off-campus agency. By permission only.

**Music Technology (MUTC)**

- MUTC 100 - Technology for Musicians (3 Credits)

An introduction to notational tools, sound reinforcement, recording, sequencing, video capture/editing and music-specific web design and social media.

- MUTC 170 - MIDI Composition (3 Credits)

A comprehensive overview of composing through a digital audio workstation. Topics include vocoding, sampling, synthesis, film scoring, automation, and bussing through a series of interactive projects.

- MUTC 320 - Audio Recording (3 Credits)

Fundamentals of acoustics audio recording for all types of instruments and ensembles including microphone selection and placement, acoustical treatments, professional practices and applications in related fields.

- MUTC 330 - Audio Production (3 Credits)

Prerequisite: MUTC 320. Production techniques in a variety of styles with an exploration of the roles that production, artists, and finances play in the process from conception to finished recording.

- MUTC 370 - Electroacoustic Techniques (3 Credits)

A study on compositional techniques in electroacoustic music with an emphasis on interactivity. Lectures are designed to compliment student projects in a variety of topics including hid, electronic instrument design, live coding, and real-time processing.

- MUTC 473 - Special Studies in Music Technology (3 Credits)

Studies of a topic of music technology.

**Music Theory (MUTH)**

- MUTH 181A - Materials and Sources for Music Theory (3 Credits)

A conceptual explanation of basic music vocabulary and sound resources—rhythm, meter, modes, scales, clefs, intervals, notation, acoustics—with musical examples.

- MUTH 191 - Diatonic Music Theory (3 Credits)

MUTH 192 - Diatonic Music Theory Skills (1 Credits)

MUTH 291 - Chromatic Music Theory (3 Credits)

MUTH 292 - Chromatic Music Theory Skills (1 Credits)

MUTH 351 - Fundamentals of Counterpoint and Form (3 Credits)
Prerequisite: MUTH 291. Introduction to the principles of counterpoint as exemplified i the music of the Renaissance. Introduction to larger musical forms.

MUTH 369 - Music Orchestration (3 Credits)
Prerequisites: MUTH 291 and MUTH 292. A study of techniques of instrumental scoring considered historically and creatively. Project required.

MUTH 391 - Post-Tonal Music Theory (3 Credits)

MUTH 392 - Post-Tonal Music Theory Skills (1 Credits)

MUTH 473 - Special Studies in Music Theory (3 Credits)
Studies of a topic in Music Theory.

MUTH 483 - Scoring and Arranging (3 Credits)
Prerequisites: MUTH 291, MUTH 292. A practicum developing skills in composing, arranging, and adapting music to meet the needs abilities of a variety of ensembles, and with regard to music copyright laws.

MUTH 491 - Individual Study (1-3 Credits)
Individual study is under the direction of a Music Department faculty member. Details may be obtained from the chair. Project required. By permission of the department.

MUTH 492 - Individual Study (1-3 Credits)
Individual study is under the direction of a Music Department faculty member. Details may be obtained from the chair. Project required. By permission of the department.

MUTH 499 - Internship (1-3 Credits)
Supervised off-campus experiences, developed in consultation with the Department of Music and the off-campus agency. By permission only.

Nursing (NURS)

NURS 310 - The Role of the Professional Nurse (3 Credits)
Pre-requisite: RN License. Admission to the BSN-NURS Program. Pre-or-Corequisite: ENGL 307. This course provides the Registered Nurse with a foundation for understanding the expanded role of the professional baccalaureate nurse in the current health care delivery system. Concepts related to professionalism and the fundamental professional values of altruism, autonomy, human dignity, integrity, and social justice will be explored. Transformation of the individual and of the profession will be examined. Communication behavior to improve intra- and interprofessional collaboration will be analyzed.

NURS 320 - Holistic Health Assessment for the Professional Nurse (3 Credits)
This course is designed to enhance the registered nurse’s previous knowledge and experience in completing a comprehensive health assessment. An emphasis will be on the advanced skills and techniques of a physical assessment, as well as on identifying lifestyle choices, health alterations and pertinent patient education activities.

NURS 410 - Evidence Based Nursing Research (3 Credits)
Pre-requisite: STAT 180 and NURS 310. This course introduces the Registered Nurse to the research process and methods for critiquing research literature. The development of theoretical frameworks for research studies, quantitative and qualitative methodologies to accomplish goals, and the dissemination of research findings will be examined. The use of research in the delivery of evidence-based practice to improve patient outcomes will be explored. The Registered Nurse will further explore a previously identified health care issue and engage in a systematic, formal process to identify scientific relationships which can lead to finding solutions to the identified issue or discover new nursing knowledge. Safeguarding patient rights will be explored.

NURS 430 - Current Nursing Issues and Trends (3 Credits)
Pre-or co-requisite: NURS 310. This course examines the current issues and trends in nursing and its effect on delivering quality and safe patient care. The Registered Nurse will consider current political, economic and social issues and discuss their impact on health care. The Registered Nurse will examine an issue related to quality, safety, access, equity, affordability or social justice in healthcare delivery and explore political activism aimed at eliminating health disparities for a vulnerable population. The identified issue will be further explored in NURS 410 Evidence-Based Nursing Research and NURS 490 BSN Practicum.

NURS 440 - Community and Population Health (3 Credits)
Prerequisites: STAT 180 and NURS 310. This course examines population-focused nursing. Improving population health through health promotion, disease and injury prevention across the lifespan for individuals, families, groups, communities and populations will be explored. Fundamentals of epidemiology and biostatistics will be introduced. Primary, secondary and tertiary care will be differentiated. The national health initiative Healthy People 2020 will be utilized. The registered nurse develops a preventive program for an assigned community. This course includes 16 hours of field work experience in the assigned community.
**Philosophy (PHIL)**

**PHIL 100 - Individual and Community (3 Credits)**
Through a close reading of Plato’s *Republic*, supplemented by accompanying readings, small tutorial groups will read, write, and talk about specific issues that interest them. Among potential questions are the characteristics of a good person, of a good society, and of the best government; whether certainty is possible for human beings; and whether some things are more real than others.

**PHIL 101 - Introduction to Philosophy (3 Credits)**
A historical introduction to Western civilization’s philosophical heritage from Plato to contemporary philosophical movements.

**PHIL 110 - Introduction to Law and Legal Writing (3 Credits)**
This course provides a basic understanding of the U.S. legal system. The focus includes essential history and the working structure of the government, procedural issues in the courts, specific concepts of basic categories of law such as contract law and property, the distinctive characteristics of criminal law and procedure, brief writing, the roles of various legal professionals, and the effect of legal ethics on the practice of law.

**PHIL 151B - Introductory Logic (3 Credits)**
Basic principles of analytical reasoning and the appraisal of arguments. Among the topics covered are symbolic language, translation, and methods of formal proof including propositional calculus and first order predicate calculus.

**PHIL 160 - Introduction to Ethics (3 Credits)**
An introduction to ethical theory and a consideration of the central questions about the nature of duty, how one makes decisions about what is morally right and morally wrong, ideas about the good life and the good person, how we come to evaluate our own and other’s action, and the relationship of the ethical to other ideas including religious, political, and social values. Course readings draw from the classical and modern philosophers as well as some contemporary sources; discussions of the readings occur in the context of some specific ethical problems and dilemmas.

**PHIL 201 - Ancient Greek Philosophy (3 Credits)**
Selected works by ancient Greek philosophers, including the presocratics, Plato, and Aristotle.

**PHIL 202 - Early Modern Philosophy (3 Credits)**
Rationalism and Empiricism. Selected works by such modern philosophers as Descartes, Spinoza, Locke, Leibniz, and Berkeley.

**PHIL 210 - Social and Political Philosophy (3 Credits)**
Introduction to classical, modern, and contemporary social and political theories as well as issues in a global context.

**PHIL 212 - Aesthetics (3 Credits)**
an introduction to the philosophical examination of art and consideration of central questions about the nature of art, the aesthetic experience, principles for evaluating works of art, and the relationship of the aesthetic to other values. Readings cover the major theorists in the history of philosophy as well as current theory and issues about art. Discussions will make reference to a wide range of specific works of visual art, film, performing arts, literature, etc. In addition to the foundational questions about the nature and value of art, we will also consider the meaning and interpretation of art, and the relevance of political, social, gender, race, religious, and other cultural contexts for art.

**PHIL 220 - Introduction to Feminism (3 Credits)**
Introduction to feminism as a philosophical movement of the 20th century. Study of historical predecessors (Mill, Marx, de Beauvoir), the dominant theoretical orientations (liberal, radical, psychoanalytic, standpoint, postmodern), and implications of this movement for philosophy and other disciplines.

**PHIL 225 - Practical Ethics (3 Credits)**
Introduction to philosophical examination of contemporary moral issues. At the discretion of the instructor, topics might include the death penalty, euthanasia, hate speech regulation, pornography, animal welfare, or human cloning.

**PHIL 226 - Medical Ethics (3 Credits)**
Central ethical issues in clinical medicine. Topics might include the physician-patient relationship, informed consent and competency, reproductive technology, distribution of scarce medical resources, organ donation, and experimental medicine.

**PHIL 231 - Topics in Philosophy (3 Credits)**
Selected topics outside of regular course offerings.

**PHIL 244A - Philosophy of Science (3 Credits)**
An examination of the philosophical issues raised and illustrated in both scientific theory and practice.

**PHIL 260 - Freud’s Greatest Hits (3 Credits)**
A guided tour through Sigmund Freud’s most influential and important texts, on dreams, sexuality, the unconscious, slips, religion, and morality. Attention to Freud’s life, the impact of his ideas, and critical assessment of his theories and assumptions. Formally taught as Phil 405.

**PHIL 275 - Mock Trial Practicum (3 Credits)**
Credit for satisfactory work on the University’s mock trial team and course assignments. Introduces students to legal research, briefing, and procedure. Enrollment by permission of department and instructor. A maximum of six credits may count toward degree requirements. Does not count in the major program. Offered as pass/fail only. Repeatable with maximum of six credits towards degree total. Does not count in the major.

**PHIL 283 - Hinduism (3 Credits)**
This course explores the diverse beliefs, rituals, and literatures of Indian religion that constitute Hinduism, the historical progression of their development, and their current expressions throughout the world. Cross-listed as RELG 283.

**PHIL 284 - Buddhism (3 Credits)**
An introduction to the thought and traditions of Buddhism. Readings from the *Dhammapada* as well as from various Theravada and Mahayana schools.

**PHIL 301 - Medieval Philosophy (3 Credits)**
Prerequisite: PHIL 201. A survey of philosophical thought in the Jewish, Christian, and Islamic traditions.
PHIL 302 - Hume And Kant (3 Credits)
Prerequisite: PHIL 202. A study of the major works and influence of Hume and Kant.

PHIL 303 - Hegel, Marx, and Nietzsche (3 Credits)
Prerequisite: PHIL 202. A study of European philosophical developments of the 19th century.

PHIL 306 - Advanced Logic (3 Credits)
Prerequisite: PHIL 151B or six credits in mathematics. Theory of formal systems; applied criteria of consistency-completeness- and quantification; other topics in symbolic logic.

PHIL 307 - Philosophy of Language (3 Credits)
Prerequisite: PHIL 151B or PHIL 202. Introduction to the study of semantics, syntax, and pragmatics from a philosophical standpoint, including some central writings of Frege, Russell, Wittgenstein, Quine and others.

PHIL 310 - Plato (3 Credits)
Prerequisite: PHIL 201. Close study of selected works by Plato and scholarship on Plato.

PHIL 318 - Philosophy of Religion (3 Credits)
Prerequisite: At least one course in Philosophy or permission of the instructor. Philosophical examination of such topics as the relationship between faith and reason- the existence and non-existence of God, life after death, mysticism, and miracles. Crosslisted as RELG 318.

PHIL 320 - Philosophy of Law I (3 Credits)
Prerequisite: At least one course in Philosophy or permission of the instructor. Central issues in philosophy of law, including theory of law, constitutional interpretation, First Amendment protections, and race and gender in the law. PHIL 320 and PHIL 325 may be taken in either order.

PHIL 325 - Philosophy of Law II (3 Credits)
Prerequisite: At least one course in Philosophy or permission of the instructor. An exploration and analysis of issues in criminal and tort law: responsibility and punishment, causation and liability, acts and omissions, justifications and excuses, and the duty to rescue. PHIL 320 and PHIL 325 may be taken in either order.

PHIL 330 - Environmental Ethics (3 Credits)
Prerequisite: At least one course in Philosophy or permission of the instructor. A philosophical investigation of topics such as individualistic and holistic ethics, anthropocentrism and ecocentrism, wilderness and sustainability, ecofeminism, and environmental justice.

PHIL 331 - Topics in Philosophy (3 Credits)
Selected topics outside of regular course offerings.

PHIL 335 - Ethical Theory (3 Credits)
Prerequisite: At least one course in Philosophy or permission of the instructor. An in-depth study of moral theory. Topics might include relativism, utilitarianism, deontology, virtue theory, care ethics, egoism, and moral pluralism.

PHIL 342 - Phenomenology (3 Credits)
Prerequisite: At least one course in Philosophy or permission of the instructor. The basic concepts and arguments of both transcendental and existential phenomenology- from central works of Husserl and Heidegger.

PHIL 343 - Existentialism (3 Credits)
Prerequisite: At least one course in Philosophy or permission of the instructor. Critical study of major works of Heidegger, deBeauvoir, and Sartre.

PHIL 344 - Critical Theory (3 Credits)
Prerequisite: PHIL 202. Study of key figures in the Frankfurt School tradition of Critical Theory including Horkheimer, Adorno, Marcuse, Habermas, Honneth, Fraser, and others.

PHIL 353 - Islamic Philosophy and Theology (3 Credits)
Central themes and topics in the Islamic theological and philosophical tradition will be discussed in some detail. Such topics include the existence of God, free will and determinism, eschatology, ontology and epistemology. References will be made between major Islamic philosophers and their medieval Christian counterparts. Cross-listed as RELG 353.

PHIL 383 - Yoga in Theory, History, and Contemporary Society (3 Credits)
Prerequisites for courses above 300: at least one course in Philosophy or Permission of the instructor. Critically explores the long history and diverse beliefs, practices, rituals and literatures of the religions that constitute Yoga, especially their theories of the body, mind and transcendence, as well as their popular expressions through the contemporary world.

PHIL 425 - Philosophy Tutoring Practicum (3 Credits)
Prerequisite: Permission of instructor. Advanced students in philosophy serve as tutors in introductory level philosophy classes, assisting others in preparing for exams and projects, organizing small-group work, and reviewing writing assignments. Repeatable for a different course.

PHIL 430 - Seminar: Ethics, Environment, & Sustainability (3 Credits)
Prerequisite: PHIL 330 or permission of instructor. Explores philosophical questions in ethics related to the environment and sustainability. Emphasis will be on practical problems with specific topics including population and consumption, pollution, climate change, species preservation, and environmental justice. The concept of sustainability will both frame the discussions and be itself subject to conceptual analysis.

PHIL 440 - Studies in Asian and Comparative Philosophy (3 Credits)
Prerequisite: PHIL/RELG 283 or PHIL/RELG 284. Studies in a topic within Asian philosophical traditions.

PHIL 450 - Seminar in Twentieth Century Philosophy (3 Credits)
Prerequisite: PHIL 202 or permission of instructor. Studies in a topic within Asian philosophical traditions.

PHIL 481 - Readings in Philosophy (3 Credits)
Discussion of philosophical literature in a field selected by the philosophy faculty after consultation with students.

PHIL 485 - Research in Philosophy (3 Credits)
Prerequisite: Senior standing and major in Philosophy or Philosophy, Pre-law Concentration. Capstone course required of all senior Philosophy majors; preparation of a senior thesis under supervision of the Philosophy faculty. Successful completion and defense, with GPA of 3.5 in the major, required for graduation with Honors in Philosophy.

PHIL 491 - Individual Study (1-3 Credits)
Independent work under the supervision of a member of the Philosophy faculty. Must have permission of instructor and department chair.

PHIL 492 - Individual Study (1-3 Credits)
Independent work under the supervision of a member of the Philosophy faculty. Must have permission of instructor and department chair.

PHIL 499 - Internship (1-12 Credits)
Supervised off-campus experience, developed in consultation with the philosophy faculty.
Physical Education (PHYD)

PHYD 102 - Basketball: Men (1 Credits)
Course includes history, rules, and basic techniques of basketball.

PHYD 104 - Basketball: Women (1 Credits)
Course includes history, rules, and basic techniques of basketball.

PHYD 105 - Volleyball (1 Credits)
Course includes history, rules, and basic techniques of volleyball.

PHYD 106 - Special Topics in Physical Education (1 Credits)
Course offers basic techniques, rules, and safety for the designated topic.

PHYD 110 - Individual Exercise: Weight Training (1 Credits)
Course includes basic techniques of weight training.

PHYD 113 - Individual Exercise (1 Credits)
Course includes personal program of individual exercises.

PHYD 116 - Swimming (1 Credits)
Course includes basic techniques of swimming.

PHYD 117 - Swimming: Non-Swimmers (1 Credits)
Course includes basic techniques of swimming.

PHYD 123 - Soccer (1 Credits)
Course includes history, rules, and basic techniques of soccer.

PHYD 130 - Introduction to Sports Management (3 Credits)
This course will examine all facets of Sports Management as they relate to the industry of sports: including topics such as the basic principles of management, marketing, law, finance and ethics in sports. Students will be challenged to apply knowledge of sport management to solve basic problems faced by sport managers. The course will also introduce and explore an understanding of career opportunities in the field of Sports Management. This is a core requirement for the Sports Management minor and a prerequisite for PHYD 330.

PHYD 132 - Tennis (1 Credits)
Course includes history, rules, and basic techniques of tennis.

PHYD 134 - Tennis-Badminton (1 Credits)
Course includes history, rules, and basic techniques of tennis and badminton.

PHYD 146 - Adaptive Individual Exercise (1 Credits)
For handicapped students. An opportunity for physically handicapped students to participate in individual exercise.

PHYD 147 - Elementary Position and Control in Riding (1 Credits)
Designed for those who have never ridden hunt seat. General handling of the horse, basic terminology; riding at the walk, trot, and canter, using elementary aids. Additional fees are required for ALL riding classes, please call Hazelwild Farm at 540-891-7101.

PHYD 148 - High Elementary Position and Control in Riding (1 Credits)
Designed for those who have limited experience in riding or those who have taken PHYD0147. Review of PHYD0147; introduction of soft contact and jumping over low fences on loose reins. Additional fees are required for ALL riding classes, please call Hazelwild Farm at 540-891-7101.

PHYD 248 - Intermediate Position and Control in Riding (1 Credits)
The beginning of soft, precise controls; coordination of the rider's aids with the horse's efforts. Continuation of jumping fundamentals and crest release; work over simple courses. Additional fees are required for ALL riding classes, please call Hazelwild Farm at 540-891-7101.

PHYD 302 - Basketball: Men (1 Credits)
Prerequisite: PHYD 102. Advanced instruction in basketball.

PHYD 304 - Basketball: Women (1 Credits)
Prerequisite: PHYD 104. Advanced instruction in basketball.

PHYD 305 - Volleyball (1 Credits)
Prerequisite: PHYD 105. Advanced instruction in volleyball.

PHYD 306B - Special Topics: Leisure Time Sports (1 Credits)
Course offers basic techniques, rules, and safety for the designated topic. This class will offer activities such as Beach Volleyball, Corn Hole, Boche Ball, Horseshoes and such outdoor activities.

PHYD 310 - Individual Exercise: Weight Training (1 Credits)
Prerequisite: PHYD 110. Advanced instruction in weight training.

PHYD 313 - Individual Exercise (1 Credits)
Prerequisite: PHYD 113. Advanced instruction in individual exercise.

PHYD 314 - Lifeguard Training (1 Credits)
Teaches individuals skills, procedures, and philosophies associated with lifeguarding. Students become aware of common hazards in aquatic environments; learn to recognize victims in distress or drowning situations; establish an awareness of the responsibilities of a lifeguard; and develop speed, endurance, and technique in swimming and lifeguarding skills. May not be repeated for additional credit.

PHYD 316 - Swimming (1 Credits)
Prerequisite: PHYD 116. Advanced instruction in swimming.

PHYD 317 - Swimming: Non-Swimmers (1 Credits)
Prerequisite: PHYD 117. Advanced instruction for the non-swimmer.

PHYD 323 - Soccer (1 Credits)
Prerequisite: PHYD 123. Advanced instruction in soccer.

PHYD 330 - Events and Facility Management (3 Credits)
Prerequisite: PHYD 130. This course will examine all of the facets of public assembly facility management as they relate to sports arenas, ballparks, stadiums and other venues. Among the topics to be presented and explored will be: event booking, finance, marketing, operations, scheduling, staffing and ticketing. This is a core requirement for the Sports Management minor. Prerequisite for this course is successful completion of PHYD 130 Intro to Sports Management.

PHYD 332 - Tennis (1 Credits)
Prerequisite: PHYD 132. Advanced instruction in tennis.

PHYD 334 - Tennis/Badminton (1 Credits)
Prerequisite: PHYD 134. Advanced instruction in tennis and badminton.

PHYD 346 - Adaptive Individual Exercise (1 Credits)
Prerequisites: PHYD 146, medical authorization and permission of instructor. An opportunity for physically handicapped students to participate in individual exercise. Must have taken PHYD0146, have medical authorization, and permission of the instructor.

PHYD 348 - Advanced Equitation, Schooling, and Competition (1 Credits)
Preparation of student horses for competition; schooling of green horses, reschooling of problem horses; preparation of IHSA open riders for competitions. Additional fees are required for ALL riding classes, please call Hazelwild Farm at 540-891-7101.

PHYD 400 - Intercollegiate Baseball (1 Credits)
Participation on Intercollegiate Men’s Baseball team.

PHYD 403 - Intercollegiate Basketball: Men (1 Credits)
Participation on Intercollegiate Men’s Basketball team.

PHYD 404 - Intercollegiate Basketball: Women (1 Credits)
Participation on Intercollegiate Women’s Basketball Team.
PHYD 406 - Intercollegiate Cross Country: Men (1 Credits)
Participation on Intercollegiate Men's Cross Country Team.

PHYD 407 - Intercollegiate Cross Country: Women (1 Credits)
Participation on Intercollegiate Women's Cross Country Team.

PHYD 408 - Intercollegiate Women's Field Hockey (1 Credits)
Participation on Intercollegiate Women's Field Hockey Team.

PHYD 410 - Intercollegiate Lacrosse: Men (1 Credits)
Participation on Intercollegiate Men's Lacrosse Team.

PHYD 411 - Intercollegiate Lacrosse: Women (1 Credits)
Participation on Intercollegiate Women's Lacrosse Team.

PHYD 412 - Intercollegiate Riding (1 Credits)
Participation of Intercollegiate Riding Team. Additional fees are required for ALL riding classes; please call Hazelwild Farm at 540-891-7101.

PHYD 413 - Intercollegiate Soccer: Men (1 Credits)
Participation on Intercollegiate Men's Soccer Team.

PHYD 414 - Intercollegiate Soccer: Women (1 Credits)
Participation on Intercollegiate Women's Soccer Team.

PHYD 415 - Water Safety Instruction (1 Credits)

PHYD 419 - Intercollegiate Golf: Men (1 Credits)
Participation on Intercollegiate Men's Golf Team.

PHYD 420 - Intercollegiate Golf: Women (1 Credits)
Participation on Intercollegiate Women's Golf Team.

PHYD 422 - Intercollegiate Softball: Women (1 Credits)
Participation on Intercollegiate Women's Softball Team.

PHYD 428 - Intercollegiate Swimming: Men (1 Credits)
Participation on Intercollegiate Men's Swimming Team.

PHYD 429 - Intercollegiate Swimming: Women (1 Credits)
Participation on Intercollegiate Women's Swimming Team.

PHYD 431 - Intercollegiate Tennis: Men (1 Credits)
Participation on Intercollegiate Men's Tennis Team.

PHYD 432 - Intercollegiate Tennis: Women (1 Credits)
Participation on Intercollegiate Women's Tennis Team.

PHYD 482 - Intercollegiate Track: Men (1 Credits)
Participation on Intercollegiate Men's Track Team.

PHYD 483 - Intercollegiate Track: Women (1 Credits)
Participation on Intercollegiate Women's Track Team.

PHYD 484 - Intercollegiate Women's Volleyball (1 Credits)
Participation on Intercollegiate Women's Volleyball Team.

PHYD 498 - Sports Management Experience (3 Credits)
Prerequisite for this course is successful completion of PHYD 330 Event & Facility Management. This is an optional core requirement for the Sports Management minor. This experience is a supervised on-campus experience relating to the field of Sports Management. There will also be multiple seminar sessions throughout the semester relating to the experience.

PHYD 499 - Sports Management Internship (3 Credits)
Prerequisite: PHYD 330. This is a core requirement for the Sports Management minor. An internship is a supervised experience relating to the field of Sports Management. There will also be multiple seminar sessions throughout the semester relating to the internship experience.

PHYD 406 - General Physics w/Lab (4 Credits)
An introductory course focused on the fundamentals of physics. Primarily for non-science majors. Emphasis is on building concepts and applying principles to make quantitative measurements. Among the topics covered are classical mechanics, thermodynamics, electricity and magnetism, optics, and the rudiments of modern physics. Facility with algebra and trigonometry is required. Laboratory. Only in sequence. Credit for only one introductory physics sequence (101-102, 101-108, 103-104, 105-106 or 105-110) can be counted toward degree requirements.

PHYD 407 - General Physics w/Lab (4 Credits)
Prerequisite: PHYD 101 for PHYD 102. An introductory course focused on the fundamentals of physics. Primarily for non-science majors. Emphasis is on building concepts and applying principles to make quantitative measurements. Among the topics covered are classical mechanics, thermodynamics, electricity and magnetism, optics, and the rudiments of modern physics. Facility with algebra and trigonometry is required. Laboratory. Only in sequence. Credit for only one introductory physics sequence (101-102, 101-108, 103-104, 105-106 or 105-110) can be counted toward degree requirements.

PHYD 408 - General Physics w/Lab (4 Credits)
Prerequisite: PHYD 101 for PHYD 102. An introductory course focused on the fundamentals of physics. Primarily for non-science majors. Emphasis is on building concepts and applying principles to make quantitative measurements. Among the topics covered are classical mechanics, thermodynamics, electricity and magnetism, optics, and the rudiments of modern physics. Facility with algebra and trigonometry is required. Laboratory. Only in sequence. Credit for only one introductory physics sequence (101-102, 101-108, 103-104, 105-106 or 105-110) can be counted toward degree requirements.
PHYS 110 - University Physics (3 Credits)
Prerequisite: PHYS 105. Corequisite: MATH 122. Calculus-based introductory course primarily for science students. Topics covered: classical mechanics, thermodynamics, electricity, magnetism, optics and some modern physics. Credit for only one introductory physics sequence (101-102, 101-108, 103-104, 105-106 or 105-110) can be counted toward degree requirements.

PHYS 201 - Thermodynamics and Statistical Mechanics (3 Credits)
Prerequisite: PHYS 106. Temperature, thermodynamic states and variables, the laws of thermodynamics, entropy, thermodynamic potentials, change of phase, and the statistical properties of thermodynamic systems.

PHYS 210 - Nuclear Physics (3 Credits)
Prerequisites: PHYS 106 and MATH 122. Topics include: nuclear structure- static and dynamic properties of the nucleus- radioactive decay- the Bateman equation- mass parabolas- transition rates and particle acceleration.

PHYS 211 - Modern Physics (3 Credits)
Prerequisite: PHYS 106. Covers development of 20th and 21st centuries physics – special relativity, introduction to quantum mechanics, wave particle duality, nuclear, atomic, molecular structure, and recent 21st century physics development.

PHYS 283 - Electronics w/Lab (4 Credits)
Prerequisite: PHYS 106 and MATH 122. Basic DC and AC circuit theory, network filters, power supplies, non-linear devices and basic digital circuit theory; experiments using linear and non-linear elements. Laboratory.

PHYS 292 - Optics w/Lab (4 Credits)
Prerequisites PHYS 106 and MATH 122. Introduction to topics in geometrical and physical optics: reflection, refraction, superposition, interference, diffraction, polarization, laser systems, and holography. Laboratory.

PHYS 317 - Methods of Mathematical Physics (3 Credits)
Prerequisites: PHYS 106 and MATH 122; Recommended: MATH 224A; or permission of the instructor. Development of methodologies needed to study advanced physics: vectors and matrix algebra, vector calculus, differential equations, orthogonal functions, complex numbers, Fourier series, probability distributions, and numerical methods.

PHYS 320 - Classical Mechanics I w/Lab (4 Credits)
Prerequisites: PHYS 211 and PHYS 317. Recommended: MATH 224A and MATH 312. General kinematics and dynamics of single particles and systems of particles in three dimensions, harmonic motion, central forces, conservation laws, Lagrange and Hamiltonian mechanics. Laboratory.

PHYS 330 - Electricity and Magnetism I w/Lab (4 Credits)
Prerequisites: PHYS 211 and PHYS 317. Recommended: MATH 224 and MATH 312. Development of electric and magnetic static properties in vacuum and matter, electrodynamics and Maxwell's equations. Laboratory.

PHYS 384 - Advanced Physics Laboratory (4 Credits)
Prerequisite: PHYS 211. Recommended: PHYS 292. Experiments relevant to 20th century physics: electron's charge and mass, charge quantization, atomic spectra, microwave properties, speed of light, intensity and attenuation of radiation.

PHYS 410 - Quantum Mechanics I w/Lab (4 Credits)
Prerequisites: PHYS 211 and PHYS 317. Recommended: MATH 224 and MATH 312. Introduction to basic principles of nonrelativistic quantum mechanics: wave packets, uncertainty principle, wave functions, Schrödinger equation, harmonic oscillator and hydrogen atom. Laboratory.

PHYS 471 - Selected Topics in Physics (1-3 Credits)
Prerequisite: Permission of Instructor. Specialized topics in physics not offered on a regular basis, such as particle physics, atomic and molecular spectroscopy, general relativity advanced classical physics and advanced quantum physics.

PHYS 472 - Solid State Physics (3 Credits)
Prerequisite: PHYS 211. Introduces the physics of solids-crystal structure, Fermi surfaces and metallic behavior, phonons, and exited, electrical, optical and magnetic behavior of materials, semiconductors, and effect of defects on material properties.

PHYS 482 - Physics Seminar (2 Credits)
A capstone course for senior physics majors only, except by permission of department. Students conduct research and give oral presentations on selected topics in physics.

PHYS 491 - Individual Study (1-4 Credits)
Open to junior and senior physics majors. Four credits when taken for Honors in Physics.

PHYS 492 - Individual Study (1-4 Credits)
Open to junior and senior physics majors. Four credits when taken for Honors in Physics.

PHYS 499 - Internship (1-12 Credits)
Supervised off-campus experience, developed in consultation with the department.

Political Science (PSCI)

PSCI 101A - Introduction to Political Science (3 Credits)
Survey of the basic concepts and theories of political science, including comparative analysis of political institutions and ideologies.

PSCI 102A - Introduction to International Relations (3 Credits)
Survey of major issues in international politics and foreign affairs, with emphasis on global awareness of states, regions, and politics in the international system.

PSCI 201 - American Government (3 Credits)
Principles of Political Science as applied to American national government. Political Science 101-102 is a prerequisite to all Political Science courses except PSCI 201. Students may take PSCI 201 before or with PSCI 101 and/or PSCI 102.

PSCI 202A - American Public Policy (3 Credits)
Prerequisite: PSCI 101A and PSCI 102A. A study of selected issues in public policy, including those related to the economy, health care, poverty, education, and the environment.

PSCI 301B - Comparative Government of Western Europe (3 Credits)
Prerequisite PSCI 101A & PSCI 102A. Comparative analysis of the governments of the United Kingdom, France, and Germany.

PSCI 302C - The Politics of Soviet Successor States (3 Credits)
Prerequisite: PSCI 101A and PSCI 102A. A comparative analysis of politics in Soviet successor states and the legacy bequeathed to them by communist rule in the U.S.S.R.
PSCI 304  -  Contemporary American Politics  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. In-depth analysis of selected problems in contemporary American politics.

PSCI 306  -  US Constitutional Reform  (3 Credits)
Prerequisites: PSCI 101A and PSCI 102A. This course assesses the strengths and weaknesses of the existing Constitution and considers possible amendments to the Constitution in response to contemporary American political values and conditions. Students who have not yet taken PSCI 201 should consider doing so before taking this course.

PSCI 311A  -  Congress and the Political Process  (3 Credits)
Prerequisite: PSCI 101A and PSCI 102A. Analysis of the contemporary role of Congress in its relation to the Presidency, the federal bureaucracy, and pressure groups.

PSCI 312A  -  The American Presidency  (3 Credits)
Prerequisite: PSCI 101A and PSCI 102A. Analysis of the modern Presidency and its role in the American political system.

PSCI 313  -  U.S. Federal Judiciary  (3 Credits)
Prerequisites: PSCI 101A and PSCI 102A. Analysis of the federal judiciary and its role in the American political system.

PSCI 315  -  Alliance Politics  (3 Credits)
Prerequisite: PSCI 101A and PSCI 102A. The study of the origins, management, and consequences of alliances.

PSCI 321A  -  Theories of International Relations  (3 Credits)
Prerequisite: PSCI 101A and PSCI 102A. Analysis of major theories of international relations. Topics include war, peace, international security, political economy, and global institutions such as the United Nations system.

PSCI 323  -  Latin American Politics  (3 Credits)
Prerequisite: PSCI 101A and PSCI 102A. Comparative analysis of politics in Latin America, including historical precedents and contemporary systems in several of the region's countries.

PSCI 324  -  U.S. - Latin American Relations  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. Study of US foreign policy towards Latin America, including its major historical developments and contemporary challenges.

PSCI 334A  -  Political Parties and Elections in America  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. Structure and function of political parties; conduct of elections; pressure groups.

PSCI 350B  -  Politics of Developing Countries  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. Analysis of major issues and theories of political development in Latin America, Africa, and Asia, including political modernization and decay, civil society, and North-South relations.

PSCI 351  -  International Political Economy  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. Analyzes the interplay of politics and economics in international economic relations. Focuses on contemporary debates over issues such as trade and monetary relations, foreign investment, foreign aid and debt, economic development and globalization.

PSCI 353  -  Indian Foreign Policy  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. Analysis of Indian foreign policy in the post-Cold War era. Emphasis on challenges India faces in security and economic issue areas.

PSCI 354A  -  Politics of South Asia  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. Study of political life in India, Pakistan, Bangladesh, and Sri Lanka.

PSCI 355  -  Politics of the Middle East and North Africa  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. Study of politics in Iran, Israel, Turkey, and the Arab World. Featured topics may include Islam and politics, nationalism and the impact of Westernization, the Arab-Israeli conflict, and politics in the Persian Gulf.

PSCI 356  -  American Foreign Policy  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. Analysis of foreign policy of post-communist Russia.

PSCI 357A  -  Russian Foreign Policy  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. Analysis of the foreign policy of the People's Republic of China from both historical and conceptual perspectives, including discussion of political and economic reform since 1978, rising differentiation within Chinese society, human rights, and prospects for democracy in China.

PSCI 358  -  Government and Politics of China  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. The Study of political and economic development of the People's Republic of China from both historical and conceptual perspectives, including discussion of political and economic reform since 1978, rising differentiation within Chinese society, human rights, and prospects for democracy in China.

PSCI 359  -  East Asia in World Affairs  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. The role of East Asian countries in international affairs. Special emphasis is placed on the examination of the foreign policies of China and Japan, the development of Greater China, tension on the Korean Peninsula, and cooperation and conflict in the Pacific Rim over national security, trade issues, and human rights.

PSCI 360  -  Women and Politics  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. Provides an overview of the major debates concerning women and politics. The first section of the course examines the historical evolution of women's participation in American politics from the fight for suffrage through the modern feminist movement. The second part of the course analyzes the experience of women as voters, candidates, and officeholders. Finally, students will evaluate the impact of specific public policies on women. The policy areas investigated will include abortion, welfare, child care, education, and employment issues.

PSCI 362  -  The Politics of Central and Eastern Europe  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. Study of political life under both communist and post-communist rule in Bulgaria, the Czech and Slovak Republics, Hungary, Poland, Romania, and the former Yugoslavia.

PSCI 363  -  Mass Media Politics  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. Study of the role of the mass media in shaping political attitudes and events.

PSCI 366  -  East Asia in World Affairs  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. The role of East Asian countries in international affairs. Special emphasis is placed on the examination of the foreign policies of China and Japan, the development of Greater China, tension on the Korean Peninsula, and cooperation and conflict in the Pacific Rim over national security, trade issues, and human rights.

PSCI 370  -  Alliance Politics  (3 Credits)
Prerequisite PSCI 101A and PSCI 102A. The study of alliances in international politics. Special emphasis is placed on the examination of alliances in the post-Cold War era. Emphasis on challenges India faces in security and economic issue areas.

PSCI 372  -  Gender and Development  (3 Credits)
Prerequisites: PSCI 101A and PSCI 102A. The course examines the domestic and international political forces that shape women's access to education, healthcare, work, freedom from violence and other development-related resources, particularly in the developing world. It analyzes the impact of public policies on women's lives and the latter's ability to influence the political process.

PSCI 387  -  Security and Conflict Studies  (3 Credits)
Prerequisites: PSCI 101A and PSCI 102A. Analysis of contemporary security and conflict challenges (e.g., proliferation of weapons of Mass Destruction) with an emphasis on frameworks for choosing best policies to address these challenges.
PSCI 391 - Research and Writing in Political Science (3 Credits)
Prerequisites: PSCI 101A and PSCI 102A. Principles of research and writing techniques for political science.

PSCI 422 - American Civil Liberties (3 Credits)
Prerequisites: PSCI 101A and PSCI 102A. Intensive analysis of civil liberties in the United States, based primarily upon decisions of the Supreme Court.

PSCI 441 - History of Political Thought I (3 Credits)
Prerequisites: PSCI 101A and PSCI 102A. Examination of the contributions of the great political theorists from Plato to Burke.

PSCI 442A - History Political Thought II (3 Credits)
Prerequisites: PSCI 101A and PSCI 102A. Examination of contributions of modern political philosophers.

PSCI 444 - Political Movements and Organizations in Latin America (3 Credits)
Prerequisites: PSCI 101A and PSCI 102A. Intensive analysis of political organizations and movements in contemporary Latin America. Topics include political parties, guerrilla movements and populism.

PSCI 450 - US Political Film (3 Credits)
Prerequisites: PSCI 101A and PSCI 102A. An examination of the political meaning and implications of influential American films, paying particular attention to the changing political and cultural messages found in films from different decades.

PSCI 471 - Political Science Seminar (3 Credits)
Prerequisites: PSCI 101A and PSCI 102A. Intensive reading and group discussion of selected topics in political science.

PSCI 490 - Advanced Research Methods in Political Science (3 Credits)
Prerequisite: PSCI 101A and PSCI 102A. An overview of advanced methods in Political Science, with topics including predictive analytics and machine learning as applied to voter turnout, donor recruitment, and get-out-the-vote efforts, best practices for data visualization, and implementing these methods in the R programming language.

PSCI 491 - Individual Study in Political Science (3 Credits)
Prerequisites: PSCI 101A and PSCI 102A. Directed individual research on approved problems in political science.

PSCI 499 - Internship (1-12 Credits)
Prerequisites: PSCI 101A and PSCI 102A. Supervised off-campus experience, developed in consultation with the department. Up to 3 credits can be applied to the major.

Psychology (PSYC)

PSYC 000 - 40 Hour Community Service (0 Credits)
40 Hour Community Service.

PSYC 100 - General Psychology (3 Credits)
Fundamental principles of human behavior; history of psychology; research methods; the nervous system; learning; memory; personality; psychological disorders; therapy; social behavior; careers in psychology.

PSYC 120 - Lifespan Developmental Psychology (3 Credits)
Psychological development from conception through end of life. Consideration of developmental processes, theories, issues, and relevant research. This course cannot be used to fulfill any requirements in the Psychology major.

PSYC 201 - Social Psychology (3 Credits)
Prerequisite: PSYC 100. Individual behavior in a social context; attitudes; social influence; attribution; prejudice and discrimination; prosocial behavior and aggression.

PSYC 211 - Abnormal Psychology (3 Credits)
Prerequisite: PSYC 100. Various models of psychopathology, history of abnormal psychology, psychological disorders: their causes, and therapies.

PSYC 231 - Developmental Psychology: The Infant and Child (3 Credits)
Prerequisite: PSYC 100. Psychological development from conception through childhood. Consideration of developmental processes, theories, issues, and relevant research.

PSYC 232 - Developmental Psychology: The Adolescent and Adult (3 Credits)
Prerequisite: PSYC 100. Theories of, and research on, personality, social, physical, and intellectual characteristics from adolescence to young adulthood.

PSYC 233 - Psychology of Aging (3 Credits)
Prerequisite: PSYC 100. Theories and research in aging, changes in personality, intellectual abilities, cognitive capacities, and physical capabilities from adulthood to death.

PSYC 242 - Psychology of Personality (3 Credits)
Prerequisite: PSYC 100. Personality structure, dynamics, development, and methods of research.

PSYC 253 - Fundamentals of Learning and Motivation (3 Credits)
Prerequisite: PSYC 100. Survey of empirical findings and theoretical issues in the analysis of learning and motivation and their interaction in the determination of behavior.

PSYC 261A - Introductory Statistics for Psychology (3 Credits)
Prerequisite: PSYC 100. Introduction to descriptive and inferential statistical methods, including basic ANOVA and simple regression. Experience includes problem solving, technical writing, and use of computer statistical package (SPSS).

PSYC 273 - Cognitive Psychology (3 Credits)
Prerequisite: PSYC 100. The study of human information processing, including pattern recognition, attention, memory, language, problem solving, and decision making.

PSYC 274 - Biological Psychology (3 Credits)
Prerequisite: PSYC 100. Exploration of biological bases of behavior and neurological correlates of psychological events.

PSYC 305 - Cognitive Neuroscience (3 Credits)
Prerequisite: PSYC 100. Introduction to neural models of cognitive processes emphasizing the relations between neural organization and observations of cognitive functioning.

PSYC 315 - Foundations of Clinical Psychology (3 Credits)
Prerequisites: PSYC 100 and PSYC 211. Professional issues in clinical psychology, theories and practices of the major schools of psychotherapy, effectiveness of psychotherapy, community psychology, and primary prevention.

PSYC 320 - Psychology of Exceptional Children and Youth (3 Credits)
Prerequisite: PSYC 100 and either PSYC 231 or PSYC 232. Cognitive, emotional, behavioral, and physical exceptionalities from infancy through adolescence. Consideration of theories and relevant empirical research.
PSYC 322 - Mentoring Children at Risk (3 Credits)
Prerequisite: PSYC 100 and permission of instructor. Course combines lecture with hands-on work with children of incarcerated mothers at a summer camp. Topics covered in lectures include models of developmental psychology; middle childhood development; maternal incarceration; the impact of poverty on development in children; risk and resilience; and managing problem behaviors. Mentoring component involves spending one week at a sleepover camp specifically for children of incarcerated mothers.

PSYC 339 - Health Psychology (3 Credits)
Prerequisite: PSYC 100. Exploration of psychological issues surrounding health, illness, and medical care. Social psychological perspectives are applied to such topics as stress-related diseases, exercise adherence, and doctor-patient interactions.

PSYC 346 - Forensic Psychology (3 Credits)
Prerequisite: PSYC 100 and PSYC 201 or PSYC 211 or PSYC 242. Examination of criminal behavior from a psychological perspective, including causes of criminal behavior, the criminal personality, the relationship between psychology and law, how psychology is applied to legal situations, rehabilitation, and the prediction of dangerousness.

PSYC 349 - Psychology of Human Sexuality (3 Credits)
Prerequisite: PSYC 100. Introduction to major areas of investigation concerning human sexuality, including anatomy, physiology, culture, behavior, sexual health, sexual violence, dysfunctions, and therapy.

PSYC 350 - Psychology of Women (3 Credits)
Prerequisite: PSYC 100. Impact of sex and gender on the female experience—individual, interpersonal, and institutional. Includes work, physical and mental health, physical and cognitive ability, social status and empowerment, ethnicity, and sexuality.

PSYC 351 - Positive Psychology (3 Credits)
Prerequisite: PSYC 100. Introduction to the field of positive psychology theory and research. Topics will include positive emotions, character strengths, and research-based techniques to enhance well-being that allow individuals and communities to thrive.

PSYC 360A - Advanced Statistics for Psychology (3 Credits)
Prerequisite: PSYC 261A with a minimum grade of C-. Introduction to advanced statistical methods, including ANOVA models, a priori and post hoc tests, and multiple regression. Particular emphasis on quasi-experimental and correlational methods, as well as data entry, analysis using SPSS, and presentation.

PSYC 362 - Research Methods for Psychology (4 Credits)
Prerequisite: PSYC 261A with a minimum grade of C-. Introduction to both laboratory and applied methods commonly used in psychological research including experimental, quasi-experimental observational, qualitative, and correlational methods. A strong focus on the role of ethics in research is integrated into student’s own process of data collection, data analysis using SPSS, and formal presentation of their research results.

PSYC 372 - Sensation and Perception (3 Credits)
Prerequisite: PSYC 100. Study of processing of environmental energy by the sensory systems (visual, auditory, somatosensory, olfactory, and gustatory), as well as the higher-order processing of activity in those systems, from psychophysical, physiological, and behavioral perspectives.

PSYC 385 - Organizational Psychology (3 Credits)
Prerequisite: MGMT 301. Behavioral aspects of organizations, presenting concepts, theories, research, and research techniques applicable to people in organizations. Topics include personnel selection and placement, job and work environments, worker motivation, job satisfaction, and the organizational and social context of human work. Cross-listed as MGMT 345.

PSYC 386 - Human Resources Management (3 Credits)
Prerequisite: MGMT 301. Philosophy, principles, policies, and programs for effective personnel management and industrial relations in business, governmental, and not-for-profit organizations. Cross-listed as MGMT 346.

PSYC 387 - Organizational Development and Change (3 Credits)
Prerequisite: MGMT 301. System-wide application of behavioral science methods, theories, and accumulated knowledge to the developmental change, and reinforcement of organizational strategies, structures and processes for improving organizational effectiveness. Cross-listed as MGMT 347.

PSYC 394 - Psychopharmacology (3 Credits)
Prerequisites: PSYC 100 and one of the following courses: PSYC 274, PSYC 305, or PSYC 372 Principles of drug action on the body, drug effects on behavior, and the social psychology of drug use.

PSYC 399 - Psychology in Europe (3 Credits)
Prerequisite: PSYC 100. In this 3 credit summer school course, students travel to different European cities to trace the roots of Psychology in Europe. Through lectures, readings, tours, and group discussions, students learn about important figures and events in Psychology.

PSYC 401 - Behavior Assessment (3 Credits)
Prerequisites: Twelve hours in Psychology and either PSYC 253 or PSYC 320, and acceptance into the UMW-NECC program. This course will provide an introduction to key concepts, methods, and ethical considerations associated with behavioral assessment. Course objectives will include teaching students to distinguish between idiographic and norm-referenced assessment approaches, to conduct pertinent behavioral assessments (preference assessments, functional assessments, and skills assessments), and to incorporate assessment outcomes with treatment selection and design in accordance with contemporary best practices in the field of applied behavior analysis. Course available only to UMW students enrolled in the UMW-NECC cooperative program at the New England Center for Children.

PSYC 402 - Principle of Behavior Analysis (3 Credits)
Prerequisites: Twelve hours in Psychology and either PSYC 253 or PSYC 320, and acceptance into the UMW-NECC program. This course will orient students to the concepts, processes, and scientific principles of behavior on which the field of applied behavior analysis was founded. Topics of study will include the history and defining features of applied behavior analysis as well as the role of basic principles in producing socially meaningful behavior change (positive and negative reinforcement, punishment, discriminative control of behavior, and motivating operations). Course available only to UMW students enrolled in the UMW-NECC cooperative program at the New England Center for Children.
**PSYC 403 - Behavioral Interventions** (3 Credits)
Prerequisites: Twelve hours in Psychology and either PSYC 253 or PSYC 320, and acceptance into the UMW-NECC program. This course will prepare students to identify, implement, and maintain effective behavioral interventions in applied settings. Specific objectives will include teaching students to select and implement function-based interventions for the reduction of problem behaviors, skills-based prevention strategies, and a variety of behavioral teaching tactics. Tactics for promoting procedural integrity and facilitating the generalization and maintenance of treatment effects will also be reviewed. Course available only to UMW students enrolled in the UMW-NECC cooperative program at the New England Center for Children.

**PSYC 404 - Methods of Evaluation** (3 Credits)
Prerequisites: Twelve hours in Psychology and either PSYC 253 or PSYC 320, and acceptance into the UMW-NECC program. This course will equip students with skills needed to confirm the clinical efficacy of interventions by subjecting them to experimental evaluation using single subject designs. Students will learn to develop valid and reliable systems for measuring behavior, to display data using popular and accessible graphing software, and to assess for orderly changes in behavior through visual inspection and interpretation of graphic data. Course available only to UMW students enrolled in the UMW-NECC cooperative program at the New England Center for Children.

**PSYC 405 - Evidence-based Teaching** (3 Credits)
Prerequisites: Twelve hours in Psychology and either PSYC 253 or PSYC 320, and acceptance into the UMW-NECC program. This course will provide students with a comprehensive review of empirically-supported behavioral teaching procedures for individuals with autism and related disabilities. Topics will focus on teaching skills in a variety of content areas such as language, social, and self-help. Procedures for teaching these include, match-to-sample discrimination training, task analysis, as well as prompting procedures including prompt fading and video modeling. Course available only to UMW students enrolled in the UMW-NECC cooperative program at the New England Center for Children.

**PSYC 406 - Autism and Related Disabilities** (3 Credits)
Prerequisites: Twelve hours in Psychology and either PSYC 253 or PSYC 320, and acceptance into the UMW-NECC program. This course will provide students with a foundation in etiological, diagnostic, ethical, and treatment related considerations affecting services for individuals with autism and other disabilities. Topics of study will include current data on causal variables, issues in early identification, and a survey of evidence-based models of treatment, outcome evaluation, and effective systems support for individuals with pervasive developmental disabilities. Course available only to UMW students enrolled in the UMW-NECC cooperative program at the New England Center for Children.

**PSYC 411 - Research Seminar in Abnormal, Personality, or Social Psychology** (3 Credits)
Prerequisite: PSYC 360A, PSYC 362, and one from the following: PSYC 201, PSYC 211, or PSYC 242. Exploration of current theory and research in abnormal, personality, or social psychology with a focus on designing, conducting, and reporting research in these areas.

**PSYC 412 - Research Seminar in Biological Psychology** (3 Credits)
Prerequisite: PSYC 360A and PSYC 362, and one from the following: PSYC 274, PSYC 305, PSYC 372, or PSYC 394. Exploration of current theory and research in the biological influences on and correlates of behavior, with a focus on designing, conducting, and reporting research in this area.

**PSYC 413 - Research Seminar in Cognition or Learning** (3 Credits)
Prerequisites: PSYC 360A and 362, and one from the following: PSYC 253, PSYC 273, PSYC 305, or PSYC 372. Exploration of current theory and research in cognition and human learning with a focus on designing, conducting and reporting research in this area.

**PSYC 414 - Research Seminar in Developmental Psychology** (3 Credits)
Prerequisite: PSYC 360A and PSYC 362, and one of the following: PSYC 231, PSYC 232, or PSYC 233. Exploration of current theory and research in human development, with a focus on designing, conducting, and reporting research in these areas.

**PSYC 470 - Seminar in Psychology** (3 Credits)

**PSYC 480 - Selected Topics in Psychology** (3 Credits)

**PSYC 490 - Guided Readings in Psychology** (1-3 Credits)
Readings in a specialty area of psychology. Maximum of three credits toward the major; maximum of six credits in PSYC 490, PSYC 491A and PSYC 492 combined may count toward the major.

**PSYC 491A - Individual Research** (3 Credits)
Prerequisites: PSYC 360A and PSYC 362 and permission of instructor. Empirical investigation and/or theoretical research. Maximum of six credits in PSYC 490, PSYC 491A and PSYC 492 combined may count toward the major.

**PSYC 492 - Individual Research** (3 Credits)
Prerequisite: PSYC 491A and permission of instructor. Empirical investigation and/or theoretical research with emphasis on research writing and oral presentation of results. Maximum of six credits in PSYC 490, PSYC 491A and PSYC 492 combined may count toward the major.

**PSYC 499 - Internship** (1-6 Credits)
Prerequisite: Junior standing and 12 hours in psychology beyond PSYC 100. Supervised off-campus experience. Maximum of three credits toward the major program.

**Religious Studies (RELG)**

**RELG 101 - Introduction to World Religions** (3 Credits)
Survey of the major religions of the world; including among others Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism and Daoism.

**RELG 102 - Introduction to the Study of Religion** (3 Credits)
Examination of the religious dimension of human life, the ways in which it is defined, and the methods by which it is studied.

**RELG 103 - The Abrahamic Religions** (3 Credits)
Introduction to the religions of Judaism, Christianity, and Islam.

**RELG 117 - Introduction to Christian Theology** (3 Credits)
Christian theology is characterized as a way of seeking to make sense of life in relation to central doctrines and concepts.

**RELG 201A - Judaism** (3 Credits)
Historical and religious development of Judaism from biblical times to the present.

**RELG 205 - Hebrew Bible** (3 Credits)
Study of the literature, history, and culture of ancient Israel within the broader context of the ancient Near East.

**RELG 206A - Christian Beginnings** (3 Credits)
Study of the literature, history, and beliefs of the first Christians within the broader cultural context of the Roman Empire.
RELG 208 - Christianity After the New Testament (3 Credits)
In this course, we will consider the interaction between Christianity and imperial power, the creation of a specifically Christian culture, the origins and development of the ascetic movement within Christianity. Christian conflicts with Jews and Hellenes, and the ways that Christian ritual and sacred space changed the landscape of the Mediterranean world.

RELG 210 - Islam (3 Credits)
This introductory course examines the Quran, the life of the prophet Muhammad, Islamic law, philosophy, theology, mysticism, and art.

RELG 211 - Greek and Roman Religion (3 Credits)
The public, personal, and mystery religions of the Greeks and Romans, and the development of classical religious ideas. Crosslisted as CLAS 211.

RELG 231 - Special Studies in Religion (3 Credits)
Among topics taught at different times: Current Theological Issues, The Roman Catholic Tradition, World Religions II. Different subjects taught under this course number count as different courses.

RELG 250 - African American Religions (3 Credits)
A study of the variety of African-American religious expression from colonial times to the present. Course will include slave religions, African-American interpretations of Protestant and Roman Catholic thought, Religion and the Civil Rights struggle, as well as Santeria and Voodoo.

RELG 251 - Native American Religions (3 Credits)
A study of the variety of Native American religious expression from pre-European contact times to the present. Course will explore the similarities and differences among the beliefs of the First Nations, as well as a discussion of how contact with European settlers influenced those faiths.

RELG 252 - Religion and Politics in Islam (3 Credits)
This course is designed to familiarize students with political aspects of Islam, in particular radical Islam and its major ideologies. The emphasis will be placed on modern and contemporary periods (1850-present).

RELG 253 - Muhammad and the Qur'an (3 Credits)
In this course, the life of Prophet Muhammad with special emphasis on his sayings (Hadith literature) will be studied first, followed by an in-depth study of the Qur'an. Verses of the Qur'an will be analyzed and interpreted particularly those that are in dialogue with Judaism and Christianity.

RELG 277 - Religion in America Before the Civil War (3 Credits)
An examination of principal figures, trends, and issues in religion in America from the pre-contact era to the Civil War.

RELG 278 - Religion in America After the Civil War (3 Credits)
An examination of principal figures, trends, and issues in religion in America from the Civil War to the present day.

RELG 283 - Hinduism (3 Credits)
This course explores the diverse beliefs, rituals, and literatures of Indian religion that constitute Hinduism, the historical progression of their development, and their current expressions throughout the world. Cross-listed as PHIL 283.

RELG 284 - Buddhism (3 Credits)
An introduction to the thought and traditions of Buddhism. Readings from the Dhamapada as well as from various Theravada and Mahayana traditions.

RELG 298 - Ethics of Religion and Violence (3 Credits)
Compares Hindu, Buddhist, Jewish, Christian and Muslim constructions of the moral self, and explores provocative exemplars renowned for their response to violence, injustice and power in the modern world.

RELG 302 - Virgins, Monks, and Hermits (3 Credits)
In this course, we will explore some of the most influential early Christian ascetics, as well as their most extreme practices such as sexual renunciation, fasting, and poverty.

RELG 303 - Sex, Gender, Religion America (3 Credits)
A historical and thematic examination of the ways in which sexual identity, gender identity, and religion have shaped each other in American culture and history.

RELG 305 - Religion and Politics in the United States (3 Credits)
Prerequisite: Any one 100- or 200-level religion course or the permission of the instructor. Preparation of a senior thesis under the direction of the religion faculty. Choice of topic by student. Capstone course required of all senior majors.

RELG 308 - Philosophy of Religion (3 Credits)
Prerequisite: Any one 100- or 200-level religion course or the permission of instructor. In this course, we will narrow our study to how early Christians thought about, ritualized, and created theological principals around the various processes of and theories on the topic of death and dying.

RELG 310 - Women and Sexuality in the Western Religious Tradition (3 Credits)
Prerequisite: Any one 100- or 200-level religion course or the permission of the instructor. Study of the changing understanding and roles of women and sexuality in the western religious tradition from the origins of Christianity to modern times.

RELG 322 - Neuro Theology (3 Credits)
Prerequisite: Any one 100- or 200-level religion course or the permission of the instructor. Philosophical examination of such topics as the relationship between faith and reason, the existence or non-existence of God, life after death, mysticism, and miracles. Cross-listed as PHIL 322.

RELG 331 - Special Studies in Religion (3 Credits)
Among topics taught at different times: Asceticism, Body, and Gender in Late Antiquity; 19th-Century Theology; Religion and Politics in Islam, Early Christian Monasticism. Different subjects taught under this course number count as different courses.

RELG 341 - Major Religious Thinkers (3 Credits)
Prerequisite: Any one 100- or 200-level religion course or the permission of the instructor. Among thinkers studied in some depth at different times: Paul, Augustine, Avicenna, al-Ghazzali, Dostoevsky, Kierkegaard, Wiesel. Different figures taught under this course number count as different courses.

RELG 342 - Religion and Politics in the United States (3 Credits)
Prerequisite: Any one 100- or 200-level religion course or the permission of the instructor. In this course, we will explore some of the most influential early Christian ascetics, as well as their most extreme practices such as sexual renunciation, fasting, and poverty.

RELG 356 - Islamic Philosophy and Theology (3 Credits)
Any 100 or 200 level RELG course. Central themes and topics in the Islamic theological and philosophical tradition will be discussed in some detail. Such topics include the existence of God, free will and determinism, eschatology, ontology and epistemology. References will be made between major Islamic philosophers and their medieval Christian counterparts. Cross-listed as PHIL 353.
RELG 383 - Yoga In Theory, History, and Contemporary Society (3 Credits)
Prerequisite: Any 100 or 200 level RELG course or permission of instructor. Critically explores the long history and diverse beliefs, practices, rituals and literatures of the religions that constitute Yoga, especially their theories of the body, mind and transcendence, as well as their popular expressions throughout the contemporary world.

RELG 384 - Death and Rebirth in Tibetan Buddhism (3 Credits)
Prerequisite: Any 100 or 200 level RELG course. Explores Tibetan Buddhism's experiential descriptions of dying, death, intermediate states between lifetimes, and rebirth, which are framed within its philosophy of karma, the relative world we inhabit, and the ultimate goal of liberation from it. Also surveys meditation practices in preparation for death and death rites.

RELG 400 - Research Seminar: Selected Religious Texts (3 Credits)
Prerequisite: Junior or Senior status or consent of instructor. In-depth study of selected religious texts chosen by the instructor. Text selection will vary; examples include the Bhagavadgita, Kierkegaard's Philosophical Fragments and Augustine's Confessions.

RELG 401 - Guided Research (3 Credits)
Preparation of a senior thesis under the direction of the religion faculty. Choice of topic by student. Capstone course required of all senior majors.

RELG 491 - Individual Study (1-3 Credits)
Independent work under the supervision of a member of the Religion faculty. Must have permission of instructor and department chair.

RELG 492 - Individual Study (1-3 Credits)
Independent work under the supervision of a member of the Religion faculty. Must have permission of instructor and department chair.

RELG 499 - Internship (1-6 Credits)
Supervised off-campus learning experience, developed in consultation with the religion faculty.

Sociology (SOCG)

SOCG 105 - The Social World (3 Credits)
An introduction to the nature and scope of sociology, emphasizing the development and uses of basic concepts, theories, and methods of inquiry. Emphasis varies by instructor. Course formerly taught as Socg 200.

SOCG 155 - Social Issues (3 Credits)
Sociological perspectives for analyzing social problems such as economic inequality, race relations, and crime. Emphasis varies by instructor. Course formerly taught as Socg 100.

SOCG 304 - Social Stratification (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor. Analysis of inequality in society. The nature and consequences of social stratification and power in modern society.

SOCG 313 - Urban Sociology (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor. Problems of city growth and living; the influence of social, cultural, and ecological factors upon social organization, power relations, and everyday social relationships in urban areas.

SOCG 315A - Gender and Society (3 Credits)
Prerequisite: SOCG 105 or 155 or permission of the instructor. Sociological study of gender differentiation in American society, with an emphasis on major social institutions and social change.

SOCG 320 - Food Justice (3 Credits)
Prerequisites: SOCG 105 or SOCG 155 or permission of instructor. Sociologists study food in order to puzzle through the complicated questions of fairness, equity, justice, and all human beings' inherent right to nourishment and sustenance. What would a 'just' food system look like? What social groups are advancing this cause in contemporary society? How successful have their efforts been? What can/will we do to contribute to this process? How will we adequately, healthily, and sustainably feed others and ourselves?

SOCG 331 - The Family (3 Credits)
Prerequisite: SOCG 105 to SOCG 155 or permission of the instructor. Historical changes in American patterns of marriage, divorce, and child rearing; social class, racial, ethnic variation; and alternative family forms.

SOCG 332 - Introduction to Social Welfare (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor. The history, philosophy, and institutionalization of social welfare; social work as a profession, methods, and policies.

SOCG 334 - Medical Sociology (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor. The relationship of disease and health to social structure and culture. Organizational and role analysis of the medical care industry, various allied health professions, and alternative approaches to coping with health and illness.

SOCG 335 - Global Perspectives on Health and Illness (3 Credits)
Analyzes problems of health, illness, inequality, and care at the global level. Examines health care systems and health promotion in comparative perspective. Explores how social forces shape individual and group health behaviors and illness experiences in various structural and cultural contexts. Emphasis on health rights as human rights.

SOCG 336 - Community Power (3 Credits)
Prerequisite: SOCG 105 or SOCG 155. This course explores how power is distributed at the local level (city, region, neighborhood), and how this impacts our experiences of community. Power can be examined through locally experienced issues, for example: housing, schools, policing, neighboring behaviors, health care, etc.

SOCG 341 - American Society (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor. Study of selected issues in contemporary American society.

SOCG 342A - Socw Work:Occupatn & Professns (3 Credits)
Prerequisite: SOCG 105 or SOCG 155. Analysis of major occupational groups; special emphasis on professions and executive roles; relationship of occupations to other aspects of society; the growth of leisure.

SOCG 347 - Sociology of East Asia (3 Credits)
Prerequisite: SOCG 105. Sociology of East Asia is an introductory course on three East Asian countries, China (including Hong Kong and Taiwan), Japan, and Korea. The course aims to help students understand similarities and differences among East Asian countries and with/from Western societies from sociological perspectives.

SOCG 351 - Juvenile Delinquency (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor. The development of the concept of juvenile delinquency. The extent and nature of delinquent behavior and efforts at explanation and control.

SOCG 352 - Criminology (3 Credits)
Prerequisite: SOCG 105 to SOCG 155 or permission of the instructor. Causal theories and descriptive research on adult crime; survey of the American criminal justice system.
SOCG 354 - Environmental Sociology (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of instructor.
Examines how contemporary social organization drives environmental degradation and renders some people more vulnerable to its effects, and whether a shift in environmental consciousness and individual behaviors is sufficient to create a more harmonious relationship between society and the natural world.

SOCG 355 - Death and Society (3 Credits)
Prerequisite: SOCG 105 or permission of instructor. An overview of the sociological approach to the study of death and dying. Examines causes of death, treatment of death both before and after the event. The meaning of death from various cultural perspectives, and the death industry.

SOCG 364 - Quantitative Research Methods and Analysis (4 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor, and STAT 180. Quantitative sampling and study design, questionnaire construction and administration, analysis of survey data with emphasis on cross-classification, correlation, or regression techniques.

SOCG 365 - Qualitative Research Methods and Analysis (4 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor. Introduction to qualitative sociological research methods, including participant observation, interviewing, and narrative analysis. Students will engage in independent research to gather and analyze qualitative data.

SOCG 371 - Selected Topics in Sociology (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of instructor. Major concepts or points of view in contemporary sociology with an emphasis on discussion. Topic varies.

SOCG 400 - Sociology of the Body (3 Credits)
Prerequisite: SOCG 105 to SOCG 155 or permission of the instructor. How are bodies socially constructed? This seminar examines social, particularly feminist theories of embodiment. Central questions consider how bodies are sexed/gendered, racialized, ethnicized, aged, sexualized, classed, sickened/cured, and otherwise modified through social processes. Also explores the subjective experience of embodiment.

SOCG 404 - Global Inequality and Development (3 Credits)
Prerequisite: SOCG 105 to SOCG 155 or permission of the instructor. Examines social, economic, and political development at the global level and in comparative perspectives. Students consider competing perspectives on global inequality, with attention to the role of power relations and historical contingencies in shaping issues of development and underdevelopment.

SOCG 411 - Popular Culture (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor. Traditional sociological conceptions of popular culture as well as recent theoretical interventions and studies of everyday life, gender, social class, and race and ethnicity from feminist studies, American studies, minority discourses, and cultural studies. Popular culture as a meaningful site of political and social resistance for the disenfranchised.

SOCG 415 - The Sociology of Law (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor. The role of law in American society, particularly the relationship between legal and other institutions. Sociological approaches to American legal cultures, the legal profession and legal education, law and social change.

SOCG 418B - Racial and Ethnic Relations (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor. Analysis of the relationship between ethnic and racial groups and their relationship to the dominant ethnic majority in America and other societies. Sociological examination of concepts such as racism, racial identity, prejudice, discrimination, inter-group conflict, power, assimilation, and pluralism.

SOCG 432 - Political Sociology (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor. Theories and research regarding the social structural and cultural bases of political authority in human societies; emphasis given to the polity, power, and political action as integral aspects of sociocultural organization and dynamics.

SOCG 434 - Gender and Work (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor. This seminar examines the opportunities, imperatives, and experiences of women and men at work. Work is structured by institutional arrangements that come before us and that change over time and is shaped in relation to institutions in society other than the economy, especially the family. Work, occupational opportunities and cultural expectations are also shaped by the intersectionality of class, race, and gender in our lives and experiences. Readings and projects are selected to emphasize related questions and themes.

SOCG 440 - Sociology of Education (3 Credits)
Prerequisite: SOCG 105 or SOCG 155 or permission of the instructor. Formal and informal educational processes in various societies with an emphasis on stratification in education in the US. Theoretical and methodological approaches to studying education as a social institution.

SOCG 471 - History of Social Theory (3 Credits)
Prerequisite: SOCG 105 and completion of at least 6 credit hours of 300-400 level sociology courses, or permission of the instructor. Presentation and analysis of major forms and themes of social and early sociological theory from the 16th century to the early 20th century.

SOCG 472 - Contemporary Sociological Theories (3 Credits)
Prerequisite: SOCG 105 and completion of at least 6 credit hours of 300-400 level sociology courses, or permission of the instructor. Consideration of major sociological theorists of the 20th century.

SOCG 475 - Public Sociology (3 Credits)
Prerequisite: SOCG 105. Students will be trained in participatory action research methods. Action research is community-based and operates on a collaborative model of social research that simultaneously engages academic practices and democratic social change. Data used may include interviews, focus groups, participant observation, documents, records, reports, and surveys.

SOCG 491 - Individual Study and Research (3 Credits)
Available to qualified students; reading and research, project or paper with guidance of a faculty member.

SOCG 492 - Individual Study and Research (3 Credits)
Available to qualified students; reading and research, project or paper with guidance of a faculty member.

SOCG 499 - Internship (1-12 Credits)
Supervised off-campus experience, developed in consultation with departmental faculty. Cannot be counted in the major program.
Spanish (SPAN)

SPAN 000 - Service Learning (0 Credits)
Community service using Spanish with a local agency or agencies for a minimum of 42 hours.

SPAN 101 - Beginning Spanish I (3 Credits)
Grammar, composition, conversation, reading, laboratory use. Introduction to the elementary aspects of Spanish. Review of elementary Spanish for beginning students of the language. Students with credit for a higher level course in Spanish may not take this course.

SPAN 102 - Beginning Spanish II (3 Credits)
Grammar, conversation, reading, laboratory use. Students with credit for a higher level course in Spanish may not take this course for credit.

SPAN 105 - Intensive Beginning Spanish (6 Credits)
Grammar, conversation, reading, laboratory use. May take either SPAN 101 and SPAN 102 or SPAN 105. May not be awarded credit for both. Students with credit for a higher level course in Spanish may not take this course for credit.

SPAN 201A - Intermediate Spanish I (3 Credits)
Grammar review, reading, oral work, laboratory use. Students with credit for a higher level course in Spanish may not take this course for credit.

SPAN 202A - Intermediate Spanish II (3 Credits)
Grammar review, oral and written work, and readings in culture and literature. Students with credit for a higher level course in Spanish may not take this course for credit.

SPAN 205 - Intensive Intermediate Spanish (6 Credits)
Grammar review, reading, oral work, laboratory use. Students with credit for a higher level course in Spanish may not take this course for credit.

SPAN 301 - Study Abroad Reflection (1 Credit)
Prerequisite: Four-week minimum study abroad program. A reflection course for students of Spanish to complete after returning from an approved study abroad program in Spain or Latin America.

SPAN 305 - Conversation and Grammar (3 Credits)
Conversation and Grammar. Prerequisite: SPAN 202A or SPAN 205 or equivalent. Course designed to increase students’ spoken Spanish in formal and informal conversation and presentations. Review of major points of grammar. Native speakers are encouraged to take SPAN 314 or SPAN 415 instead of this course.

SPAN 306 - Composition and Grammar (3 Credits)
Composition and Grammar. Prerequisite: SPAN 202A or SPAN 205 or equivalent. Course designed to polish student’s writing skills in Spanish in a variety of formats, including analytical essays. Review of major points of grammar.

SPAN 310 - Spanish for Native and Heritage Speakers (3 Credits)
Prerequisite: SPAN 202A or SPAN 205 or equivalent. Class addresses special problems in grammar and spelling. Only open to of native and heritage speakers of the language.

SPAN 312 - Introduction to Literary Studies in Spanish (3 Credits)
Prerequisite: SPAN 202A or SPAN 205 or equivalent. An introduction to the analysis of literary texts. This course prepares students for reading, analyzing, discussing and writing about texts before taking literature courses in Spanish.

SPAN 314 - The Sounds of Spanish; Theory and Practice (3 Credits)
Prerequisite: SPAN 202A or SPAN 205 or equivalent. An introduction to the study of speech/production of sounds in Spanish. Emphasis on description and criteria to classify sounds, phonetic transcription, syllabification, accent/intonation, and phonetic features of different varieties of Spanish.

SPAN 315 - Spanish Civilization (3 Credits)
Prerequisite: SPAN 202A or SPAN 205 or equivalent. Geography, history, and the social, political and cultural background of Spain and the Spanish people.

SPAN 320 - Topics in Hispanic Culture (3 Credits)
Prerequisite: SPAN 202A or SPAN 205 or equivalent. Studies in grammar and oral skills.

SPAN 321 - Culture of Service and Social Action in the Hispanic World (3 Credits)
Prerequisites: SPAN 202A, SPAN 205, or Permission of Instructor. Examines concepts of service and social action as a reaction to various social problems in Spain, Latin America and the United States such as poverty, socio-political inequality, gender, and race, as expressed in literary and historical texts, film, art and music. Required community service in addition to regular class meetings.

SPAN 323 - Introduction to Spanish Literature (3 Credits)
Prerequisite: SPAN 202A or SPAN 205 or equivalent. Survey of Spanish literature from the Middle Ages to present day.

SPAN 324A - Intro to Spanish Literature (3 Credits)
Prerequisite: SPAN 202A or SPAN 205 or equivalent. Survey of Spanish literature from the Middle Ages to present day.

SPAN 327A - Introduction to Latin American Literature (3 Credits)
Prerequisite: SPAN 202A or SPAN 205 or equivalent. Survey of major examples of Spanish American literature from the colonial period to present day.

SPAN 328A - Introduction to Latin American Literature (3 Credits)
Prerequisite: SPAN 202A or SPAN 205 or equivalent. Survey of major examples of Spanish American literature from the colonial period to present day.

SPAN 345 - Ideas on Nature in Latin American Literature (3 Credits)
Prerequisite: SPAN 312 or permission of the instructor. A study of ideas about nature and environment in Latin American narrative and poetry.

SPAN 365 - Detective Fiction from Spain and Latin America (3 Credits)
Prerequisite: SPAN 312 or permission of the instructor. Detective fiction and the 'novela negra' of contemporary authors from Spain and Latin America.

SPAN 370 - Caribbean Culture and Literature in the 20th and 21st Centuries (3 Credits)
Pre-requisites: SPAN 312, SPAN 317, or SPAN 318; or permission of the instructor. A study of the culture and literature of the Caribbean region, with a special focus on the Spanish speaking Caribbean.

SPAN 375B - Spanish Realism and Generation of 1898 (3 Credits)
Representative authors from nineteenth-century Spanish literature (Pardo Bazan, Alas, Galdos) and from the Generation of ‘98 (Unamuno, Azorin, Baroja, Machado, Valle,Inclan).

SPAN 378 - Latin American Poetry (3 Credits)
Prerequisite: SPAN 312 or permission of the instructor. A study of representative poetic works from the Renaissance, Baroque, Neoclassic, Romantic, Modernista and/or contemporary periods in Latin America.
SPAN 383 - Contemporary Spanish Prose (3 Credits)
Prerequisite: SPAN 312 or permission of the instructor. Novels and short stories selected from the beginnings of 20th century to the present.

SPAN 386A - The Twentieth-Century Spanish American Short Story (3 Credits)
Prerequisite: SPAN 312 or permission of the instructor. Collections of short fiction from the avant-garde to present day.

SPAN 388 - Twentieth-Century Latin American Drama (3 Credits)
Prerequisite: SPAN 312 or permission of the instructor. Major dramatists from Latin America.

SPAN 393 - Business Spanish (3 Credits)
Prerequisite: SPAN 305 and SPAN 306. Study of specialized vocabulary, cultural variances, and their applications to business professions.

SPAN 413 - Advanced Writing (3 Credits)
Prerequisite: SPAN 305 and SPAN 306. Study of composition, grammar, and lexicon at an advanced level with a special focus on creative writing.

SPAN 414 - Spanish for Translation (3 Credits)
Prerequisite: SPAN 306. English-Spanish and Spanish-English translation of articles and essays with special attention given to fields of interest to students. Includes studies in history and theory of translation.

SPAN 415 - Advanced Conversation (3 Credits)
Prerequisite: SPAN 305. Oral communication at an advanced level. Students practice conversation skills through individual presentations, group discussions, and other formats.

SPAN 416A - Envir Justice in Latina/o Lit (3 Credits)
Prerequisite: SPAN 315 or SPAN 320. Course is intended as a class for students who have completed one lower level class in culture and civilization. The class targets students who wish to take additional courses in Latino culture and literature and who have a particular interest in learning about the Hispanic culture of the United States.

SPAN 420 - Cinema in the Hispanic World (3 Credits)
Prerequisites: SPAN 312 or SPAN 315 or permission of the instructor. Selected topics in film.

SPAN 425 - The Boom of Latin American Literature (3 Credits)
Prerequisite: SPAN 312. In depth study of novels from the period known as the Boom of Latin American Literature (1960-1970).

SPAN 451 - Cervantes (3 Credits)
Prerequisite: SPAN 312 or permission of the instructor. Readings and intensive study of Don Quijote.

SPAN 475 - Hispanic Women Writers (3 Credits)
Prerequisite: SPAN 312 or permission of the instructor. Study of women writers from Spain and Latin America.

SPAN 491 - Individual Study (3 Credits)
Intensive study of topics selected by student in consultation with instructor. By permission of the department.

SPAN 492 - Individual Study (3 Credits)
Intensive study of topics selected by student in consultation with instructor. By permission of the department.

SPAN 499 - Internship (1-12 Credits)
Supervised off-campus experience, developed in consultation with the department.

Statistics (STAT)

STAT 180 - Introduction to Statistics (3 Credits)
First course in statistical methods. Includes descriptive and inferential techniques and probability, with examples from diverse fields. Topics vary with instructor and may also include sampling methods, regression analysis, and computer applications.

STAT 205 - Selected Topics in Statistics (1-3 Credits)
Selected Topics in Statistics (1-3) Prerequisite: Course dependent. Opportunity for additional study of lower-level topics in statistics.

STAT 280 - Statistical Methods (3 Credits)
Prerequisite: STAT 180 or equivalent. Second course in statistical methods. Includes one-way and higher ANOVA, multiple regression, categorical data analysis, and nonparametric methods with examples from diverse fields. Topics vary with instructor and may also include time series and survival analysis.

STAT 320 - Applied Regression Analysis (3 Credits)
Prerequisite: STAT 280. Topics include simple linear regression, multiple linear regression, categorical predictors, model building principles, residual analysis, multicollinearity and other regression problems, robust regression, nonlinear regression, logistic regression, time series and generalized linear models.

STAT 361 - Topics in Statistics (3 Credits)
Prerequisite: Course dependent. Opportunity for additional study of statistical topics

STAT 381 - Probability and Statistical Inference (3 Credits)
Prerequisite: MATH 122 An introduction to probability theory and calculus-based statistics including probability distributions of discrete and continuous random variables, functions of random variables, methods of estimation, and statistical inference. Only in sequence.

STAT 382 - Probability and Statistical Inference (3 Credits)
Prerequisite: STAT 381. An introduction to probability theory and calculus-based statistics including probability distributions of discrete and continuous random variables, functions of random variables, methods of estimation, and statistical inference. Only in sequence.

STAT 420 - Applied Multivariate Statistics (3 Credits)
Prerequisite: STAT 280. Topics include visualization techniques, principal component analysis, factor analysis, multidimensional scaling, canonical correlation analysis, correspondence analysis, cluster analysis and structural equation models.

STAT 461 - Topics in Statistics (3 Credits)
Prerequisite: Course dependent. Topics such as time series analysis, computational statistics, design of experiments, probability theory, stochastic processes, and queuing theory. May be taken up to three times for credit.

STAT 491 - Directed Study (1-3 Credits)
Prerequisite: Departmental permission Individual study beyond the scope of normal course offerings, done under the direction of a faculty member. May lead to graduation with Honors in Mathematics.
STAT 492 - Directed Study (1-3 Credits)
Prerequisite: Departmental permission. Individual study beyond the scope of normal course offerings, done under the direction of a faculty member. May lead to graduation with Honors in Mathematics.

STAT 499 - Internship (1-12 Credits)
Internship (credits variable) Supervised off-campus experience, developed in consultation with the department. Does not count in the major program or minors.

Studio Art (ARTS)

ARTS 104 - Digital Approaches to Fine Art (3 Credits)
This course introduces basic tools and techniques of computer generated art in the context of studio theory and practice.

ARTS 105 - Design Principles (3 Credits)
Basic study of design elements (line, shape, texture, value, color, scale, proportion...) and their use in the organization and construction of visual communication in both two and three dimensions.

ARTS 120 - Drawing I (3 Credits)
Introduction to the basic principles of structural and expressive drawing in composition using various media.

ARTS 219 - Digital Video Production (3 Credits)
Prerequisite: ARTS 104. A production focused introduction to video art with an emphasis on cinematography, editing, performance, and sound.

ARTS 220 - Intermediate Drawing (3 Credits)
Prerequisite: ARTS 120 or permission of instructor. Further study of drawing compositions, compositional problems, and technique in various media.

ARTS 223 - Ceramics I (3 Credits)
Prerequisite: ARTS 105 or permission of instructor. Basic techniques of handbuilding and wheel throwing; introduction to studio procedures including making clay, preparing and applying glaze, and kiln firing.

ARTS 224 - Printmaking I (3 Credits)
Prerequisite: ARTS 120 or permission of instructor. Fundamentals of intaglio and relief processes in the production of multiple prints.

ARTS 226 - Animation (3 Credits)
Prerequisite: ARTS 104. An introduction to the methods, techniques and history of animation with a special focus on computer animation and traditional stop motion practices.

ARTS 227 - Wheel Throwing (3 Credits)
Prerequisite: ARTS 105. Introduction to working with clay on the potter’s wheel and the ceramic process. Students will create functional and sculptural forms while exploring high temperature glazes by firing both gas and electric kilns. Building and firing processes will be further informed through the study of historical and contemporary precedents.

ARTS 231A - Sculpture I (3 Credits)
Prerequisite: ARTS 105 or permission of instructor. Basic techniques of construction are introduced, focusing on additive and subtractive approaches to form. Fundamentals of creative problem solving are covered, as well as an introduction to studio procedures and the use of power tools and machinery.

ARTS 241A - Photography I (3 Credits)
Prerequisite: ARTS 105 or permission of instructor. A practical introduction to cameras and lenses along with basic darkroom techniques for printing black and white photographs. A study of the history of photography and basic photographic chemistry is included.

ARTS 242 - Painting I (3 Credits)
Prerequisite: ARTS 120 or permission of instructor. Fundamentals of problems, concepts, and materials in the study of pictorial organization with an emphasis on indirect and direct techniques in oils and acrylics.

ARTS 281 - Topics in Studio Art (3-6 Credits)
Prerequisite: Permission of instructor. Offers special topics in the theory and practice of making art.

ARTS 311A - Ceramics II (3 Credits)
Prerequisite: ARTS 223 or permission of instructor. Emphasis on developing content and expression with ceramic materials through advanced wheel throwing and hand-building techniques. High temperature clays and firing methods are covered, along with glaze composition and surface development. Contemporary and historical techniques and research are integrated into course assignments.

ARTS 316 - Experimental Documentary (3 Credits)
This hybrid seminar/studio art course examines the rich history of documentary filmmaking, concentrating on the artists who challenged, questioned, and redefined this constantly evolving cinematic form. Weekly screenings, readings, and discussions, will focus on exploring modes of production historical context, and analyzing, ethical concerns.

ARTS 331B - Sculpture II (3 Credits)
Prerequisite: ARTS 231A or permission of instructor. Conceptual approach to space and form is explored through a broad range of media. Performance, installation, and site-specific works employing found objects, constructed objects, sound, movement, etc., are introduced. Focus is on development of individual creative ideas and approaches to sculpture as a visual language. Slide presentations and lectures.

ARTS 341 - Multiple Imaging (3 Credits)
Prerequisite: ARTS 224 or ARTS 241A. Course expands upon skill and techniques learned in Photography I and/or Printmaking I, focusing on the idea of creating images in small editions. A variety of photographic, printmaking, and digital media techniques are explored. Reading, writing, research, and speaking assignments accompany studio work.

ARTS 342 - Painting II (3 Credits)
Prerequisite: ARTS 242 or permission of instructor. Advanced problems in painting practice including technical exploration in multiple painting media. This course is designed to promote recognition, formulation and articulation of concepts and perceptions about painting. Emphasis is on individual technical and conceptual development broadened by readings and research.

ARTS 350 - Photography II (3 Credits)
Prerequisite: ARTS 241A or permission of instructor. Study of contemporary concepts and techniques in photography as a fine art. Projects will concentrate on such areas as the aesthetics and ethics of photography, personal metaphors and non-objective elements, and provide hands-on experience with a variety of materials that go beyond basic black and white photography.

ARTS 381 - Special Topics in Studio Art (3 Credits)
Prerequisite: One Studio Art course at the 200-level. Course provides advanced study in a specific area of Studio Art with an emphasis on individual processes and extensive creative inquiry. The course is designed to facilitate the development of ideas that contribute to the artist's content and decision-making processes, as well as the development of applied skills needed to manifest these ideas.

ARTS 442 - The Human Body (3 Credits)
Prerequisite: ARTS 242. Focuses on comprehensive painting and drawing techniques in representing the human form, as well as critical analysis of the use of the human body in contemporary art and visual culture.
ARTS 450 - Topics in Art and Art History (3 Credits)
Prerequisite: ARTS 105 and ARTH 114A or ARTH 115A, or permission of instructor. Offers topics that bridge traditional boundaries between Art History and Studio Art.

ARTS 454 - Approaches to Video Art (3 Credits)
Prerequisite: ARTS 104. A comprehensive look at the development of video and other time-based media as important art forms in contemporary art; explores the formal development, content, and format of various multi-media art forms.

ARTS 470 - Special Studies in Studio Art (3 Credits)
Prerequisite: Must have completed at least one 300-level course. Provides a study of a specific area in Studio Art. Topic is selected by faculty in consultation with students.

ARTS 474 - Professional Practices in Studio Art (3 Credits)
Prerequisite: Must have completed at least two 300-level studio art courses. Senior status preferred. Addresses contemporary issues in art and professional development as an artist. The course covers: development of a body of work, professional development in speaking and writing, artist resume, artist statement, artist biography, portfolio preparation, job opportunities, interview practices, graduate school application process, exhibition opportunities, grant funding for artistic work, residency opportunities, and financial accounting practices for the professional artist.

ARTS 475 - Senior Thesis Seminar (3 Credits)
Prerequisite: ARTS 474 Senior Studio Art majors are involved in independent research in their chosen medium or mode of expression. Individual studio research is supplemented through group meetings involving critiques, discussions, readings and field trips. Students apply all skills acquired during their course of study towards the development of a cohesive body of artwork. Analytical and conceptual approaches to art making are emphasized.

ARTS 491 - Individual Study (3 Credits)

ARTS 499 - Internship (1-12 Credits)
Supervised off-campus experience developed in consultation with the Studio Art faculty. A maximum of three credits may count toward elective credit in the major.

Study Abroad Gen Ed Review (SAGE)

SAGE 000 - Study Abroad Review (0 Credits)
Study Abroad Review.

SAGE 001 - St Abroad Gen Ed Review-Global (0 Credits)
Study Abroad General Review - Global.

Theatre (THEA)

THEA 111 - Introduction to Theatre (3 Credits)
A course for the general student designed to introduce the various elements of theatrical production.

THEA 112 - Introduction to Acting (3 Credits)
An introductory course focusing on basic skills, concepts, and methods of modern realistic acting through improvisation and practical exercises leading to formal scene work.

THEA 113 - Introduction to Theatre Design (3 Credits)
A study of design elements and composition principles as they relate to stage scenery, costumes, and lighting. A survey of theatre design today.

THEA 131 - Technical Production (4 Credits)
Theories and techniques of designing, building, painting, and lighting stage settings; organization and operation of production crews. Laboratory.

THEA 132 - Technical Production (4 Credits)
Theories and techniques of designing, building, painting, and lighting stage settings; organization and operation of production crews. Laboratory.

THEA 211A - Dramatic Literature (3 Credits)
The reading and discussion of selected plays and of theatrical developments as an introduction to the theatre.

THEA 212A - Dramatic Literature (3 Credits)
The reading and discussion of selected plays and of theatrical developments as an introduction to the theatre.

THEA 218 - Voice and Body Movement (4 Credits)
Voice and body training to improve vocal quality, articulation, and posture and carriage.

THEA 225 - Summer Workshop (4 Credits)
An intensive course focused on the production of plays and musicals for the student interested in developing professional skills in the theatre. Crosslisted as DANC 225.

THEA 226 - Summer Workshop (4 Credits)
An intensive course focused on the production of plays and musicals for the student interested in developing professional skills in the theatre. Crosslisted as DANC 226.

THEA 240 - Stage Makeup (3 Credits)
Techniques and styles of stage makeup for theatre and dance.

THEA 242 - Costume Construction (3 Credits)
An introduction to the principles of pattern development and clothing construction techniques. Projects will include contemporary and period styles. Students will work on costumes for departmental productions. Laboratory.

THEA 250 - Fashion History (3 Credits)
A survey of clothing, hair styles, and accessories from the ancient world to the present, with particular emphasis on the relationship of fashion to social, political, and economic history.

THEA 251 - Fashion History (3 Credits)
A survey of clothing, hair styles, and accessories from the ancient world to the present, with particular emphasis on the relationship of fashion to social, political, and economic history.

THEA 270 - Special Studies in Theatre (3 Credits)
Concentration in a single area of theatre for general students. Topics vary from year to year.

THEA 271 - Special Studies in Theatre (3 Credits)
Special Studies in Theatre for general students. Topics vary from year to year.

THEA 280 - Stage Management (3 Credits)
An introduction to the theory and practice of stage management for the theatre.

THEA 281 - Principles of Arts Administration (3 Credits)
THEA 281 Principles of Arts Administration (3). An introduction to current theory and practices of arts administration.

THEA 290 - Scene Painting (3 Credits)
An examination of the technique and practical applications of painting for the stage.
**THEA 291 - Fabric Modification (3 Credits)**
An introduction to the basics of fabric dyeing and painting and their specific applications for the theatre.

**THEA 318 - Stage Dialects (3 Credits)**
A survey of the basic techniques for learning and applying selected stage dialects.

**THEA 321 - Acting (4 Credits)**
Scene study and performance, creating characters, and ensemble training.

**THEA 322 - Acting (4 Credits)**
Prerequisite: THEA 321. Scene study and performance, creating characters, and ensemble training.

**THEA 331 - Playwriting (3 Credits)**
Writing for the stage. Exercises and practice in the structure of action, character development, dialogue, critical analysis.

**THEA 335 - Musical Theatre Performance (3 Credits)**
A workshop course in musical theatre performance techniques. A maximum of six credits may count toward degree requirements.

**THEA 336 - Musical Theatre Performance (3 Credits)**
A workshop course in musical theatre techniques. A maximum of six credits may count toward degree requirements.

**THEA 345 - Patterning (3 Credits)**
Principles of pattern development including flat patterning, drafting and draping, focusing on period styles for the stage.

**THEA 355 - Theatre Crafts (3 Credits)**
Prerequisites: THEA 131. Exploration of the specialized vocabulary, techniques and tools of the theatre artis on including furniture restoration, welding, upholstery soft goods and properties creation.

**THEA 361 - Theatre History and Literature (3 Credits)**
Theatres, production methods, dramatic conventions, theory/criticism, and key figures from the Greek period to the present in a global context.

**THEA 362 - Theatre History and Literature (3 Credits)**
Prerequisite: THEA 361. Theatres, production methods, dramatic conventions, theory/criticism, and key figures from the Greek period to the present in a global context.

**THEA 390 - Theatre Practicum (1 Credit)**
Theatre Practicum earns credit for performance or other work on major productions of the department. A maximum of eight credits may count toward degree requirements.

**THEA 400 - Professional Identity and Practice (1 Credit)**
Prerequisite: Declared theatre major, arts administration minor, or musical theatre minor. Through a combination of research, discussion, and applied practice, students will develop strategies for creating a challenging and successful career.

**THEA 411 - Acting Styles (4 Credits)**
Prerequisite: THEA 322. An examination of period style for the stage through scene study and performance.

**THEA 431 - Directing (3 Credits)**
Technique and practice of directing for the stage.

**THEA 432 - Advanced Directing (3 Credits)**
Prerequisite: THEA 431. Technique and practice of directing for the stage.

**THEA 433 - Lighting Design (3 Credits)**
Theories and techniques of lighting stage productions; lighting instruments and equipment.

**THEA 434 - Scene Design (3 Credits)**
A study of the theories, methods, and techniques used in scenic design.

**THEA 435 - Ideas in Performance (3 Credits)**
An examination of professional productions of the dramatic literature in Washington and New York. Readings and theatre trips. Permission of instructor.

**THEA 436 - Costume Design (3 Credits)**
Prerequisite: THEA 113. A study of the theories, methods, and techniques used in costume and clothing design.

**THEA 451 - Special Studies in Theatre (3 Credits)**
Concentration on a single area of dramatic arts. Topics vary from year to year.

**THEA 452 - Special Studies in Theatre (3 Credits)**
Concentration on a single area of dramatic arts. Topics vary from year to year.

**THEA 481 - Resource Strategies in Arts Administration (3 Credits)**
Prerequisite: THEA 281. Approaches to understanding and developing critical needs for arts organization through case study, analysis, and critical problem solving.

**THEA 482 - Senior Project (3 Credits)**
This course may only be taken in one of the last two semesters. An independent project in Theatre supervised by the student’s advisor.

**THEA 491 - Individual Study (1-3 Credits)**
Individual study under the direction of a member of the department. By permission of the department.

**THEA 492 - Individual Study (1-3 Credits)**
Individual study under the direction of a member of the department. By permission of the department.

**THEA 499 - Internship (1-12 Credits)**
Supervised off-campus experience, developed in consultation with the department.

**Women and Gender Studies (WGST)**

**WGST 101 - Introduction to Women's Studies (3 Credits)**
This course explores questions about sex and gender roles and conceptions of male/female experience. It uses texts and videos from several disciplines, sometimes supplemented by guest lectures.

**WGST 102 - Perspectives in Sexuality (3 Credits)**
This course is designed to examine the theoretical and social implications of lesbian and gay histories, politics, geographies, cultures, arts, and identities. It is interdisciplinary in scope and content, reflecting upon and drawing from the discourses of history, psychology, sociology, geography, the arts, literature, and women's studies.

**WGST 300 - Special Topics in Women's and Gender Studies (3 Credits)**
Topics offered under this heading are designed to supplement and enhance the Women’s and Gender Studies program. Check Schedule of Courses for specific topics.

**WGST 400 - Special Topics in Women's and Gender Studies (3 Credits)**
Topics offered under this heading are designed to supplement and enhance the Women’s and Gender Studies program. Check Schedule of Courses for specific topics.

**WGST 485 - Senior Project (3 Credits)**
Capstone course involving the in-depth investigation of a subject and creation of original material under close supervision by a faculty member affiliated with the Women’s and Gender Studies Program.
**WGST 491** - Individual Study (3 Credits)
Prerequisite: Permission of Instructor. Individual investigation of a subject of significance to women's and/or gender studies directed by a faculty member affiliated with the Women's and Gender Studies Program.

**WGST 499** - Internship (1-3 Credits)
The Undergraduate Curriculum in Arts and Sciences

The University of Mary Washington’s undergraduate curriculum represents a distinctive academic experience which prepares graduates to make choices that lead to fulfilling lives as responsible, contributing members of local, national, and global communities. Three interrelated components make up this experience: General Education, the Major, and Electives.

General Education is the foundation of a liberal arts and sciences education and is designed to cultivate the skills, knowledge, and habits of mind that are essential in every field of study and which enable graduates to make effective decisions as citizens of a rapidly changing, richly diverse, and increasingly interconnected world. The University’s General Education requirements introduce students to a variety of learning perspectives and methods of inquiry that combine to foster an appreciation for different ways of viewing, knowing, and engaging the world. General Education facilitates collaborative learning, individual intellectual development, and constitutes the basis for lifelong learning.

The Major develops expertise in a specialized area of study resulting from focused investigation in a particular academic discipline or disciplines (in the case of an interdisciplinary major). Majors are organized areas of inquiry and knowledge with defined learning goals and methodologies. Major requirements complement, reinforce, and extend the objectives of General Education while adding depth of study in course work, individualized learning, and co-curricular experiences.

Electives offer students opportunities to explore personal interests, add variety to one’s studies, and advance particular academic, career, or professional goals (such as preparation for law or medical school). Electives also enable the study of an area of knowledge in greater depth through individually selected courses or experiences that build on a Major’s formal requirements. The combination of experiences provided through General Education, the Major, and Electives enables students to achieve the following learning goals and to emerge fully prepared to contribute to the world beyond the University.

Visit the College of Arts and Sciences website (http://cas.umw.edu) for additional details.

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College of Arts and Sciences Faculty
Faculty in the College of Arts and Sciences is organized by departments and programs.

American Studies Program
Erin K. Devlin, Program Coordinator and Career Advisor

Affiliated Faculty
Antonio Barrenechea, Department of English and Linguistics
Erin K. Devlin, Department of History and American Studies
Joseph G. Dreiss, Department of Art and Art History
Stephen J. Farnsworth, Department of Political Science and International Affairs
Bradley A. Hansen, Department of Economics
Christine R. Henry, Department of Historic Preservation
Janie Lee, Department of English and Linguistics
Mary Beth Mathews, Department of Classics, Philosophy, and Religion
Jeffrey W. McClurken, Department of History and American Studies
Will B. Mackintosh, Department of History and American Studies
Melina A. Patterson, Department of Geography
Gary N. Richards, Department of English and Linguistics
Mara N. Scanlon, Department of English and Linguistics
Jason R. Sellers, Department of History and American Studies
Gregg Stull, Department of Theatre and Dance
Clarence W. Tweedy, III, Department of English and Linguistics

Art and Art History Department
Jon F. McMillan, Chair
Suzie Kim, Career Advisor, Art History
Carole Garmon, Career Advisor, Studio Art

Faculty
(The person’s subject field is indicated in parentheses.)

Professors
Julia Anne DeLancey (Art History)
Joseph G. Dreiss (Art History)
Carole A. Garmon (Studio Art)
Marjorie A. Och (Art History)

Associate Professors
Rosemary K. Jesionowski (Studio Art)
Jon F. McMillan (Studio Art)
Jason M. Robinson (Studio Art)

Assistant Professor
Suzie Kim (Art History)

Athletics, Health, and Physical Education Department
Patrick L. Catullo, Chair
Caitlin E. Moore, Assistant Chair

**Faculty**

**Assistant Professor**
Deborah A. Conway

**Senior Lecturers**
Deena A. Applebury
J. Todd Helbling
Marcus N. Kahn
Jason A. Kilby
Caitlin E. Moore
Rodrick L. Wood

**Lecturers**
Justin A. Anderson
Andrew S. Delaney
Scott P. Gerseny
Alexander S. Hinsey
Adekunle O. Lawson
Kelly F. Swiney
Jamie M. Tierney

**Administrative/Professional Faculty**
Ashley Drier, Associate Athletic Trainer
Elizabeth Druvenga, Head Athletic Trainer
Brett Longobucco, Director of Strength and Conditioning
Clint Often, Sports Information Director

**Biological Sciences Department**
Lynn O. Lewis, Chair
Lynn O. Lewis, Career Advisor, Pre-Veterinary
Stephen G. Gallik, Career Advisor, Pre-Medical/Dental
Deborah A. O’Dell, Career Advisor, Biology and Pre-Physical/Occupational Therapy
Alan B. Griffith, Career Advisor, Allied Health

**Faculty**

**Professors**
Dianne M. Baker
Andrew S. Dolby
Stephen G. Gallik
Alan B. Griffith
Lynn O. Lewis
Deborah A. O’Dell

**Associate Professors**
Theresa M. Grana
Abbie M. Tomba

**Assistant Professors**
Swati Agrawal
Josephine Antwi
Bradley A. Lamphere
Ginny R. Morriss
R. Parrish Waters
April N. Wynn

**Senior Lecturer**
Michael C. Stebar

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**Chemistry and Physics Department**

Janet A. Asper, Chair
Janet A. Asper, Career Advisor

(The person’s subject field is indicated in parentheses.)

**Faculty**

**Professors**
Janet A. Asper (Chemistry)
K. Nicole Crowder (Chemistry)
Kelli M. Slunt (Chemistry)

**Associate Professors**
Leanna C. Giancarlo (Chemistry)
E. Davis Oldham (Chemistry)
Randall D. Reif (Chemistry)

**Assistant Professor**
Varun Suresh Makhija (Physics)

**Classics, Philosophy, and Religion Department**

Joseph M. Romero, Chair
Liane R. Houghtalin, Career Advisor (Classics)
Craig R. Vassey, Career Advisor (Philosophy)
Mehdi Aminrazavi, Career Advisor (Religion)

(The person’s subject field is indicated in parentheses.)

**Professors**
David K. Ambuel (Philosophy), Kurt E. Leidecker Co-Chair of Asian Studies
Mehdi Aminrazavi (Philosophy and Religion), Kurt E. Leidecker Co-Chair of Asian Studies
Liane R. Houghtalin (Classics)
Mary Beth Mathews (Religion)
Jason P. Matzke (Philosophy)
Nina Mikhailovsky (Philosophy)
Angela L. Pitts (Classics)
Joseph M. Romero (Classics)
Craig R. Vassey (Philosophy)

**Associate Professors**
Jennifer A. Barry (Religion)
Daniel A. Hirshberg (Religion)

**Lecturer**
Michael J. Reno (Philosophy)

**Communication and Digital Studies Department**

P. Anand Rao, Chair and Career Advisor (Communication)
Zachary N. Whalen, Career Advisor (Digital Studies)

**Faculty**

**Professor**
P. Anand Rao

**Associate Professor**
Zachary N. Whalen
Assistant Professors
Emily D. Crosby
Adria Y. Goldman
Elizabeth A. Johnson-Young
Sushma Subramanian

Senior Lecturer
Jesse Stommel

Computer Science Department
Ian Finlayson, Chair
Karen M. Anewalt, Career Advisor
Stephen C. Davies, Graduate School Advisor

Faculty
Professors
Karen M. Anewalt
Stephen C. Davies
Jennifer A. Polack

Associate Professors
Ian Finlayson
Andrew M. Marshall
Ronald A. Zacharski

Assistant Professors
Veena Ravishankar
Jessica Zeitz Self

Contemplative Studies Program
Daniel A. Hirshberg, Program Coordinator, Department of Classics, Philosophy, and Religion

Affiliated Faculty
David K. Ambuel, Department of Classics, Philosophy, and Religion
Mehdi Aminrazavi, Department of Classics, Philosophy, and Religion
John P. Broome, College of Education
Joseph G. Dreiss, Department of Art and Art History
Caitlin C. Finlayson, Department of Geography
Daniel A. Hirshberg, Department of Classics, Philosophy, and Religion
Miriam N. Liss, Department of Psychological Science
Deborah A. O’Dell, Department of Biological Sciences
Angela L. Pitts, Department of Classics, Philosophy, and Religion
Holly H. Schiffrin, Department of Psychological Science
Hilary E. Stebbins, Department of Psychological Science

Cybersecurity Program
Andrew Marshall, Program Coordinator, Department of Computer Science

Affiliated Faculty
Randall Helmstutler, Department of Mathematics
Kimberley Kinsley, College of Business
Michael Lapke, College of Business
Veena Ravishankar, Department of Computer Science
Mukesh Srivastava, College of Business

Data Science Program
Stephen Davies, Program Coordinator, Department of Computer Science

Affiliated Faculty
Christopher J. Garcia, College of Business
Debra L. Hydorn, Department of Mathematics
Robert S. Rycroft, Department of Economics
Jessica Zeitz Self, Department of Computer Science
Ronald A. Zacharski, Department of Computer Science

Earth and Environmental Sciences Department
Jodie L. Hayob, Chair
Jodie L. Hayob, Career Advisor (Geology)
Melanie D. Szulczewski, Career Advisor (Environmental Science)

Faculty
Professors
Jodie L. Hayob
Ben O. Kisila
Grant R. Woodwell

Associate Professors
Melanie D. Szulczewski
Charles E. Whipkey

Assistant Professors
Tyler E. Frankel
Pamela R. Grothe

Senior Lecturer
Sarah A. Morealli

Economics Department
Margaret A. Ray, Chair
Steven A. Greenlaw, Career Advisor

Faculty
Professors
Steven A. Greenlaw
Bradley A. Hansen
Margaret A. Ray
Robert S. Rycroft

Associate Professor
W. Shawn Humphrey

Assistant Professors
Amrita Dhar
Donghyun (Don) Lee

English and Linguistics Department
Gary N. Richards, Chair
Maya Mathur, Associate Chair
Marie E. McAllister, Career Advisor (English)
Colin T. Rafferty, Career Advisor (Creative Writing)
Janie Lee, Career Advisor ( Linguistics)

Faculty
(The person’s subject field is indicated in parentheses.)

Professors
Antonio Barrenechea (English)
Christofer C. Foss (English)

Affiliated Faculty
Christopher J. Garcia, College of Business
Debra L. Hydorn, Department of Mathematics
Robert S. Rycroft, Department of Economics
Jessica Zeitz Self, Department of Computer Science
Ronald A. Zacharski, Department of Computer Science

Earth and Environmental Sciences Department
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Jodie L. Hayob, Career Advisor (Geology)
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W. Shawn Humphrey

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Marie E. McAllister, Career Advisor (English)
Colin T. Rafferty, Career Advisor (Creative Writing)
Janie Lee, Career Advisor ( Linguistics)

Faculty
(The person’s subject field is indicated in parentheses.)

Professors
Antonio Barrenechea (English)
Christofer C. Foss (English)
Teresa A. Kennedy (English)  
Jonathan Levin (English)  
Eric G. Lorentzen (English)  
Mary Mathur (English)  
Marie E. McAllister (English)  
Judith A. Parker (Linguistics)  
Gary N. Richards (English)  
Mara N. Scanlon (English)  

Associate Professors  
Shumona Dasgupta (English)  
Paul D. Fallon (Linguistics)  
Mary Katherine Haffey (English)  
Benjamin J. LaBreche (English)  
Janie Lee (Linguistics)  
Colin T. Rafferty (English)  
Clarence W. Tweedy, III (English)  

Assistant Professors  
Susanne Brenta Blevins (English)  
Laura L. Bylenok (English)  
Rachel J. Levy (English)  

Geography Department  
Jacqueline Gallagher, Chair  
Dawn S. Bowen and Brian Rizzo, Career Advisors  

Faculty  

Professors  
Dawn S. Bowen  
Stephen P. Hanna  
Farhang Rouhani  

Associate Professors  
Caitlin C. Finlayson  
Jacqueline Gallagher  
Marco Millones Mayer  
Joseph W. Nicholas  
Melina A. Patterson  
Brian R. Rizzo  
Ping Yin  

Historic Preservation Department  
Michael G. Spencer, Chair  
Andréa D. Livi Smith, Career Advisor  

Faculty  

Professor and Prince B. Woodard Chair  
Andréa D. Livi Smith  

Associate Professors  
Daniel J. Hubbard  
Michael G. Spencer  
Cristina Turdean  

Assistant Professors  
Christine R. Henry  
Lauren K. McMillan  

History and American Studies Department  
Claudine L. Ferrell, Chair  
Will B. Mackintosh, Career Advisor (History)  
Erin K. Devlin, Career Advisor (American Studies)  

Faculty  

Professors  
Susan R. Fernsebner  
Claudine L. Ferrell  
Jeffrey W. McClurken  
Krystyn R. Moon  
Bruce R. O’Brien  
Allyson M. Poska  

Associate Professors  
Nabil S. Al-Tikriti  
Porter R. Blakemore  
Erin K. Devlin  
Steven E. Harris  
Will B. Mackintosh  
Jason R. Sellers  

Interdisciplinary Science Studies Program  
Jodie L. Hayob, Chair, Department of Earth and Environmental Sciences  

Affiliated Faculty  
Pamela R. Grothe, Department of Earth and Environmental Sciences  
Debra Hydorn, Department of Mathematics  
Ben Odhiambo Kisila, Department of Earth and Environmental Sciences  
Sarah A. Morealli, Department of Earth and Environmental Sciences  
Marie Sheckels, College of Education  
Melanie D. Szulczewski, Department of Earth and Environmental Sciences  
Charles E. Whipkey, Department of Earth and Environmental Sciences  
Grant R. Woodwell, Department of Earth and Environmental Sciences and Associate Dean, College of Arts and Sciences  

Latin American Studies Program  
Jeremy G. Larochelle, Program Coordinator, Department of Modern Languages and Literatures  

Affiliated Faculty  
Antonio Barrenechea, Department of English and Linguistics  
Maria Laura Bocaz-Leiva, Department of Modern Languages and Literatures  
Dawn S. Bowen, Department of Geography  
Ana Garcia Chichester, Department of Modern Languages and Literatures  
Marcelo Fajardo-Cárdenas, Department of Modern Languages and Literatures  
Laura H. Mentore, Department of Sociology and Anthropology  
Allyson M. Poska, Department of History and American Studies  

Mathematics Department  
Julius N. Esunge, Chair  
Randall D. Helmstutler, Career Advisor for Pure Mathematics  
Jangwoon Lee, Career Advisor for Applied Mathematics  
Debra L. Hydorn, Career Advisor for Statistics  

Faculty  

Professors  
Yuan-Jen Chiang  
Debra L. Hydorn  
Janusz Konieczny
Jangwoon Lee
J. Larry Lehman
Keith E. Mellinger
Marie P. Sheckels
Suzanne Sumner

Associate Professors
Melody B. Denhere
Julius N. Esunge
Randall D. Helmstutler

Assistant Professor
James B. Collins

Senior Lecturers
Jennifer M. Magee
Kelly W. Perkins

Middle Eastern Studies Program
Farhang Rouhani, Program Coordinator

Affiliated Faculty
Maysoon Fayez Al-Sayed Ahmad, Department of Modern Languages and Literatures
Nabil Al-Tikriti, Department of History and American Studies
Mehdi Aminrazavi, Department of Classics, Philosophy, and Religion
Ranjit Singh, Department of Political Science and International Affairs

Modern Languages and Literatures Department
Marcel Rotter, Chair
Brooke E. Di Lauro, Career Advisor, French
Marcel Rotter, Career Advisor, German
Elizabeth F. Lewis, Career Advisor, Spanish

Faculty
(The person's subject field is indicated in parentheses.)

Professors
Ana García Chichester (Spanish)
Brooke E. Di Lauro (French)
Jeremy G. Larochelle (Spanish)
Elizabeth F. Lewis (Spanish)
Scott M. Powers (French)

Associate Professors
María Laura Bocaz-Leiva (Spanish)
Marcelo Fajardo-Cárdenas (Spanish)
Antonia L. Delgado-Poust (Spanish)
Leonard R. Koos (French)
María Isabel Martínez-Mira (Spanish)
Marcel Rotter (German)
Jose A. Sainz (Spanish)
Federico Schneider (Italian)

Assistant Professors
Gonzalo S. Campos-Dintrans (Spanish)
Jennifer Hansen-Glucklich (German)

Senior Lecturer
Maysoon Fayez Al-Sayed Ahmad (Arabic)

Music Department
James Brooks Kuykendall, Chair
Douglas T. Gately, Career Advisor

Faculty
Professor
James Brooks Kuykendall

Associate Professor
Christopher O. Ryder

Assistant Professor
Robert L. Wells

Senior Lecturer
Douglas T. Gately

Nursing (Bachelor of Science in Nursing [BSN] Completion Program)
Janet M. Atarthi-Dugan, Program Director

Faculty
Lecturer
Pamela McCullough

Political Science and International Affairs Department
Elizabeth F. Larus, Chair
Jason W. Davidson, Career Advisor and Director of the Security and Conflict Studies Minor

Faculty
Professors
Rosalyn L. Cooperman
Jason W. Davidson
Stephen J. Farnsworth, Director of the Center for Leadership and Media Studies
Surupa Gupta
Elizabeth F. Larus
Emile J. Lester

Associate Professor
Ranjit Singh

Assistant Professor
Melissa Martinez

Psychological Science Department
Christine A. McBride, Chair and Career Advisor
Miriam N. Liss, Community Service Learning Advisor
Mindy J. Erchull, Psi Chi Advisor

Faculty
Professors
Mindy J. Erchull
Miriam N. Liss
Christine A. McBride
Affiliated Faculty
Jason C. James, Department of Sociology and Anthropology
Leslie E. Martin, Department of Sociology and Anthropology
Will Mackintosh, Department of History
Andréa D. Livi Smith, Department of Historic Preservation

Women’s and Gender Studies Program
Surupa Gupta, Program Coordinator

Affiliated Faculty
Jennifer M. Barry, Department of Classics, Philosophy, and Religion
Laura A. Bylenok, Department of English and Linguistics
Tracy B. Citeroni, Department of Sociology and Anthropology
Rosalyn L. Cooperman, Department of Political Science and International Affairs
Shumona Dasgupta, Department of English and Linguistics
Antonia L. Delgado-Poust, Department of Modern Languages and Literatures
Mindy J. Erchull, Department of Psychological Science
Susan R. Fernsebner, Department of History and American Studies
Carole A. Garmon, Department of Art and Art History
Surupa Gupta, Department of Political Science and International Affairs
Mary Katherine Haffey, Department of English and Linguistics
Christine R. Henry, Department of Historic Preservation
Liane R. Houghtalin, Department of Classics, Philosophy, and Religion
Rosemary K. Jesionowski, Department of Art and Art History
Benjamin J. LaBreche, Department of English and Linguistics
Janie Lee, Department of English and Linguistics
Elizabeth F. Lewis, Department of Modern Languages and Literatures
Miriam N. Liss, Department of Psychological Science
Will B. Mackintosh, Department of History and American Studies
Kristin L. Marsh, Department of Sociology and Anthropology
Mary Beth Mathews, Department of Classics, Philosophy, and Religion
Jeffrey W. McClurken, Department of History and American Studies
Kevin J. McCluskey, Department of Theatre and Dance
Laura H. Mentore, Department of Sociology and Anthropology
Nina Mikhailovsky, Department of Classics, Philosophy, and Religion
Krystyn R. Moon, Department of History and American Studies
Marjorie A. Och, Department of Art and Art History
Judith A. Parker, Department of English and Linguistics
Alyson M. Poska, Department of History and American Studies
Gary N. Richards, Department of English and Linguistics
Farhang Rouhani, Department of Geography
Cedric B. Rucker, Associate Vice President for Student Affairs and Dean of Student Life
Mara N. Scanlon, Department of English and Linguistics
Debra J. Schleef, Department of Sociology and Anthropology
Gregg Stull, Department of Theatre and Dance
Craig R. Vassey, Department of Classics, Philosophy, and Religion
Laura C. Wilson, Department of Psychological Science

Urban Studies Program
Melina A. Patterson, Program Coordinator
COLLEGE OF BUSINESS

Founded on July 1, 2010, UMW’s College of Business builds on the Mary Washington tradition of a well-rounded undergraduate program in the liberal arts, with small classes that encourage direct interaction with expert faculty that will nurture the solid intellectual grounding necessary for tomorrow’s business leaders and entrepreneurs.

The College of Business is accredited by AACSB International, the longest serving global accrediting body for business schools and the benchmark of quality for business education worldwide, accrediting only 5% of the world’s schools offering business degrees. As such, UMW’s College of Business delivers undergraduate and graduate degree programs providing a distinctive blend of opportunities for learning, scholarship, and professional development that meets the needs of a diverse student population.

UMW has a long history of teaching business-related subjects, dating back to 1919 when the Virginia State Board responsible for the four Normal Schools in Virginia, decided that the Fredericksburg campus would specialize in “commercial” subjects. The first business “teacher” graduated in 1924, the same year that commercial courses were offered in the evening to “interested townspeople”.

Since the 1920’s Business has been an integral part of Mary Washington, evolving as the school did from primarily preparing teachers to preparing future leaders in a wide variety of fields. In the late thirties and early forties, the Commercial Education major gained National recognition, as the first program to require all majors to have real business experience before they could graduate. Currently, undergraduate internships, while not required, continue this legacy.

Under James Harvey Dodd’s leadership, the Commercial Education major became the largest on campus and encompassed about half the student body in 1944, the same year Mary Washington officially became the Women’s College of the University of Virginia (UVA). In 1945, as Mary Washington prepared to change from an independent Teachers College to a new Liberal Arts College associated with UVA, then Dean of the College, Edward Alvey, presented the faculty’s plan for the change to the Chancellor of UVA in which he wrote:

If some courses of a liberal arts college also prepare its students for economic competence, the college does not thereby become less of a liberal arts college, provided it holds to its true objectives. In fact a person’s ability to make a living may be essential to his capacity for leadership in the higher things in life. (Edward Alvey, History of Mary Washington College, 1974)

In 1948 Mary Washington began offering a Economics and Business Administration major, separating them officially into two departments with separate majors in 1980, adding that same year a Masters of Business Administration degree. In 1999, Business was one of two evening programs (the other was Education) opening at the new Stafford Campus, thus continuing the tradition of serving the educational needs of the “interested townspeople” and now the growing region.

UMW’s business alumni can be found at work in an array of businesses, government agencies, schools and not-for-profit organizations. Some have risen through the ranks to executive positions here and abroad, some are entrepreneurs running very successful enterprises, and some are teachers and professors.

College of Business students may also be interested in the option of UMW’s accelerated degree program with the George Mason University School of Law (p. 109).

To learn more about the College of Business, follow the links in the Catalog for the mission, major and minor requirements, and for the steps required to gain admission as a declared business major. And visit the College of Business website (https://business.umw.edu).

College of Business Mission

“The College of Business embraces its liberal arts tradition and its geographic location to offer programs that prepare students for life as honorable, competent, and globally-aware leaders.”

The mission is supported by:

- An undergraduate curriculum based upon a traditional liberal arts foundation emphasizing business fundamentals, ethics, critical thinking, and communication while incorporating new technologies and an awareness of the global marketplace;
- A graduate curriculum based on ethical decision-making, critical thinking, research design and data analysis, technological proficiency, communication expertise, national and global business perspectives designed to produce creative leaders; and
- A faculty with extensive business experience and academic credentials, committed to excellence in teaching, research and scholarship contributing to knowledge in their disciplines, and service to the regional business community.

Undergraduate Business Degree Program

The College of Business faculty works together closely to support the University’s liberal arts mission. Accordingly, the integrated curriculum provides a balanced rigorous foundation in the core areas of Accounting, Business Administration, Business Law, Decision Sciences, Management Information Systems, Finance, Management, and Marketing, all in the context of the broad liberal arts environment provided by the University.

The Faculty hold high expectations of the students and themselves with the goal of developing skills in diagnosing, analyzing, developing and implementing solutions to a wide variety of problems in public and private organizations. The College promotes active learning by encouraging students to manage complex, interdisciplinary problems, marshaling resources, and take responsibility for implementing effective solutions. Expected student involvement includes research problems, group case analyses, internships and consulting with organizations throughout the region. Students are encouraged to actively involve themselves in professional service, contributions to society, and the lifelong pursuit of knowledge through scholarship and research.

In an environment of mutual trust and support, concerned faculty help students learn the elements of managing resources to achieve a purpose while emphasizing the skills of writing, presenting, and speaking; technological proficiency; and critical thinking in a global context. The students’ relationship with faculty is facilitated by small class size. The faculty work closely with students to instill the values of intellectual integrity and objectivity; tolerance and respect for individuality and diversity; the intrinsic rewards of ethical behavior and social responsiveness; and appropriate competitive vigor balanced with the value of effective collaboration with others.
The Business Administration program provides students the opportunity to go forward in the broadest range of professional directions and build sound and rewarding careers.

The academic program leading to a Bachelor of Science degree in Business Administration provides a broad, intellectual outlook and analytical skills for students who wish to combine a liberal arts education with academically rigorous course work in administration and decision-making needed for an eventual career in management or in preparation for graduate study. Course work provides an understanding of the variety of approaches to the complexity of managerial decision-making in the contextual framework of a global society.

An "Executive-in-Residence" program offers students the opportunity for wide-ranging discussions and contact with chief executives from important organizations in the private, public, and not-for-profit sectors.

Scholarships available for majors in the College of Business include the Frances Holscaw Brown '44 Scholarship, the Coleman Family Farm Scholarship, the Evelyn Harrell Scholarship, the Fred. E. Miller Memorial Scholarship, the Benjamin T. Pitts Scholarship, The Elizabeth Griffith Schmidt '35 Scholarship, the Harry Skinker Scholarship, the George and Moncia L. Helton Taylor, '81 Scholarship in Business, and the Wachovia Scholarship in Business.

Students who establish outstanding records of academic achievement may be elected to Sigma Beta Delta, the international honor society for AACSB-accredited schools.

Courses of Study in Business

A number of different programs in business are offered leading to a degree of Bachelor of Science in Business Administration. In meeting the degree requirements, students may elect one of the following four majors:

- Accounting (p. 39)
- Business Administration (p. 46)
- International Business (p. 68)
- Marketing (p. 72)

The College of Business also offers minors in:

- Business Administration (p. 91)
- Financial and Quantitative Analysis (p. 97)

Follow the links to learn additional details about each program.

Incoming students interested in pursuing a program of study in business will initially be designated as "pre-business." Normally this designation will be held for no more than the first two years. After admission to the College of Business, a student may declare a business major.

To be admitted to the College of Business, students must have earned a cumulative grade point average of 2.0 or better after completing at least 27 college credits. Additionally, applicants will have completed the following courses for the College of Business and have earned an average GPA of 2.5 in these five courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201B</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition to the requirements above, transfer students must have earned a cumulative GPA of 2.0 in 15 semester hours taken at the University of Mary Washington and have completed 9 semester hours of required College of Business coursework with a cumulative GPA of 2.5 to be admitted to the College of Business.

The major in Business Administration is a Bachelor of Science degree. Business majors should note the degree requirements for B.S. degrees, found here (p. 28).

Additional important information is contained in the description of B.A./B.S. General Education Requirements (p. 35).

Please also note that the section of this Catalog outlining "University Academic Policies and Procedures" applies to students in the College of Business. Students with questions about general academic requirements should consult this part of the Catalog for guidance. All of the "Academic Resources" described in an earlier section of this Catalog are available as needed to students in the College of Business.

College of Business Faculty

Lynne D. Richardson, Dean
Kenneth D. Machande, Associate Dean for Faculty

Faculty

Professors
R. Leigh Frackelton, Jr.
Lance C. Gentry
Kenneth D. Machande
Lynne D. Richardson
Mukesh Srivastava
Xiaofeng Zhao

Associate Professors
Wei Chen
Kanchan Deosthali
Christopher J. Garcia
Rachel L. Graefe-Anderson
David L. Henderson, III
Kashef A. Majid
John S. Marsh

Assistant Professors
Alexandra M. Dunn
Samira Fallah
Kimberly S. Gower
Sayan Sarkar
Eun Jung [Kelly] Yoon

Senior Lecturers
Kimberley L. Kinsley
Smita Jain Oxford

Lecturer
John D. Burrow
Center for Economic Development
Brian Baker, Director

The Center for Economic Development (https://economicdevelopment.umw.edu) serves to assist area jurisdictions in their efforts to promote economic development of the region. The Center also functions as a central point of contact to connect UMW faculty and students with regional initiatives and businesses seeking their assistance, such as through the University’s partnership with the Fredericksburg Regional Alliance.

A number of separate units and initiatives are a part of the Center for Economic Development. The Small Business Development Center (SBDC) helps entrepreneurs and small businesses establish, manage, and expand their organizations. The SBDC provides one-on-one counseling and research services at no cost, and it offers seminars and training programs in all aspects of small business management at low costs. These services are available to any existing or startup small business or potential entrepreneur. StartUpUMW is a student entrepreneur education program focused on developing the essential skills and effective strategies for starting and running a business. The Office of Regional Initiatives provides opportunities for area citizens and groups to collaborate, promote, and advance local economic programs and opportunities.

Center for Business Research
Mukesh Srivastava, Director

The Center for Business Research (https://business.umw.edu/center-for-business-research) collaboratively plans and conducts research activities by the College of Business (COB) faculty and interested UMW faculty members from the UMW Colleges of Arts and Science and Education, based on their interest and skill sets for regional impact-related activities in the future. It is, however, primarily driven by the collaborative efforts of the COB faculty. The Center’s Advisory Board assesses the region’s annual needs for research and reporting and holds quarterly meetings.

As a local source for regional economic analysis and expertise, the Center was strategically created as a part of UMW’s College of Business to capitalize on access to highly regarded faculty and opportunities for student engagement. Through internships and employment opportunities, the Center will provide hands-on learning opportunities for students to assist the Center’s faculty in the research and preparation of reports on regional economy.
**COLLEGE OF EDUCATION**

**College of Education Mission**
The College of Education at the University of Mary Washington prepares educators for the 21st century who are knowledgeable, skilled, collaborative, reflective, and sensitive to diverse learner needs. To accomplish this, we:

- Are grounded in a strong liberal arts curriculum.
- Emphasize school-based experiences through which students solidify their understanding of the nature of the learner and effective teaching and motivational practices.
- Build a diverse community of practice involving strong partnerships among students, faculty, local teachers, and administrators.
- Enhance teacher aptitudes for research and critical decision making and ensure knowledge of learning theories and research-based pedagogy.
- Challenge educators to respond to the changing nature of learning in the 21st century through an emphasis on multi-literacies.

The College of Education administers the Teacher Education Program at The University of Mary Washington. All teacher education licensure programs are approved by the Virginia Department of Education. Requirements for licensure are established by the Virginia Board of Education and are subject to change. The College is undergoing accreditation review by the Council for the Accreditation of Educator Preparation. Expected approval date is 2021.

**Requirements of the Bachelor of Science in Elementary Education (BSe) Degree Program**
Additional details are available in the Education listing under the Majors section of the Undergraduate Catalog.

**Undergraduate Initial Licensure Program in Special Education – General Curriculum**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 206</td>
<td>Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 207</td>
<td>Development of the Learner and Instructional Practices</td>
<td>3</td>
</tr>
<tr>
<td>Phase II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDSE 250</td>
<td>Survey of Special Education: Characteristics and Legal Issues</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 290</td>
<td>Teaching Linguistically and Culturally Diverse Students</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 291</td>
<td>Practicum in Language and Learning Diversity</td>
<td>1</td>
</tr>
<tr>
<td>Phase III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 351A</td>
<td>Instructional Design and Assessment</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 385</td>
<td>Managing the Secondary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>Phase IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDSE 434</td>
<td>Assessment, Evaluation, and Instructional Planning</td>
<td>3</td>
</tr>
<tr>
<td>Phase V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 324</td>
<td>Transition Planning for Students with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 439</td>
<td>Supporting Students with Disabilities in the General Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 450</td>
<td>Teaching Lab: Special Education</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 460</td>
<td>Internship Seminar: Secondary, Pre-K-12</td>
<td>3</td>
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<tr>
<td>or EDUC 461</td>
<td>Internship Seminar: Elementary</td>
<td></td>
</tr>
<tr>
<td>EDUC 499</td>
<td>Internship</td>
<td>9</td>
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</tbody>
</table>

**Secondary (Grades 6-12) Undergraduate Initial Licensure Requirements**

<table>
<thead>
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<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>Phase I</td>
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<tr>
<td>EDUC 206</td>
<td>Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 207</td>
<td>Development of the Learner and Instructional Practices</td>
<td>3</td>
</tr>
<tr>
<td>Phase II</td>
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<tr>
<td>EDSE 250</td>
<td>Survey of Special Education: Characteristics and Legal Issues</td>
<td>3</td>
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<tr>
<td>EDUC 290</td>
<td>Teaching Linguistically and Culturally Diverse Students</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 291</td>
<td>Practicum in Language and Learning Diversity</td>
<td>1</td>
</tr>
<tr>
<td>Phase III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 351A</td>
<td>Instructional Design and Assessment</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 385</td>
<td>Managing the Secondary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>Phase IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDSE 434</td>
<td>Assessment, Evaluation, and Instructional Planning</td>
<td>3</td>
</tr>
<tr>
<td>or EDUC 388</td>
<td>Managing the Elementary Classroom</td>
<td></td>
</tr>
<tr>
<td>EDUC 415</td>
<td>Literacy and Language Across the Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 452</td>
<td>Content-Area Teaching Lab: Secondary, Pre-K-12</td>
<td>3</td>
</tr>
<tr>
<td>Phase V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 460</td>
<td>Internship Seminar: Secondary, Pre-K-12</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 499</td>
<td>Internship</td>
<td>9</td>
</tr>
</tbody>
</table>

**PreK-12 Undergraduate Initial Licensure Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>Phase I</td>
<td></td>
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<tr>
<td>EDUC 206</td>
<td>Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 207</td>
<td>Development of the Learner and Instructional Practices</td>
<td>3</td>
</tr>
<tr>
<td>Phase II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 434</td>
<td>Assessment, Evaluation, and Instructional Planning</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 305</td>
<td>Mathematics Instruction for Special Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 421</td>
<td>Language and Literacy for Special Populations</td>
<td>3</td>
</tr>
</tbody>
</table>
EDSE 250  Survey of Special Education: Characteristics and Legal Issues  3
EDUC 290  Teaching Linguistically and Culturally Diverse Students  3
EDUC 291  Practicum in Language and Learning Diversity  1
Phase III
EDUC 351A  Instructional Design and Assessment  4
EDUC 385  Managing the Secondary Classroom  3
or EDUC 388  Managing the Elementary Classroom  3
Phase IV
EDUC 415  Literacy and Language Across the Curriculum  3
EDUC 452  Content-Area Teaching Lab: Secondary, Pre-K-12  1
Appropriate discipline-specific course from:  3
EDUC 454  The Teaching of Foreign Language  3
EDUC 457  The Teaching of Music  3
EDUC 459  The Teaching of Visual Arts  3
Content-area licensure courses in major as outlined on College of Education checksheets  1
Phase V
EDUC 460  Internship Seminar: Secondary, Pre-K-12  3
EDUC 499  Internship  9
Total Credits  39

1 Checksheets (https://education.umw.edu/college-of-education-undergraduate-initial-licensure) are found at the College of Education web site.

Admission to the Teacher Education Programs is by application directly to the College of Education. Admission is competitive and is based on academic achievement and on other indications of potential in meeting the program goals. Students are strongly advised to attend a Group Information Session on the Initial Licensure Programs. Group Information Sessions are offered throughout the academic year. At these sessions, students are informed of the features and requirements of the program. Students are advised of the required Minimum Performance Standards and are asked to apprise the department of requests for accommodations. Current UMW students and prospective transfer students who are interested in the Initial Licensure Programs should attend one of these Group Information Sessions.

Admission, continuation, and program completion
Admission, continuation, and program completion requirements are defined within a three-stage procedure:

1. Admission to UMW,
2. Admission to the College of Education, and
3. Successful Completion of the Program and Recommendation for Licensure.

Detailed descriptions of the program requirements are explained on the College of Education website.

Undergraduate Admission
For permission to take the first education courses in Phase I of the program, EDUC 206 Foundations of Education and EDUC 207 Development of the Learner and Instructional Practices, students must have attained a 2.5 GPA or better on at least 12 UMW credits. Transfer students must have a 3.25 GPA to be able to take EDUC 206 and EDUC 207.

To be fully admitted to the COE, students apply during Phase I of the program. Students must have earned a B or better in EDUC 206 and EDUC 207 and have passing scores for:

1. the Praxis Core, or
2. passing scores for the SAT or ACT Reading and Writing, plus a passing score on the Math Praxis Core, SAT, or ACT.
3. Passing scores for the Praxis Core Math, SAT or ACT Math plus a passing score on the VCLA.

Continuation
To continue in the program students must do the following:

1. maintain good academic standing with an overall cumulative GPA of 2.5 or better;
2. achieve a GPA of 3.0 or better in all education courses;
3. demonstrate satisfactory progress on all Professional Competencies; and
4. achieve satisfactory evaluations in all field experiences.

A student who receives more than one C (including C+, C, and C-) in an education course will be dismissed from the program.

Completion
Successful completion of the program and recommendation for licensure to the Virginia Department of Education are contingent upon:

1. completion of all degree requirements;
2. a grade of B (including B+, B, or B-) or better in EDUC 499: Internship; minimum 3.0 (B) or higher overall cumulative GPA in all education coursework; and
3. achieving passing scores on all licensure examination and the Child Abuse Recognition Intervention Module; certification or training in emergency first aid, CPR and use of the automated external defibrillators; and completion of the Dyslexia Awareness Training Module as required by the Virginia State Board of Education.

College of Education Faculty
Peter S. Kelly, Dean
Courtney M. Clayton, Associate Dean for Academic Programs, Assessment, and Accreditation

Faculty
Professors
Teresa L. Coffman
Peter S. Kelly
Venitta C. McCall
Marie P. Scheckels

Associate Professors
John P. Broome
Courtney M. Clayton
Janine Schank Davis
Beverly D. Epps
Jane L. Huffman
Kyle T. Schultz
Jennifer D. Walker
Assistant Professors
Kevin E. Good
Christy K. Irish
Melissa C. Jenkins
Melissa S. Wells
THE UNIVERSITY

Chartered on March 14, 1908, and originally established as a State Normal and Industrial School for Women, the institution has evolved into a state-assisted, coeducational university consisting of campuses in Fredericksburg, Virginia, Stafford County, and King George County. University of Mary Washington is recognized as one of the nation’s best small universities by such authoritative publications as U.S. News and World Report, Barron’s Profiles of American Colleges, The Fiske Guide to Colleges, and The Princeton Review. In addition, programs in business, education, and adult degree completion provide a rich diversity of options that build upon and extend University of Mary Washington’s excellence in the liberal arts.

Several factors contribute to the institution’s excellence. Foremost among these are the expertise and commitment of the faculty. Members of the faculty are energetically engaged in productive research and scholarship, which lead to the advancement of their particular disciplines. At the same time, however, it is teaching that is their primary goal and purpose.

Teaching effectiveness is enhanced by the small size of most classes, which encourages personal interaction between faculty and students. Moreover, faculty devote much attention to students’ concerns beyond the classroom, working closely with them on matters of academic, career, and personal development.

The University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate and masters degrees. Contact the Commission on Colleges at 1886 Southern Lane, Decatur, Georgia, 30033-4097 or call 404-679-4500 for questions about the accreditation of the University of Mary Washington.

University of Mary Washington
Mission Statement

The University of Mary Washington is one of Virginia’s outstanding public liberal arts universities, providing a superior education that inspires and enables our students to make positive changes in the world.

The University is a place where faculty, students, and staff share in the creation and exploration of knowledge through freedom of inquiry, personal responsibility, and service. UMW regards the provision of high quality instruction as its most important function. The University offers a wide range of undergraduate and graduate programs focusing on both disciplinary and interdisciplinary studies. These academic programs afford students opportunities to integrate and apply their knowledge within broad educational experiences, to develop their professional interests, and to practice the habits of mind necessary for life-long learning. Through a professionally engaged faculty, the University supports ongoing research appropriate to the development of student abilities and faculty interests. It especially encourages the participation of undergraduates in research.

UMW’s size, dedicated faculty, and historical commitment to fine teaching create an institutional culture where both undergraduate and graduate students benefit from strong connections with their faculty and multiple opportunities for active learning.

Located in Fredericksburg between our nation’s capital and the capital of the Commonwealth of Virginia, the University of Mary Washington is a nexus for engagement among diverse communities and is dedicated to supporting professional advancement and economic development and to improving the regional quality of life.

We fulfill our mission by immersing students, faculty, and staff in local, regional, national, and international communities, and by inculcating the values of honor and integrity. UMW graduates are models of adaptive learning, personal achievement, responsible leadership, service to others, and engaged citizenship in a global and diverse society.

History and Development of the University

The institution was founded in 1908 as the State Normal and Industrial School for Women in Fredericksburg. The name was changed in 1924 to the State Teachers College at Fredericksburg, and again in 1938 to Mary Washington College, having transformed over the years to Virginia’s public liberal arts college for women. Then in 1944, Mary Washington College became affiliated with the University of Virginia as its women’s undergraduate arts and sciences division. In 1970 the entire University became coeducational and in 1972, by action of the General Assembly of Virginia, the College became an independent, state-supported institution for women and men, with its own governing board. On July 1, 2004, the General Assembly named the institution University of Mary Washington.

Through an emphasis on quality, the University attracts students from all areas of Virginia, particularly the urban areas of Northern Virginia, Richmond, and Tidewater. Approximately 25 percent of its on-campus resident students are from other states and foreign countries, with the largest population coming from Southern, Middle Atlantic, and New England states. Located in the middle of a rapidly growing Washington-Richmond “urban corridor,” the University of Mary Washington serves the educational needs of both full-time and part-time students.

To meet the diverse academic goals sought by students in today’s society, the undergraduate curriculum is organized into three colleges – the College of Arts and Sciences, the College of Business, and the College of Education. The various academic departments and disciplines offer more than 30 undergraduate programs. Four undergraduate degrees are awarded: Bachelor of Arts, Bachelor of Science, Bachelor of Liberal Studies, and Bachelor of Science in Nursing (degree completion program). Emphasis upon excellence in the pursuit of liberal learning has traditionally been at the core of the University’s educational philosophy, and commitment to this tradition will continue.

University of Mary Washington also awards graduate degrees: Master of Business Administration (MBA), Master of Science in Geospatial Analysis, Master of Education, and Master of Science in Elementary Education. Details about these degree programs are available in the University’s Graduate Academic Catalog. Because the Master of Science in Elementary Education is a fifth-year program that follows directly from the undergraduate degree, details about it are available in the education section of this Catalog as well.

As the University evaluates its offerings, it will build upon its high-quality programs and propose curricular additions and adjustments specifically designed to meet new and increased demands.

Statement of Community Values

As a public, liberal arts university, the University of Mary Washington community is dedicated to providing a diverse, accepting, and supportive environment that holds all of its members to the highest standards of
conduct, scholarship, integrity, inclusiveness, respect, and engagement. Through a commitment to these values, we strive to transform our academic community into a place where all will learn, thrive, and grow. As faculty, staff, and students of the UMW community, we are committed to upholding these common values:

- **Accountability** – we promote practices, behaviors, and attitudes where individuals take responsibility for their actions and decisions.
- **Scholarship** – we promote intellectual inquiry by engaging ideas and one another in order to gain better understanding and contribute to knowledge.
- **Personal and Institutional Integrity** – we are honorable in our academic and work endeavors as well as our interactions with others.
- **Inclusive Excellence** – we strive for all members of the community to have equitable access to opportunities for participation and the resources necessary for success.
- **Respect and Civility** – we foster an environment in which every individual is treated with dignity at all times by valuing the inherent worth of all identities, abilities, and differences.
- **Engagement** – we develop engaged members of our community who actively participate in the community through responsible leadership and service.

We **ASPIRE** to live these values and work to support our collective and individual successes.

### Statement of Guiding Principles on Diversity and Inclusion

UMW embraces its obligation to serve the educational aspirations of all communities and seeks to reflect the diversities of all people in its students, faculty, and staff. This philosophical approach to diversity and inclusion strengthens our community and is essential to our academic mission and institutional excellence. UMW is committed to its responsibility to be a model of fairness, inclusiveness, equity, access and equal opportunity, providing intellectual and institutional leadership regarding diversity, and maintaining a welcoming, inclusive environment of mutual respect for its members of all backgrounds and identities. In keeping with these tenets, the University is committed to a system of responsibility, accountability, and recognition of all of its members, and seeks to carry out these principles of diversity and inclusion in all of its operations, goals, and objectives.

### Statement of Non-Discrimination

At the University of Mary Washington the principles of equal opportunity and affirmative action are practiced. The University does not discriminate on the basis of race, religion, color, sex, gender identity or expression, sexual orientation, parental status (including pregnancy), national origin, age, disability, family medical history or genetic information, political affiliation, military service, or other non-merit based factors in recruiting, admitting, enrolling students or hiring and promoting faculty and staff members. Complaints of discrimination should be directed to the AA/EEO officer of the University (Approved by the Board of Visitors, September 2018)

### The Campuses

The learning environment of the University of Mary Washington is further enhanced by the very location and physical characteristics of each campus. The University is named for the mother of George Washington, who lived most of her life in Fredericksburg and is buried near the Fredericksburg campus. Fredericksburg is a place of extraordinary historical significance in both the Revolutionary and Civil War eras. Indeed, the original campus is located on Marye's Heights, a Confederate artillery position in the 1862 Battle of Fredericksburg, and major historic sites abound throughout the area.

The spacious Fredericksburg campus, located in an established residential neighborhood, is exceptionally attractive. Both academic and residential buildings, consistent in their neoclassical, Jeffersonian style of architecture, are interspersed along a wide brick Campus Walk that extends for more than a half-mile from one end of campus to the other. With vehicular traffic and parking confined to the edges of campus, the grounds offer extensive park-like space including substantial stretches of lawn and large wooded areas.

The Stafford campus (121 University Blvd., Fredericksburg, VA 22406) is located seven miles north of the Fredericksburg campus and situated on a wooded 48-acre site in the heart of one of the region’s rapidly developing business, technology, and residential corridors. The campus location, parking, and modern architectural design have been carefully tailored to maximize convenience and educational quality for working adult commuting students, while remaining faithful to the high aesthetic standards of the University.

A third campus (4224 University Dr., King George, VA 22485) is located near the Dahlgren Naval Surface Warfare Station. The UMW Dahlgren Campus Center for Education and Research is designed to support the education and continued professional development of the region’s engineers, scientists and professionals by providing educational programs and services to the Naval base and the surrounding community.

Two historic sites are also owned and administered by the University of Mary Washington: Belmont, the home of famed impressionist artist Gari Melchers, and the James Monroe Museum and Memorial Library, located on the site of James Monroe’s Fredericksburg law office. Overlooking the Rappahannock River, Belmont is a carefully restored 18th-century house and early 20th-century artist’s studio, which now serves as a gallery of Melchers’ work. The James Monroe Museum illustrates and educates about the life and times of America’s fifth president and houses artifacts, an archive, and a presidential library. Working in conjunction with the University’s Department of Historic Preservation, the Museum promotes education in museum practice, research, public history, and collections management.

### The Honor System

Another element basic to the University’s mission is adherence to the Honor System, which applies to every student enrolled at the University and constitutes one of the distinctive features of student life at the institution. This system, based upon the integrity of each student, provides that a student shall act honorably in all facets of campus life. The Honor Pledge required on quizzes, examinations, and other course work means that the submitted work is the student’s own, completed according to requirements for the course as determined by the instructor. Lying, cheating, and stealing are specific infringements of the Honor Code. In the case of an alleged violation, determination of responsibility and possible sanctions is made by students elected to the Honor Council. When a student is found “responsible,” the student may receive a sanction ranging from honor education to permanent dismissal from the University, and major sanctions will be noted on the student’s permanent academic transcript. All students and faculty
should understand that by joining the University of Mary Washington community, they commit themselves to living by and upholding the Honor System. More information is available on the Honor System website (https://academics.umw.edu/academicintegrity/academic-integrity/guidebook-and-constitution).

**Title IX**

The University of Mary Washington complies with Title IX 34 C.F.R. part 106 as it is amended from time to time and does not discriminate on the basis of sex in its programs, activities, admission or employment. Inquiries about the application of Title IX and 34 C.F.R. part 106 may be referred to the University of Mary Washington’s Title IX Coordinator, Stefanie Lucas-Waverly, at the contact information herein, to the Assistant Secretary for Civil Rights, or both.

Stefanie Lucas-Waverly, M.S.
Title IX Coordinator
Fairfax House
1301 College Ave.
Fredericksburg, VA 22401

Phone: 540-654-5656
E-mail: slucaswa@umw.edu
FEES AND FINANCIAL AID

Tuition and Fees are approved by the Board of Visitors prior to each academic year. The yearly tuition and fee schedule can be found on the Student Accounts website (https://adminfinance.umw.edu/studentaccounts). Any changes to the schedule of fees will be announced immediately. Questions about fees and payment procedures should be directed to the Office of Student Accounts in Lee Hall (540/654-1250). Questions about financial aid or assistance should be addressed to the Office of Financial Aid, Lee Hall (540/654-2468).

The University of Mary Washington offers financial aid to students without regard to physical ability, political affiliation, marital status, sex, color, race, religion, age, or national origin. Each year, UMW administers over $43 million in financial assistance, including educational loans totaling $30 million, to students at both the Fredericksburg and Stafford campuses. Through a comprehensive program of grants, scholarships, loans and student employment from federal, state, institutional and private resources, the Office of Financial Aid strives to assist applicants with various aid sources to pay for college expenses. Additional details are provided in the Financial Aid and Scholarships (p. 198) section of the Catalog.

Classification As a Virginia Student

The Code of Virginia, section 23-7.4, governs eligibility for in-state tuition rates at Virginia public institutions of higher education. Please refer to the State Council of Higher Education for Virginia website (http://www.schev.edu/index/tuition-aid/in-state-residency) for clarification on eligibility and any changes to the Code of Virginia regarding tuition benefit provisions.

In general, an independent student, or the parents or legal guardians of a dependent student, must have been legally domiciled in the Commonwealth of Virginia for one full and continuous year immediately before the first official day of class within the semester or term of the student’s program and must have paid Virginia state income tax on a full-time salary for that full year. Living in the state primarily to attend school does not constitute legal domicile. Certain exceptions are made for military personnel and their dependents. Detailed questions about domiciliary status are part of each application for admission. Questions about residency status should be directed to the Office of Admissions (540/654-2000), or Office of Student Accounts (540/654-1250).

EagleOne Card

The University of Mary Washington EagleOne Identification Card is the only card a student needs at the University. The card acts as a form of identification allowing access to the library, gymnasium, residence halls, and other University buildings and activities. It contains the students’ meal plan and flex dollar information for University food service. It is also a debit card. Money may be added in the form of EagleOne Dollars, which can then be debited from the balance for use in the University Bookstore, the Eagle’s Nest, dining in the University Center, Panera Bread (in the University Center), Katora Coffee at the Hurley Convergence Center, UMW Health Center, laundry, vending, University Tennis Center, theatre productions, pay-to-print and cloud printing, Copy Center, Post Office, and other locations on campus. Fredericksburg area merchants also accept the EagleOne card as payment. A list of participating merchants (https://adminfinance.umw.edu/eagleone/vending-off-campus/eagleone-off-campus-2) is available. EagleOne cardholders may check their account balances, deposit funds, and download statements at EagleOne eAccounts (https://eagleone-sp.blackboard.com/eAccounts/AnonymousHome.aspx).

Fees

Fees vary by academic year. For the most up-to-date fees please visit the Student Accounts website (https://adminfinance.umw.edu/studentaccounts). Any changes to the schedule of fees will be announced immediately. The University does not charge an additional fee for taking online courses.

Mandatory Processing Fee

A mandatory processing fee is charged to any student who registers for classes.

Audit Fee

This non-refundable fee is incurred when students take a course for no credit, and is charged to all part-time students (including graduate students) who audit a class and any full-time undergraduate student whose semester course load exceeds 18 credit hours by virtue of the audited course. Auditing a course is permitted on a space-available basis in courses where approval to audit is granted.

In-State Tuition Surcharge

As required by state law, an undergraduate student entitled to in-state tuition must pay a surcharge on all satisfactorily completed credit hours that are in excess of 125% of the credit hours required for an undergraduate degree. The amount of the surcharge will be based on the difference in the rate paid for tuition by an in-state student and the actual cost of providing instruction. Some credits on a student’s record, such as Advanced Placement (AP) and International Baccalaureate (IB) credits, will not count toward the surcharge total. However, all UMW courses taken will apply to the surcharge threshold, and so will any transfer courses taken that are used to satisfy either general education or major requirements. For additional details, go to the explanation (https://adminfinance.umw.edu/studentaccounts/tuition-and-fees/instate-tuition-surcharge) on the Student Accounts web page.

Tuition Overload Fee

A full-time student registering for more than 18 semester credit hours is required to pay an additional overload fee based on his or her residency.

Credit-by-Examination

Degree-seeking students are charged a fee when taking examinations for which credit may be awarded.

Special Course Fees

Some classes require the payment of a special instructional fee in addition to the tuition charge.

Education Abroad Fee

All students studying abroad must pay the education abroad fee. The fee applies to all education abroad programs occurring in the winter, spring break, summer session, semester, and the full academic year.
Late Payment Fee
A fee, which is 10 percent of the unpaid account balance (up to $250), will be charged to students whose accounts are not paid in full by the invoice due date. Interest may also be charged on all past due accounts.

Returned Payment Fee
There is a service charge for each check/e-check returned for insufficient funds or similar reasons. A cashier's check or cash is then required in place of the returned payment. Payments returned for insufficient funds will be considered as nonpayment and subject to the 10 percent late fee.

Parking Fee
There is a parking fee and students should visit the Parking Management office's website (http://adminfinance.umw.edu/parking) for more details.

Residential Fee
The residential fee is the cost per semester for University housing.

Meal Plans
University of Mary Washington offers a variety of meal plans. For information about meal plan options, please visit the Student Accounts web page (https://adminfinance.umw.edu/studentaccounts/room-and-board). Each meal plan comes with flex dollars, which may be used to purchase additional meals or to eat in the Eagle's Nest or the Underground. EagleOne Dollars may also be used for additional dining meals. All residential students are required to enroll in a meal plan. The meal plan required depends on where the student resides. All freshmen are required to have the largest meal plan of those being offered. Commuting students may sign up for any of the plans offered at UMW.

Terms and Methods of Payment
University of Mary Washington accepts payments in a variety of ways. For complete details, see the Office of Student Accounts web page regarding "Methods of Payment (https://adminfinance.umw.edu/studentaccounts/methods-of-payment)" accepted.

All fees, including room and board, are billed to students through EaglePAY within the student's portal and are payable in advance of the beginning of the semester. If a student wishes to designate additional authorized payers, he/she may do so through EaglePAY. This will allow those authorized by the student to access the student's bill. For further instructions, please contact the Office of Student Accounts.

Room and Tuition Deposits
After receiving notice of acceptance for admission students must make a deposit ($550 for residential students, $300 for non-residential students). Please note that for residential students only $300 will be credited to the account and the other $250 will be held as a contingent fee to be refunded less any outstanding balance at the point they either graduate or move off campus.

Statements and Due Dates
The University emails each student a notification that a bill is available for viewing online well in advance of the beginning of each semester. Payment is due prior to the start of each semester (the cancellation date). Students with an unpaid balance as of the due date (and who have not set up a payment plan) will have their course registration administratively cancelled.

Payment plans are offered to degree seeking students through a third party approved by the University. Additional details about payment plans and the University's Payment Policy are available at the Student Accounts website (https://adminfinance.umw.edu/studentaccounts).

Throughout the semester, a student may incur additional charges on their account such as library fines, lost library books, parking tickets, prescriptions, lost keys, building and equipment damage, and other miscellaneous charges. Any student whose full account has not been settled may not receive grades or transcripts, be able to pre-register for classes, or be eligible to return to the University until the account is settled.

Scholarship and Loan Awards
Normally, one-half of the annual financial aid awarded through the Office of Financial Aid is shown on each semester statement. If state, federal or UMW grants/scholarships that were awarded are not credited on the statement, the student may check their student portal for missing documents and then contact the Office of Financial Aid. Some scholarships are not paid until the successful completion of the semester. In these cases, you may not deduct these scholarships from the amount due.

A student receiving financial aid from a source other than the University must make sure that payment is received prior to the start of the semester. Awards and loans from sources other than the University will not be credited to the account until they are actually received at the Cashier's Office. One half of the award will be shown on each semester unless otherwise directed in writing by the granting source.

Delinquent Accounts
Any charge incurred in collecting a delinquent account will be added to the account. This applies but is not limited to fees charged by an attorney or collection agency.

Refund of Fees
A student who withdraws from the University during the semester should promptly complete an official withdrawal form in the Office of the Registrar in Lee Hall (Fredericksburg campus) or on the Stafford campus. A copy of the form must be sent or delivered to the Office of the Registrar in Lee Hall (Fredericksburg campus) or on the Stafford campus. A student who withdraws from the University during the semester. In these cases, you may not deduct these scholarships from the amount due.

Students who are in military service (active duty, reserves, or National Guard) and withdraw from all courses in a given term as a result of a military deployment, mobilization, or change in duty assignment will receive a full refund of all tuition and fees and pro-rated refunds for dining or housing contracts. Military change orders must be provided to the Office of Student Accounts and will serve as the basis for withdrawal charges and credits.

Students who are in military service (active duty, reserves, or National Guard) and withdraw from all courses in a given term as a result of a military deployment, mobilization, or change in duty assignment will receive a full refund of all tuition and fees and pro-rated refunds for dining or housing contracts. Military change orders must be provided to the Office of Student Accounts and will serve as the basis for withdrawal charges and credits.

Financial Aid and Scholarships
All need-based financial assistance, including need-based scholarships and grants, offered through the Office of Financial Aid requires the results from the Free Application for Federal Student Aid (https://studentaid.ed.gov/sa/fafsa) (FAFSA). Meeting published filing dates is critical to receiving financial aid. All students must file the FAFSA on or
before February 1. The Federal (Title IV) school code for the University of Mary Washington is 003746.

Priority for all scholarships and grants is given to students who maintain a minimum 2.000 UMW cumulative grade point average. Many programs require a higher grade-point average. Students who are Virginia residents with demonstrated need may be eligible for Virginia state scholarships and grants. Critical financial aid information, including general information, filing instructions, federal loan information, enrollment requirements, scholarship opportunities, student employment and forms for both campuses is available at Financial Aid (https://www.umw.edu/financialaid). Visit the Financial Aid Facebook page (https://www.facebook.com/UMWfinaid) for more information.

All students selected for verification, as well as parents of dependent students selected for verification, must submit copies of requested documents to the Office of Financial Aid by June 1. Students not meeting filing and submission dates will be considered for assistance AFTER on-time filers. Since funds are limited, this may result in otherwise eligible students not receiving awards. Students must be enrolled at least half-time to receive aid. Detailed information regarding eligibility and enrollment status is available on-line.

Scholarships
Current students may apply for UMW endowed scholarships by completing the Online Scholarship Application Form (https://umw.scholarships.ngwebsolutions.com/CMXAdmin/Cmx_Content.aspx?cpid=886) on or before May 15. Scholarship selection is based on academic and/or financial criteria and some qualifications can include participation in various volunteer and leadership positions. Students must complete the FAFSA to determine eligibility for need-based scholarships. Returning student recipients are selected through committee during the month of June for the following academic year. New students are reviewed for eligibility and are selected for endowed scholarships prior to the May 1 National Response Deadline, when possible.

Satisfactory Academic Progress Policy
Federal regulations require institutions of higher education to establish minimum standards of satisfactory academic progress (SAP) for students receiving Title IV federal aid. All university course work must be considered, regardless of whether the student received federal financial aid at the time.

Financial aid at the University of Mary Washington is awarded to students for the entire academic year or summer session. If an aid recipient’s grade point average falls below the minimum standards at the end of the spring semester, the recipient will be placed on financial aid suspension. The student will be ineligible for financial aid for the subsequent enrollment period and will not receive consideration for aid again until the standards have been met. A student may attend summer school to meet the standards of satisfactory academic progress to regain eligibility. The student should notify the Office of Financial Aid when standards for satisfactory academic progress have been met.

The standards for determining progress at the University of Mary Washington are composed of three separate measurements. These measurements are: grade point average (qualitative), incremental progress (quantitative), and accumulated hours (maximum timeframe). A student whose average drops below the minimum requirement will be placed on financial aid warning for the subsequent semester.

Minimum Cumulative Grade Point Average (GPA)
In order to receive federal financial aid or other need-based aid, a student’s cumulative grade point average (GPA) must meet the minimum requirement as defined below:

<table>
<thead>
<tr>
<th>Student Level</th>
<th>Hours Earned</th>
<th>Minimum Required Cumulative GPA (4.0 scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>0 - 30</td>
<td>1.80</td>
</tr>
<tr>
<td></td>
<td>31 - 60</td>
<td>1.90</td>
</tr>
<tr>
<td></td>
<td>61 +</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Incremental Progress: Minimum Credit Hour Completion Rate
University of Mary Washington students must complete at least 70% of all hours attempted towards graduation. Repeated courses and courses with a grade of W, WA, F, I, G, UN or FA will count as attempted coursework and not as completed coursework. Students repeating a course, previously passed may do so only once. A course repeated more than once will not be included when determining enrollment status. All students must earn a minimum of 70.0% of the credit hours that they have attempted.

Example A
The student below has earned 120 credit hours at UMW and has attempted a total of 123 credit hours. Divide 120 (earned credit hours) by 123 (attempted credit hours). This student’s credit hour completion rate is 98%.

Example B
The student has attempted a total of 48 credit hours during his entire attendance at UMW. In order to meet the minimum credit hour completion rate requirement and be eligible for financial aid for future semesters, the student must have earned 34 of those credit hours (48 x 0.70 = 34). In this case, the student has only earned 24 credit hours and is not meeting the minimum credit hour completion rate. (24 divided by 48 = 50%). This student is not eligible for financial aid.

Earned Hours: A, B, C, D, PA or SA
Unearned Hours: F, I, W, WA, G, UN or FA
Withdrawals (W): Courses for which a student has withdrawn and a W is posted on their transcript, are counted as attempted but not earned credit hours.

Course Repeats: If a student repeats a course, both the original and the repeated courses will count toward the earned and attempted credit hours. Students may only receive federal financial aid for one repeat of a course that has been successfully completed with a grade of "D" or higher.

Incomplete Grades (I): Courses for which a student earns a grade of incomplete (I) are counted as attempted but not earned credit hours. Once a grade is received it is the student’s responsibility to notify the Office of Financial Aid by submitting an appeal.

Maximum Timeframe/Credit Hours
To remain eligible for financial aid at the University of Mary Washington, students must complete their degree program requirements within 150 percent of the published length of their degree program. All attempted hours are counted, including transfer hours, whether or not financial aid was received.

Undergraduate Example
If an Undergraduate degree program requires 120 semester credit hours to complete, then a student is eligible for financial aid during the first 180 attempted credit hours as an Undergraduate.

(120 x 150% = 180 maximum attempted credit hours for financial aid eligibility).

Second Degree-Seeking Students
All attempted hours from a prior degree will not count towards the second degree, unless they are needed for that degree. A student pursuing a second undergraduate degree is eligible to receive financial aid for a maximum of 150% of the hours required for the second degree (Maximum of 228 hours including hours for first degree).

Mid-Year Transfer Students
When a student transfers to the University, all of their transfer credit hours are counted towards SAP as attempted and earned hours. Any grades are excluded from the University for SAP purposes. The GPA starts at 0.00 as a new transfer.

Ap inspirational Academic Progress Policy

Satisfactory Academic Progress Policy

Undergraduate Policy
Federal regulations require institutions of higher education to establish minimum standards of satisfactory academic progress (SAP) for students receiving Title IV federal aid. All university course work must be considered, regardless of whether the student received federal financial aid at the time.

Financial aid at the University of Mary Washington is awarded to students for the entire academic year or summer session. If an aid recipient’s grade point average falls below the minimum standards at the end of the summer term, the recipient will be placed on financial aid suspension. The student will be ineligible for financial aid for the
subsequent enrollment period and will not receive consideration for aid again until the standards have been met. A student may attend summer school to meet the standards of satisfactory academic progress to regain eligibility. The student should notify the Office of Financial Aid when standards for satisfactory academic progress have been met.

The standards for determining progress at the University of Mary Washington are composed of three separate measurements. These measurements are: grade point average (qualitative), incremental progress (quantitative), and accumulated hours (maximum timeframe). A student whose average drops below the minimum requirement will be placed on financial aid warning for the subsequent semester.

**Minimum Cumulative Grade Point Average (GPA)**

In order to receive federal financial aid or other need-based aid, a student’s cumulative grade point average (GPA) must meet the minimum requirement as defined below:

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**Incremental Progress: Minimum Credit Hour Completion Rate**

University of Mary Washington students must complete at least 70% of all hours attempted towards graduation. Repeated courses and courses with a grade of W, WA, F, I, G, UN or FA will count as attempted coursework and not as completed coursework. Students repeating a course, previously passed may do so only once. A course repeated more than once will not be included when determining enrollment status. All students must earn a minimum of 70.0% of the credit hours that they have attempted.

**Withdrawals (W)**

Courses for which a student has withdrawn and a W is posted on their transcript, are counted as attempted but not earned credit hours.

**Course Repeats**

If a student repeats a course, both the original and the repeated courses will count toward the earned and attempted credit hours. Students may only receive federal financial aid for one repeat of a course that has been successfully completed with a grade of “D” or higher.

**Incomplete Grades (I)**

Courses for which a student earns a grade of incomplete (I) are counted as attempted but not earned credit hours. Once a grade is received it is the student’s responsibility to notify the Office of Financial Aid by submitting an appeal.

**Maximum Timeframe/Credit Hours**

To remain eligible for financial aid at the University of Mary Washington, students must complete their degree program requirements within 150 percent of the published length of their degree program. All attempted hours are counted, including transfer hours, whether or not financial aid was received.

**Second Degree-Seeking Students**

All attempted hours from a prior degree will not count towards the second degree, unless they are needed for that degree. A student pursuing a second undergraduate degree is eligible to receive financial aid for a maximum of 150% of the hours required for the second degree (Maximum of 228 hours including hours for first degree).

**Mid-Year Transfer Students**

When a student transfers to the University, all of their transfer credit hours are counted towards SAP as attempted and earned hours. Any grades are excluded from the University for SAP purposes. The GPA starts at 0.00 as a new transfer.

**Appeal Process**

If a student is denied financial aid for failure to meet any of the above standards for satisfactory academic progress, the student may request an appeal of the decision. Students are permitted to appeal their financial aid suspension; however, the right to appeal must be based on extraordinary, personal circumstances that contributed to student’s inability to meet the SAP requirements. If the initial appeal is approved, appeals for future semesters must be based on a different circumstance than the previous appeal.

If the appeal is approved, a student will receive financial aid on a probationary status and an academic plan may be required. At the end of the semester, the student will be evaluated according to the SAP Policy to determine if financial aid will be awarded for the next semester.

Students who wish to appeal must complete and submit a Satisfactory Academic Process Appeal Form together with all the required supporting documents by the posted deadlines.

**Graduate Policy**

Federal regulations require institutions of higher education to establish minimum standards of satisfactory academic progress (SAP) for students receiving Title IV federal aid. All university course work must be considered, regardless of whether the student received federal financial aid at the time.

Financial aid at the University of Mary Washington is awarded to students for the entire academic year or summer session. If an aid recipient’s grade point average falls below the minimum standards at the end of the spring semester, the recipient will be placed on financial aid suspension. The student will be ineligible for financial aid for the subsequent enrollment period and will not receive consideration for aid again until the standards have been met. A student may attend summer school to meet the standards of satisfactory academic progress to regain eligibility. The student should notify the Office of Financial Aid when standards for satisfactory academic progress have been met.

The standards for determining progress at the University of Mary Washington are composed of three separate measurements. These measurements are: grade point average (qualitative), incremental progress (quantitative), and accumulated hours (maximum timeframe). A student whose average drops below the minimum requirement will be placed on financial aid warning for the subsequent semester.
Minimum Cumulative Grade Point Average (GPA)
In order to receive federal financial aid or other need-based aid, a graduate/advanced degree student’s cumulative grade point average (GPA) must meet the minimum requirement of 3.0.

Incremental Progress: Minimum Credit Hour Completion Rate
University of Mary Washington students must complete at least 70% of all hours attempted towards graduation. Repeated courses and courses with a grade of W, WA, F, I, G, UN or FA will count as attempted coursework and not as completed coursework. Students repeating a course, previously passed may do so only once. A course repeated more than once will not be included when determining enrollment status. All students must earn a minimum of 70.0% of the credit hours that they have attempted.

Earned Hours
A, B, C, D, PA or SA

Unearned Hours
F, I, W, WA, G, UN or FA

Withdrawals (W)
Courses for which a student has withdrawn and a W is posted on their transcript, are counted as attempted but not earned credit hours.

Course Repeats
If a student repeats a course, both the original and the repeated courses will count toward the earned and attempted credit hours. Students may only receive federal financial aid for one repeat of a course that has been successfully completed with a grade of “D” or higher.

Incomplete Grades (I)
Courses for which a student earns a grade of incomplete (I) are counted as attempted but not earned credit hours. Once a grade is received it is the student’s responsibility to notify the Office of Financial Aid by submitting an appeal.

Maximum Timeframe/Credit Hours
To remain eligible for financial aid at the University of Mary Washington, students must complete their degree program requirements within 150 percent of the published length of their degree program. All attempted hours are counted, including transfer hours, whether or not financial aid was received.

Appeal Process
If a student is denied financial aid for failure to meet any of the above standards for satisfactory academic progress, the student may request an appeal of the decision. Students are permitted to appeal their financial aid suspension; however, the right to appeal must be based on extraordinary, personal circumstances that contributed to student’s inability to meet the SAP requirements. If the initial appeal is approved, appeals for future semesters must be based on a different circumstance than the previous appeal. Acceptable circumstances include:

- The death of an immediate family member or close relative (i.e. mother, father, grandparent, sibling or immediate family such as a related aunt or uncle)
- A serious injury or illness of the student which required medical intervention
- Significant, unanticipated family obligations due to medical issue or illness
- A catastrophic loss due to fire, flood or natural disaster that affects the student’s academic attendance or performance

If the appeal is approved, a student will receive financial aid on a probationary status and an academic plan may be required. At the end of the semester, the student will be evaluated according to the SAP Policy to determine if financial aid will be awarded for the next semester.

Student who wish to appeal must complete and submit a Satisfactory Academic Process Appeal Form together with all the required supporting documents by the posted deadlines.

SAP Appeals should be submitted to the Office of Financial Aid either by mail, fax or in person to:
Lee Hall – Second Floor, University of Mary Washington
1301 College Avenue
Fredericksburg, VA 22401
or Fax: 540.654-1858

Senior Citizens
A legal resident of Virginia 60 years of age or older shall be permitted under regulations prescribed by the State Council of Higher Education to:

1. register for and enroll free of charge in courses as a full-time or part-time student for academic credit if such citizen has an individual taxable income not exceeding $23,850 for federal income tax purposes for the year preceding the year in which the enrollment is sought,
2. register for and audit courses offered for academic credit, and
3. register for and enroll in non-credit courses in any state institution of higher education in this Commonwealth on a space-available basis.

Senior citizens pay no tuition or fees except fees established for the purpose of paying for course materials, such as laboratory fees, but shall be subject to the admission requirements of the institution and a determination by the institution of its ability to offer the course or courses for which the senior citizen registers.

A legal resident of Virginia 60 years of age or older with Federal taxable income not exceeding $23,850 may audit credit courses or enroll in non-credit courses without paying general University fees, but must pay general University fees to take courses for University credit.

Additional information is available through the Office of the Registrar (540-654-1063).

Veterans Benefits
Students who have questions about Veteran Affairs (VA) benefits prior to admission should address inquiries to:
The Veterans Inquiry Unit at the U.S. Department of Veterans Affairs Regional Office
210 Franklin Road S.W.
Roanoke, VA 24011
Additional information is available from the U.S. Department of Veterans Affairs (https://www.va.gov/education/about-gi-bill-benefits).

Students who have questions about VA benefits after admission should address inquiries to the Office of the Registrar.

Under the provisions of the Veterans Access, Choice, and Accountability Act of 2014, the following individuals shall be charged a rate of tuition not to exceed the in-state rate for tuition and fees purposes:

- A Veteran using educational assistance under either chapter 30 (Montgomery G.I. Bill – Active Duty Program) or chapter 33 (Post-9/11 G.I. Bill), of title 38, United States Code, who lives in the state in which the institution is located (regardless of his/her formal State of residence) and enrolls in the institution within three years of discharge or release from a period of active duty service of 90 days or more.
- Anyone using transferred Post-9/11 GI Bill benefits (38 U.S.C. § 3319) who lives in the state in which the institution is located (regardless of his/her formal State of residence) and enrolls in the institution within three years of the transferor’s discharge or release from a period of active duty service of 90 days or more.
- Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same institution. The person so described must have enrolled in the institution prior to the expiration of the three-year period following discharge or release as described above and must be using educational benefits under either chapter 30 or chapter 33, of title 38, United States Code.
- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in the state in which the institution is located (regardless of his/her formal State of residence). Individuals using the Marine Gunnery Sergeant John David Fry Scholarship are no longer required to enroll within three years of the service member’s death, and there is no longer a requirement that the deceased service member’s death in the line of duty followed a period of active duty service of 90 days or more.
- Anyone using transferred Post-9/11 G.I. Bill benefits (38 U.S.C. § 3319) who lives in the state in which the institution is located (regardless of his/her formal State of residence) and the transferor is a member of the uniformed service who is serving on active duty.
- An individual using educational assistance under chapter 31, Vocational Rehabilitation and Employment (VR&E) who lives in the Commonwealth of Virginia while attending a school located in the Commonwealth of Virginia (regardless of his/her formal State of residence) effective for courses, semesters, or terms beginning after March 1, 2019.

For students using Chapter 33 Post 9/11 GI Bill or Chapter 31 Vocational Rehabilitation benefits, even though VA has not yet paid tuition and fees, UMW will not prevent the student from enrolling, will not assesses a late penalty fee, will not require alternative or additional funding, and will not deny access to any university resources that are available to other students that have paid. Students wishing to utilize veteran’s benefits must submit a Request for VA Benefits form (https://academics.umw.edu/registrar/requestforvabenefits-form) (accessible through the Office of the Registrar’s website) for each term of enrollment. For Chapter 33 students, a copy of the Certificate of Eligibility will also be required; for Chapter 31 students, a copy of the Tuition Assistance form will be required.

For issues regarding veterans benefits decisions that have not been satisfactorily addressed or resolved by the University, the beneficiary should contact the State Approving Agency (https://www.dvs.virginia.gov/education-employment/state-approving-agency).

Virginia Military Survivors and Dependents Education Program

The Virginia Military Survivors and Dependents Education Program (VMSDEP) provides education benefits to spouses and children of military members killed, missing in action, taken prisoner, or who became at least 90 percent disabled as a result of military service in an armed conflict. VMSDEP provides educational benefits for children of certain Virginians who served in the Armed Forces of the United States. Eligible children attending public colleges and universities in Virginia are admitted free of tuition and all required fees. (See the Code of Virginia, Section 23-7.4.1.) Additional information is available through the Office of Student Accounts (540/654-1250).

In addition, VMSDEP students are also eligible for a full-time or part-time student stipend that is processed through the State Council of Higher Education of Virginia (SCHEV). SCHEV provides a roster of eligible students who have identified their intention to attend UMW to the Office of Financial Aid who in turn certifies that the students are attending and are eligible to receive the stipend payment. Because there may not be sufficient funding to make full VMSDEP stipends to all eligible students, a priority funding system is used by SCHEV to determine the order and amount of stipends. Students in a higher Priority category must receive their full projected annual stipend, as determined by SCHEV based on student enrollment level, before subsequent categories are considered for funding.

Only students appearing on the verification rosters released by SCHEV to the institutions will be funded for the terms specified as authorized, regardless of certification/verification from any other source. For more information on eligibility, the application process, and filing dates, visit the Virginia Department of Veterans Services (https://www.dvs.virginia.gov/education-employment/virginia-military-survivors-and-dependents-education-program-2-2) web site.

Additional information is also available through the Office of Student Accounts (540/654-1250) or the Office of Financial Aid (540-654-2468).
ACADEMIC RESOURCES

The variety of resources described in this section of the Catalog support student academic engagement and enable students to have the assistance required to help them succeed academically. Academic resources also help students take full advantage of the wide range of learning opportunities offered throughout the curriculum.

Academic Advising

First-year students are advised by their First-Year Seminar (FSEM) instructor who works closely with the Office of Academic Services. After the first-year, undeclared students are advised by either their FSEM instructor or a professional advisor in the Office of Academic Services as part of a sophomore year experience focused on selecting an academic pathway. When students formally declare their major, they are assigned advisors by their respective department and college.

BLS Advising for incoming BLS students is provided by the BLS advisor and/or director. After declaring a major BLS students will be assigned a major advisor but also continue to be advised in the BLS Office.

BSN Completion Program Advising for all incoming nursing students is provided by the program director. Returning students may be advised by the director or designated nursing faculty member.

Major Advising is provided by faculty in the student’s major department or college. Major advisors are assigned by the department chair. Students will have a major advisor for each declared major. Students plan their course work with their major advisor so that they will be able to meet all graduation requirements in a timely manner. To change the major advisor, B.A./B.S. students should contact the chair of the major department. BLS students should contact advisors in their respective areas for a change in major or concentration.

Non-degree students are not assigned to an advisor.

International students are also advised by the Center for International Education and the Office of Academic Services.

Center for Community Engagement

The UMW Center for Community Engagement works to create a culture of community engagement at UMW by providing structural support for civic engagement, volunteerism, and service, and by celebrating the work in the community done by all members of UMW, including faculty, staff, and students.

The Center works with community members to support effective, respectful, community-driven, reciprocal partnerships to meet societal needs. These partnerships will have measurable, beneficial outcomes both for our community partners and our students.

The Center for Community Engagement works to provide enhanced learning opportunities for students and help them apply their knowledge and skills to complex problems in new environments and settings. The Center also works with faculty to cultivate and support opportunities for community engagement including community-engaged pedagogy and research.

Center for Economic Education

The UMW Center for Economic Education was established in 2011 as part of the Virginia Council on Economic Education (VCCE). The VCCE works in partnership with colleges and Universities in the Commonwealth of Virginia through a statewide network of university-based centers for economic education. The mission of the UMW Center for Economic Education is to build ongoing partnerships with the region’s school divisions and their teachers, provide professional development workshops for teachers, and provide creative, hands-on lesson plans, curriculum and programs for students. These efforts are with the goal of effectively infusing economic and financial education in grades K-12 to promote economic and financial literacy.

Center for Historic Preservation

Established in 1979 through a Commonwealth of Virginia Grant for Excellence, the Center for Historic Preservation has a dual mission, to support the historic preservation program and to encourage preservation activities through public outreach programs. The Center enhances students’ opportunities for employment, research, internships, and public involvement in preservation by sponsoring lectures, workshops, and conferences, and by conducting research and service projects in the Fredericksburg region. Preservation organizations, government agencies, and citizens are the beneficiaries of the Center’s second charge – the support of preservation activities through public programs and cultural resource management services. Since 1989 the Center annually awards the nationally competitive Historic Preservation Book Prize to the book that a professional jury deems to have made the most significant contribution to the intellectual vitality of historic preservation in America. Through its website, the Center hosts the Virginia Local Preservation Reference Collection and the newly established Historic Buildings of Fredericksburg database.

Center for International Education

The mission of the Center for International Education (CIE) is to build an internationally minded UMW community in order to prepare UMW students to be globally competent citizens. The Center values diversity and offers an environment that fosters cross-cultural understanding and international cooperation and engagement through transformational programs and experiences. CIE provides support to students interested in education abroad opportunities and serves the needs of international students.

CIE oversees the numerous Faculty-Led programs (https://international.umw.edu/study-abroad-2/program-search/umw-faculty-led-programs) abroad and UMW Approved education abroad programs. Faculty-Led Programs are conducted by UMW professors during the breaks from the regular academic calendar (winter and spring breaks) or during summer sessions. Students can study, intern, research or volunteer abroad through UMW’s Approved Programs for a summer, semester, or year. Students can plan one program or multiple as an undergraduate and earn academic credit that counts toward graduation requirements.

CIE guides international students (https://international.umw.edu/international-services/prospective), both degree-seeking and exchange, through the process of obtaining their visas and how to maintain status. In addition, CIE organizes and leads an international student orientation.
Information Technologies at the University

The University of Mary Washington is making steady progress toward status as a national model in the use of technology in teaching and learning. The divisions of Information Technologies and Teaching and Learning Technologies focus not only on the construction and maintenance of networks and information systems, but on the exploration and deployment of technologies that effectively and efficiently promote a first-rate education.

The University believes that technology helps stimulate creative thinking, enabling students and faculty to take advantage of all that the current worldwide information environment has to offer. Technology allows students to view, learn, assemble, and personalize information and resources from diverse sources, and enables faculty collaboration with colleagues without geographic limitations. In every discipline throughout the University, courses make use of technology to help actively engage students in the learning process.

Student Computing Needs

As a UMW student, a computer is essential to a successful academic career. While UMW does not require our students to bring a computer to campus, it is strongly recommend to facilitate access to the many resources and services available online. The list of suggested computer specifications provides guidelines about computing needs at UMW. Numerous computer labs are available on the Fredericksburg and Stafford campuses, equipped with both PC and Macintosh computers and specialized software. Printing is available in labs and can be charged to the EagleOne card.

Wireless network access is available in all academic and administrative buildings and many outdoor areas along campus walk. Residence hall rooms are equipped with both wired and wireless Internet access for each occupant through subscription ResNet service. University network resources, such as registration, class schedules, course materials, library offerings, and email, may be accessed online.

IT Help Desk

Technical support for the entire UMW community is provided by the IT Help Desk. If you have a technical question or issue, contact them at 540-654-2255, email at helpdesk@umw.edu, visit the Help Desk website, or visit room 112 in the Hurley Convergence Center. Additional online documentation addressing most common IT issues is available on the Technology Information website. The Help Desk does not repair student owned computers, but will assist in attempting to diagnose issues with software or hardware.

International Programs and Education Abroad

The University of Mary Washington encourages students to enrich their liberal arts education through a variety of education abroad programs, which range from academic, research, internships, athletics, clubs, volunteering, and service learning in other countries. Any currently enrolled student with at least 12 accumulated UMW credits and a 2.0 GPA may make education abroad part of their Mary Washington experience.

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A wealth of academic programs are available in a variety of locations for all academic disciplines. Faculty-led programs, based on the expertise and interests of UMW professors, are offered during the summer and over the spring and winter breaks. Students may also enroll in summer, semester and academic year programs approved by the Center for International Education (CIE).

Students exploring the possibility of education abroad work closely with the Center for International Education (p. 204). Preparations must be made well in advance and include the guidance of CIE as well as the student's academic advisor(s). CIE assists students with program selection and approval, transfer credit, and other administrative and cultural preparations, and supports them while abroad and upon re-entry to UMW. With careful preparation and planning in conjunction with CIE and the student's academic advisor(s), students may use coursework as well as research endeavors, internships, volunteer opportunities and service learning to fulfill degree and major requirements.

CIE also supports international students, both exchange and degree-seeking, in their adjustment to the academic, cultural and social aspects of living and studying in the United States. Serving as the point of contact with U.S. Citizenship and Immigration Services and the Department of State, CIE provides education and guidance to support compliance with the federal immigration regulations governing international students in the United States.

**Internships and Career and Professional Development**

**Internships**

Academic departments sponsor internships under the joint direction of a faculty member and award academic credit for their successful completion. Guidelines for academic credit vary from program to program; therefore, students are encouraged to discuss these opportunities with their academic advisor and review specific internships requirements of the academic program which sponsors the internship. The Center for Career and Professional Development maintains an online database of internships and is available to assist students in researching, identifying, and applying for such opportunities. In addition, please note the academic policies related to internships (p. 21).

**Career and Professional Development**

The Center for Career and Professional Development, located in the heart of the University Center, is the place where UMW’s institutional capacities converge to support and inform student transitions from college to career and the world of work. Its central placement symbolizes the University’s core belief that the liberal arts and sciences education prepares students for meaningful post-graduation opportunities as well as the constantly changing job market. The Center serves as a place where students, alumni, employers, and academic programs converge in a variety of programs, opportunities, and services related to career and professional development.

**Career Services**

The Center for Career and Professional Development supports the University’s efforts to support student’s in their transition from college to career by assisting students and alumni in assessing skills, interests, and values; exploring career options; preparing for the internship, job or graduate school search process; and implementing career goals. Through individual appointments, workshops and special events, students clarify their academic and career pursuits. The office maintains a website providing students immediate access to resources and to information on academic and career events.

Handshake (https://www.umw.edu/careercenter/handshake) is an online resource available for students and alumni to use in their internship and job searches. This resource allows students and alumni to search job and internship opportunities as well as post resumes for employer review. Employers use this site to recruit UMW students and alumni for a variety local, national and international job and internship opportunities.

Throughout the year, students and alumni have the opportunity to prepare for the job/internship/graduate school search process and meet with employers, alumni, and graduate school recruiters. Career Fairs, held each semester, provide an opportunity for representatives from businesses, government agencies, and non-profit organizations to recruit UMW students and alumni for career opportunities. A Graduate School Fair, held each year, provides the opportunity for students to explore graduate school options. Through the on-campus recruiting program, graduating students have the opportunity to interview with organizations hiring for full-time positions.

**Leidecker Center For Asian Studies**

The Leidecker Center for Asian Studies supports interdisciplinary study of Asia, drawing on the expertise of faculty from across the campus. The Center sponsors an annual lecture series, seminars, and conferences. In coordination with the resources of the Center for International Education, the Center also promotes academic and cultural exchange as well as awareness of Asia and its place in the world. In addition to promoting the academic study of Asia, the Center for Asian Studies sponsors public workshops allowing direct familiarity with various aspects of Asian cultures. The Leidecker Center for Asian Studies was established by the College’s Board of Visitors in 1998 in honor of Professor Emeritus Kurt Leidecker (1902 – 1991), a professor of philosophy at Mary Washington College from 1948 until his retirement in 1973 and a specialist in Buddhism, who first developed a program in Asian Studies at Mary Washington College.

**Office of Disability Resources**

The Office of Disability Resources (ODR) coordinates reasonable and appropriate accommodations for qualified students with disabilities. These accommodations are based on individual student profiles and may include – but are not limited to – extended time on tests, note-taking assistance, accessible dorm rooms, sign language interpreters, electronic texts, and distraction-reduced testing sites.

In order to receive services, students must provide professional documentation of a substantially limiting condition and discuss appropriate accommodations with the ODR. Documentation guidelines for specific disabilities may be found on the Disability Resources web site (https://academics.umw.edu/disability) or by requesting it from the office at 540/654-1266. The ODR verifies the disability, determines reasonable accommodations in collaboration with the student, and acts as a liaison with students, faculty, and administration as needed on issues relating to services or accommodations.

**Speaking Center**

The Speaking Center, located on the Fredericksburg campus, supports the Speaking Intensive Program by providing free consultations to students interested in developing oral communication skills. The Center houses a
collection of instructional resources (books, handouts, videotapes, and equipment) that address a variety of topics ranging from public speaking anxiety to constructing effective visual aids. Consultants are available to video record practice presentations and to provide feedback.

The Center adheres strictly to the Honor Code: consultants will not compose any portion of a presentation for a student, nor will they do research for a student’s presentations. Consultants also are prepared to offer advice on special types of oral communication activities such as speeches, group presentations, debates, or interviews.

Special Advisors

Accounting

Students interested in accounting may focus their study in this area through electives in accounting. The accounting advisors help students select courses that meet their individual needs and interests, as well as develop the communication and critical reasoning skills necessary in today’s accounting profession. Courses offered at Mary Washington provide students with an opportunity to prepare for the uniform examinations required to obtain the designation of certified public accountant (CPA), certified management accountant (CMA), and certified internal auditor (CIA).

Health Sciences

The health sciences constitute a variety of professions providing health care. The basic liberal arts and science courses offered at Mary Washington prepare students for entering nursing, physical therapy, dental hygiene, medical technology, occupational therapy, ophthalmic technology, optometry, physician assistant, and pharmacy programs. During their first year students must give careful attention to the professional school admission requirements, which are available on the respective school websites. The Pre-Physical/Occupational Therapy and Allied Health Advisors in the Department of Biological Sciences are available to help students select courses that meet these requirements, and prepare for the relevant admission examination. Admission to professional institutions is, of course, very competitive, and depends on academic performance and scores on qualifying examinations.

Medical

Pre-medicine, pre-dentistry and pre-veterinary medicine are career paths, not majors. Students in pursuit of one of these clinical careers may select any of the major programs at the University. Although most pre-medical, pre-dental, and pre-veterinary students major in one of the sciences, students can easily major in one of the humanities or social sciences and complete their pre-medical courses as electives.

The pre-medical/pre-dental advisor provides academic guidance for the pre-clinical curriculum of the pre-medical and pre-dental students, and students thinking about pursuing one of these careers should contact the pre-medical advisor for an advising appointment. The advisor also heads the Pre-medical Advisory Board, a committee charged with the preparation of an institutional recommendation for each student to be sent to the medical and dental schools. The pre-veterinary medicine advisor provides academic guidance for students interested in veterinary medicine. These students should contact the pre-vet advisor for an advising appointment.

Law

The pre-law advising system provides guidelines for students interested in entering law school. There is no prescribed “pre-law curriculum,” and students considering a legal career may focus their studies in any academic major. Students, however, are encouraged to enroll in courses that develop written and oral communication as well as critical reasoning. The pre-law advisor helps students to select courses that meet their individual needs, foster skills necessary to the legal profession, and prepare for the Law School Admissions Test (LSAT).

Teacher Education

The Teacher Education Program is approved by the Virginia State Department of Education. Students who complete an approved program qualify for licensure/certification in all the states with which Virginia has reciprocity agreements. Students major in an academic discipline and take professional education courses as electives. They have advisors both in their major discipline and in the University’s College of Education.

Student Outcomes Assessment

The University has adopted a comprehensive plan for evaluating the impact of its programs and services on its students. Developed in response to guidelines set forth by the State Council of Higher Education for Virginia and the Southern Association of Colleges and Schools Commission on Colleges, the outcomes assessment program examines the extent to which the University is meeting its intended goals for its students. Assessment results are used to evaluate programs and curricula, not individual students.

Although the data collected are maintained in the institution’s computer database, they are not included on official transcripts, nor are the aggregated data used for any purpose other than comparative analysis. The long-range goals of outcomes assessment are to identify and rectify the University’s shortcomings and build upon its strengths. Only by examining closely the effects of what it does can the University become a stronger and continuously improving institution.

The University’s commitment to assessing its effectiveness necessitates the participation of students, who are required to be involved directly in the evaluation of the various academic major programs as well as the General Education curriculum.

Summer Session

The Summer Session offers numerous opportunities to enrich and accelerate a student’s academic program. Additional Summer Session offerings include internships, study abroad courses, courses that satisfy state teacher certification requirements, and some offerings that are only available in the summers. Students attend the summer session for many reasons: to get ahead on their work toward a degree; to catch up by taking a course the student had been previously unable to take; or to explore an area of personal or career interest. Qualified high school students may apply to attend the Summer Session and may take courses if their application is approved.

Testing

College Level Examination Program (CLEP) tests are available in computer-based formats and may be scheduled individually through local universities. Different programs at the University have varying regulations about the acceptance of CLEP test scores. Students should consult the
information about CLEP tests posted at the Registrar’s web site (https://academics.umw.edu/registrar/transfer-information/transferring-credit-abi-or-previous-coursework) or should contact the Office of the Registrar.

The University’s National Testing program provides a quality testing environment for the hundreds of teachers, high school students, and graduate school applicants who live in the Fredericksburg area. On scheduled Saturdays throughout the year, the PRAXIS Series, the Graduate Record Exam (GRE) Subject Tests, the ACT, and the Law School Admission Test (LSAT) are given on the University’s Fredericksburg campus.

To register for a national exam, candidates must contact the national office of the exam they plan to take. For more information about these tests and to register, visit these websites: PRAXIS (http://www.ets.org/praxis); GRE (http://www.ets.org/gre); ACT (http://www.act.org); LSAT (https://www.lsac.org).

The Graduate Management Admission Test (GMAT) is scheduled individually and is only offered at various computer-based testing (CBT) centers throughout the country. Students interested in taking the GMAT might wish to explore the resources provided by the Graduate Management Admissions Council (https://www.mba.com).

**Tutoring**

The Office of Academic Services offers free tutorial services to degree-seeking University of Mary Washington students in need of academic assistance. Although tutors are available in a variety of subjects, tutors are not available for every course offered at the University of Mary Washington. Students are encouraged to seek help early in the semester if they feel that they will have difficulty in a course. Students who need assistance should contact the Office of Academic Services.

**Undergraduate Research and Research Grant Program**

Faculty are committed to the mutually supportive values of undergraduate teaching and academic research. Seeking to extend those values to its students, UMW has a well-established and nationally-recognized Undergraduate Research Grant Program, whereby collaborative teams of faculty member(s) and students apply for University-funded research project support. This grant program enables undergraduates to work intensively with faculty members on a broad range of research topics, work which in many instances leads to student presentations at state, regional, or national academic conferences. In some instances, undergraduate research grants support student travel for study, observation, and performance related to focused individual projects.

Students engaged in undergraduate research earn credits by registering for individual studies (courses numbered 491 or 492). Every academic discipline offered at the University has such courses available. Students should check with the department in which they are interested in doing an individual study because programs have specific requirements for enrolling in individual study courses.

Another undergraduate research option is the URES 197 Undergraduate Research course. In this case, the student works on the faculty member’s research project and completes research tasks connected with that project as determined by the faculty member. Beginning students are eligible to register for URES 197 Undergraduate Research, and the students who complete URES 197 Undergraduate Research will likely develop their own individual study project at a later time, thereby building on initial research experiences. Individual studies are most often done by more advanced students (juniors and seniors) who have the necessary background to successfully formulate an individual study project.

**University Galleries**

The Ridderhof Martin Gallery is a high-quality art museum facility. It displays traveling exhibitions from museums around the country, bringing to the University the art of the past and present from many cultures. Other exhibitions draw from the permanent collection for themes such as “The Artist Looks at Sister Artists” and “Art and 20th-Century War.” The duPont Gallery features painting, drawing, sculpture, photography, ceramics, and textiles by art faculty and students as well as other contemporary artists.

The Galleries’ permanent collection of some 6,000 artworks is strongest in mid-20th century art and Asian art. The Galleries also house much of the life’s work, as well as the personal papers, of New York surrealist Margaret Sutton and Los Angeles figurative expressionist Phyllis Ridderhof Martin.

Professors in art history and other fields often assign class projects and research in the Galleries. Students study the works on view and in storage, and delve into the computerized records and paper files. Students also participate in cataloging the collection and organizing and installing exhibitions.

**University Libraries**

Library Staff (p. 224)

The UMW Libraries constitute the knowledge center of the university — a physical and virtual manifestation of the institution’s mission of connected, integrated, and engaged teaching, learning, research, and service.

During regular semesters, Simpson Library is open with full-service for 90 hours each week. During Reading Days/Exam Week, the Library is open 24/7. The Libraries’ collections contain more than 380,000 physical items including books, journals, videos, and popular reading materials. The Libraries provide access to more than 120,000 online journals, 450,000 electronic books, and 40,000 streaming videos. The Libraries also provide access to an extensive array of electronic databases that include full-text articles, historical newspapers and other primary source materials, images, and research datasets. The Libraries add 2,000 or more volumes to their collections each year to support the University’s wide-ranging curriculum.

An official partial depository of both Federal and state government publications, the Libraries also maintain an online digital repository, a rare book collection, and the archives of the University. The University of Mary Washington is an active member of VIVA (The Virtual Library of Virginia) a consortium of colleges and universities in Virginia that provides students and faculty access to a rich array of electronic resources through the campus network. VIVA resources range from online encyclopedias and dictionaries to bibliographic databases and full-text periodical services.

One of the largest buildings on the Fredericksburg campus, Simpson Library is connected to the Hurley Convergence Center (HCC) by a bridge leading from the library’s second floor to the HCC’s third floor. The library staffs a service desk in the HCC that is equipped with a self-service
checkout system. The HCC also includes the library's Digital Archiving Lab and Digital Gallery.

Simpson Library includes spaces for group and individual study, including the popular “treehouses” – double-decker study carrels located on the third floor. UMW's ThinkLab maker space is also located in Simpson Library.

The Libraries also provide wireless access to the campus network. The online catalog provides access to the Libraries' print and electronic collections. A full range of instructional services is offered to faculty and students to aid in the use and interpretation of the Libraries’ resources, research methods and the efficient use of new information technologies. Librarians teach a wide array of course-related instruction in addition to the provision of reference assistance. The Libraries also support an efficient interlibrary loan service.

**Writing Center**

The Writing Center, located on the Fredericksburg campus, is open to all Mary Washington students. Operating within the Honor Code, the Writing Center offers free tutorial assistance to undergraduate and graduate students, regardless of major or concentration, both for course assignments and for personal writing needs.

The Writing Center works with student writers at every skill level to improve their writing performance. Staffed by a faculty director and well-trained student tutors, the Center provides advice in getting started on papers, developing ideas, achieving unity and coherence, reviewing troublesome parts of papers, learning writing styles such as APA and MLA, understanding and correcting recurring grammatical and punctuation errors, and overcoming writer's block. The Writing Center welcomes students writing research papers, short essays, letters of application, and laboratory reports. The Center also provides access to various writing guides.
STUDENT LIFE

The University provides a wide assortment of activities, programs, and services available to students. Select from the options in the drop down box above to learn more about various student life resources. Additional information on Student Life is found in the University of Mary Washington Student Handbook (http://publications.umw.edu/student-handbook), updated annually.

Athletics

The University sponsors 23 men’s and women’s NCAA Division III varsity teams for intercollegiate competition and two team sports. Varsity men’s teams compete in baseball, basketball, cross country, golf, lacrosse, soccer, tennis, swimming, and indoor and outdoor track and field. Varsity women’s teams compete in basketball, cross country, field hockey, golf, lacrosse, soccer, softball, swimming, tennis, volleyball, and indoor and outdoor track and field. Men and women compete together in riding. Men’s and Women’s Rugby are the team sports. UMW competes in the Capital Athletic Conference (CAO).

The Anderson Events Center seats 1,700 spectators for sports, and 2,800 spectators for concerts. The Goolrick physical education building provides a basketball gymnasium, dance studios, an intercollegiate swimming pool with electronic touch time system, an auxiliary gymnasium, an 8,000-square-foot weight training room, an indoor golf practice facility, three competitive volleyball courts, two indoor batting cages, and two athletic training rooms. A 15,000 square foot fitness center is connected to Goolrick and is open seven days per week during the academic year. The six-court indoor Tennis Center is a great resource for student athletes and the campus community. State-of-the-art outdoor facilities are located at the Battleground Complex on Hanover St. and include fields for baseball, soccer, lacrosse, softball, and field hockey; three artificial surface fields (two lighted); cross country courses and a running trail; 12 lighted tennis courts; and a newly completed, state of the art all-weather track and field facility.

Campus Recreation and Fitness Center

Students enjoy a comprehensive recreation program with something for everyone. Intramural sports events range widely from team leagues in basketball and flag football to events such as dodgeball and kickball. The sport club program offers opportunities for intercollegiate competition in a variety of sports. Working on your wellness is fun and interactive with group fitness classes, personal training, and outdoor recreation programs. Additionally, the Fitness Center, open to all students, faculty, and staff, offers cardiovascular, free weight, and circuit equipment for open recreation use.

Community Outreach and Resources (COAR)

COAR is a diverse group of students serving community needs through an active exchange of service and learning while continually striving to find solutions to problems that challenge the community. COAR sponsors multiple weekly programs (http://students.umw.edu/coar/coar-programs) and six major annual events (http://students.umw.edu/coar/special-events). The purpose of all COAR programs and events is to build strong community relations between UMW students and the Greater Fredericksburg community through service. Any UMW student who has a desire to serve UMW and the Greater Fredericksburg community can get involved with COAR.

Health Center

The Student Health Center offers full-time students a self-care center and outpatient medical services Monday through Friday during the academic year. It is staffed by a full-time physician, nurse practitioner, and registered nurse. On-site specialty care includes sexual health services, allergy shots, travel and health consultation. Student Health Center visits are free. There are nominal fees charged for tests, prescription medications given, immunizations, and medical supplies.

Multicultural Student Affairs

The University of Mary Washington continually and actively seeks a rich blend of cultural diversity in its faculty and staff, students, curriculum, and activities. The James Farmer Multicultural Center, named after the prominent civil rights leader who taught at the University of Mary Washington, specifically focuses on the academic and social well being of underrepresented students through programming, mentoring, and leadership opportunities. The Center also offers a wide variety of cultural programming, including the Cultural Awareness Series, which spans the academic year. The programs and activities for the various cultural celebrations highlight and enhance the education and appreciation of differences across the campus community. The series culminates with the Multicultural Fair, which attracts regional attendance.

While inclusion is a goal for all University organizations, several specific interest groups on campus assist in promoting diversity within the University community and offer programs and resources that foster an awareness and understanding of cultural differences and social justice issues, including the Asian Student Association, the Black Student Association, Brothers of a New Direction, the Latino Student Association, Jewish Student Association, Muslim Student Association, S.E.E.D. (Students Educating and Empowering for Diversity), PRISM (People for the Rights of Individuals of Sexual Minorities), and Women of Color. Through these many efforts, the University strives to achieve greater diversity and inclusion in its population and a full measure of respect for, and appreciation of, the cultural traditions of all people.

Off-Campus Student Services

Off-Campus Student Services is committed to fostering a successful UMW experience for those living off campus. We are dedicated to helping commuters feel connected and supported. Our programs and services are designed to provide off-campus students with opportunities to meet other UMW commuters, be informed of campus events, make connections on campus with staff and faculty, and have a resource for questions about off-campus living. The Off-Campus and Transfer Student Services office is located in the University Center, third floor.

Office of Student Conduct and Responsibility (OSCAR)

The Office of Student Conduct and Responsibility (OSCAR) supports the Division of Student Affairs’s overarching mission to promote student success, learning, and personal wellness. In doing so, it also supports the University’s overall mission, which is to provide students with a superior
education that inspires and enables them to make positive changes in the world.

OSCAR supports these missions by upholding a Code of Conduct, a set of guidelines for how UMW students are to conduct themselves, and what conduct they should expect from each other. These guidelines, based on principles of student development, are intended to facilitate all students’ learning and personal growth within the University and beyond, and to create a community of integrity. Students’ success, ability to learn, and wellness should not be negatively impacted by the conduct of other students, or by their own conduct. Students whose actions are inconsistent with the Code of Conduct are held accountable through a fair and compassionate process in which education is a primary value. OSCAR upholds an environment in which personal growth is facilitated, citizenship is promoted, and sensitivity to others within the community is balanced against each student’s need for personal expression. Related to their conduct, UMW students have both rights and responsibilities, and OSCAR assists students in understanding how those rights and responsibilities benefit all members of the UMW community, including themselves.

Residence Life and Housing

Students who reside on campus have a variety of living options within the 14 traditional residence halls and two apartment-style complexes. All campus communities are staffed with resident assistants who help to implement the residential curriculum as well as assist students in day-to-day university life. Each residential area is overseen by a professional live-in staff member.

First-year students are assigned to residence halls based on their First-Year Seminar (FSEM) class and benefit from the first-year experience program that gives them the opportunity to connect with fellow students, peer mentors, and faculty advisors. Upper-class students select their housing through an online housing selection system and can choose from a variety of special interest housing options. All traditional residence halls are equipped with lounges, study areas, microwaves, and common area refrigerators. Rooms are furnished with extra-long double beds, desks, desk chairs, and dresser and closet space. Some residence halls have fully-equipped kitchens.

Eagle Landing is an apartment-style residential community for sophomores, juniors, seniors, and graduate students. The complex features loftable beds, stainless steel appliances, and granite counter tops. The UMW Apartment complex houses upper-class students in apartments similar to those one would find off campus. Both Eagle Landing and the UMW Apartments remain open during all break periods within the academic year. Students residing in traditional residence halls may register to stay during breaks, based on need and availability.

Student Activities and Organizations

The University Center, the campus “living room,” serves as the home of Student Activities. Through the oversight of the Inter-Club Association, the University recognizes over 150 social, cultural, political, religious, and other special interest clubs and organizations that offer a wide range of activities throughout the year. Also, students find it easy to start new groups. In addition, most academic departments support interest clubs or honorary societies. Student-run campus publications and radio provide outlets for students to share their thoughts and talents. The University has a weekly newspaper, The Blue and Gray Press, and a campus radio station, WMWC.

Student Government

Internal governance for student life is provided by the Student Government Association (SGA). Its executive officers and the members of the Student Senate are elected each year. SGA Leaders, and appointed students, serve on a variety of student committees and on nearly all faculty and administrative committees at the University. A second elected group, Class Council, is responsible for social programming and many of the University’s traditional events, including Junior Ring Week and Devil/Goat Day. The Honor Council, with elected representatives from each class, presides over the Honor System. The Student Conduct Review Board (SCRIB) is composed of elected representatives and hears student conduct cases.

Talley Center for Counseling Services

The mission of the Talley Center is to help students meet the demands of college effectively and to support their personal, social, and intellectual growth and development. Talley Center staff includes licensed clinical psychologists, licensed professional counselors, and masters- and doctoral-level interns from graduate programs in counseling and psychology. The Talley Center provides individual and group counseling services to full-time, undergraduate, degree-seeking students enrolled on the Fredericksburg campus. The Talley Center also provides limited, short-term psychiatric services by referral. We offer crisis intervention, consultation, community referrals, and training and educational outreach programs to the entire UMW community. All services are confidential and free of charge.

Student concerns vary considerably and may range from typical developmental issues – including University adjustment, relationship concerns, and stress management – to problems with depression, anxiety disorders, bereavement, and trauma.

To schedule an appointment or inquire further about services, please call the Talley Center at 540-654-1053. If this is a crisis that requires immediate assistance and the Talley Center is not open, please call campus police at 540-654-4444.

University Bookstore

The University Bookstore, managed by Barnes & Noble College, is dedicated to supporting the academic mission of UMW and the quality of student life on campus. Competitively-priced course materials are offered in store and online (https://umw.bncollege.com/shop/umw/home). Departments, courses, or sections that have Open Education Resource (OER) materials available are listed at the Bookstore. Assorted course materials, such as computer, art, and medical supplies, are also available.

The Bookstore is also the nest of Eagle Pride, offering UMW apparel, gifts, insignia and emblematic school supplies; the trade book department boasts the work of UMW faculty, staff and alumni, and offers a rich array of local history titles.

The UMW Bookstore is located in Lee Hall. Phone: 540-654-1017.

University Public Safety

UMW Public Safety includes UMW Police, an accredited police agency, and the Office of Emergency Management. The University Police offer around-the-clock law enforcement and security for the Fredericksburg campus. They employ a community policing philosophy that includes
outreach efforts to the University and local community. The 19 full-time sworn officers and 15 security personnel are certified by the Commonwealth of Virginia to enforce state and local laws and ordinances as well as University rules and regulations. The University employs security personnel at the Fredericksburg, Stafford, and Dahlgren campuses during class and library hours, with back-up from UMW Police and Stafford or King George County sheriffs’ departments, as necessary.
ADMINISTRATION AND FACULTY

The administrative organization of the University is presented in this section of the Catalog along with a listing of all current faculty, members of the Library staff, winners of faculty awards, and all faculty and administrators who were awarded Emeriti status upon their retirement.

• Board of Visitors (https://catalog.umw.edu/administration-faculty/board-visitors)
• Administrative Organization (p. 213)
• Current Faculty (p. 214)
• Faculty Awards (p. 221)
• Library Staff (p. 224)
• Emeriti (p. 224)

Administrative Organization

President
Troy D. Paino, President
B.A., Evangel University; J.D., Indiana University; M.A. and Ph.D., Michigan State University

Jeffrey W. McClurken, Chief of Staff and Clerk of the Board
B.A., Mary Washington College; M.A., Ph.D., The Johns Hopkins University

Stefanie Lucas-Waverly, Title IX Coordinator
B.A., California Lutheran University; M.S., Colorado State University

Hall Cheshire, Chief Information Officer
B.S., The American University

Academic Affairs

Nina Mikhalevsky, Provost
B.A., Boston University; M.A., Ph.D., Georgetown University

John T. Morello, Associate Provost for Academic Affairs
A.B., The College of William and Mary; M.A., Northern Illinois University; Ph.D., Wayne State University

Timothy M. O’Donnell, Associate Provost for Academic Engagement and Student Success
B.A., M.A., Wake Forest College; University Ph.D.; University of Pittsburgh

Debra J. Schleef, Associate Provost for Institutional Analysis and Effectiveness
B.A., Indiana University at Indianapolis; M.A., Ph.D., Northwestern University

Rosemary H. Arneson, University Librarian
B.A. University of Georgia; M.Ln., Emory University

Rita F. Dunston, University Registrar
B.S., Norfolk State University; M.S., Old Dominion University

Gwen N. Hale, Director, Writing Center and Writing Program
B.A., M.A., East Tennessee State University; Ph.D., Middle Tennessee State University

P. Anand Rao, Director, Speaking Intensive Program
B.A., M.A., Ph.D., University of Pittsburgh

Kelli M. Slunt, Director, Honors Program
B.S., Mary Washington College; Ph.D., University of Virginia

Victoria K. Russell, Director, Center for Teaching
B.A., Loyola University; M.A., M.Ed., The College of William and Mary; Ed.D., The George Washington University

Gerald M. Slezak, Jr., Director, Digital Learning Support
B.A., Marymount University; M.Ed., University of Georgia

R. Wesley Hillyard, III, Director, Academic Services
B.S., University of Mary Washington; M.Ed., University of Virginia

Jessica Machado, Director, Disability Resources
B.S., M.A., George Mason University

Jose A. Sainz, Director, Center for International Education
B.A., Universidad de Deusto (Spain); M.A., West Virginia University; Ph.D., University of Maryland

David A. Rettinger, Director, Academic Integrity Program
B.A., University of Michigan; M.A., Ph.D., University of Colorado

Scott A. Harris, Executive Director, University Museums
B.A., Mary Washington College; M.A., The College of William and Mary

Kimberly C. Young, Executive Director, Continuing and Professional Studies
B.A., Duke University; MMH, MBA, Cornell University

College of Arts and Sciences

Keith E. Mellinger, Dean of the College of Arts and Sciences
B.S., Millersville University; M.S., Ph.D., University of Delaware

Grant R. Woodwell, Associate Dean, College of Arts and Sciences
B.A., Columbia University; M.Phil., Ph.D., Yale University

Elizabeth F. Lewis, Assistant Dean, College of Arts and Sciences
B.A., Auburn University; M.A., Ph.D., University of Virginia

Ana G. Chichester, Director, Bachelor of Liberal Studies Program
B.A., Mary Washington College; M.A., University of North Carolina at Chapel Hill; Ph.D., University of Virginia

Janet M. Atarthi-Dugan, Director, Bachelor of Science in Nursing Completion Program
BSN, University of San Francisco; MSN, Ph.D., George Mason University

College of Business

Lynne D. Richardson, Dean of the College of Business
BBA, University of Montevallo; MBA, University of Alabama at Birmingham; Ph.D., University of Alabama

Kenneth D. Machande, Associate Dean for Faculty
A.A., University of Maryland; BLS, Mary Washington College; MBA, Albany State University

Brian J. Baker, Executive Director, Center for Economic Development
B.A., MBA, University of Mary Washington

Kelsey L. Whitacre, College of Business Outreach Coordinator and Career Coach
B.S., Bridgewater College; M.S., Shenandoah University

**College of Education**

**Peter S. Kelly, Dean of the College of Education**

B.S., M.S., Ph.D., University of Kansas

**Courtney M. Clayton, Associate Dean for Academic Programs, Assessment, and Accreditation**

B.A., University of Pennsylvania; M.A., University of San Francisco; Ph.D., Boston College

**Kristina Peck, Director of Clinical Experiences and Partnerships**

B.S., University of Mary Washington; M.A., Virginia Tech

**April A. Brecht, Director of Advising Center Services**

B.B., M.S., Ph.D., Old Dominion University

**Administration and Finance**

**Paul C. Messplay, Vice President, Administration and Finance and Chief Financial Officer**

B.A., MPA, Virginia Commonwealth University

**Julie Smith, Associate Vice President for Finance and Controller**

B.S., University of Central Florida

**Elizabeth Williams, Executive Director for Human Resources**

B.S., Mary Washington College

**Melva Kishpaugh, Director of Procurement Services**

B.S., University of Richmond

**Katherine Sandor, Director of Business Services**

B.S., Mary Washington College

**Gary Hobson, Capital Outlay Director**

B.S., U.S. Naval Academy; MPA, Virginia Commonwealth University

**Stuart Sullivan, Interim Director of Facilities Operations**

**Enrollment Management**

**Kimberley Buster Williams, Vice President, Enrollment Management**

B.A., MSED, Ed.S., Old Dominion University

**Melissa Wheat Yakabouski, Director, Undergraduate Admissions**

B.A., Mary Washington College

**Deanna C. Pack, Director, Graduate Admissions**

BBA, MBA, Averett University

**Timothy Saulnier, Director, Financial Aid**

B.A., Asbury University; M.Ed., Northeastern University

**Equity and Access**

**Sabrina C. Johnson, Vice President for Equity and Access and Chief Diversity Officer**

B.S., MPA, Virginia Commonwealth University; J.D., The College of William and Mary

**Laura C. Wilson, Director, Safe Zone**

B.S., Virginia Polytechnic Institute & State University; M.A., The College of William and Mary; Ph.D., Virginia Polytechnic Institute & State University

**Student Affairs**

**Juliette Landphair, Vice President for Student Affairs**

B.A., Tulane University; M.A., Ph.D., University of Virginia

**Cedric B. Rucker, Associate Vice President for Student Affairs and Dean of Student Life**

B.A., Mary Washington College; M.A., University of Virginia

**Melissa L. Jones, Associate Dean for Student Involvement**

B.A., University of Virginia; M.Ed., University of Virginia; M.Ed., James Madison University

**David W. Fleming, Assistant Dean for Residence Life and Housing**

B.A., Salisbury University; M.A., University of New Haven

**Marion R. Sanford, Director of Multicultural Student Affairs**

B.A., Jackson State University; M.A., Ph.D., Iowa State University

**Michael W. Hall, Chief of Police and Assistant Vice President for Public Safety**

A.D., Central Virginia Community College; B.A., Lynchburg College

**Patrick L. Catullo, Director of Athletics**

B.S., Mary Washington College; MSS, The United States Sports Academy

**Advancement and University Relations**

**Lisa Jamison Bowling, Vice President for Advancement and University Relations**

B.A., Mary Washington College; MBA, Wake Forest University

**Anna B. Billingsley, Associate Vice President for University Relations**

B.A., The College of William and Mary; M.A., American University

**Ken L. Steen, Associate Vice President of University Advancement and Alumni Relations**

B.A., Wofford College

**Jan G. Clarke, Assistant Vice President of Gift Planning**

B.S., Averett College

**Catherine A. Seller, Assistant Vice President of Advancement Relations and Operations**

B.A., American University; M.A., Marymount University

**Current Faculty**

*Note:* Dates in parentheses indicate year of appointment to the faculty and year when present rank and/or title was attained. This listing includes all full-time, continuing teaching faculty of the University of Mary Washington as of June 1, 2020.

**Swati Agrawal, Assistant Professor of Biology (2019, 2019)**

B.Sc., Dr. Babasaheb Ambedkar Marathwada University (India); M.Sc., North Maharashtra University (India); Ph.D., University of Georgia

**Maysoon Fayez Al-Sayed Ahmed, Senior Lecturer in Arabic (2010, 2020)**

B.A., M.A., University of Jordan

**Nabil S. Al-Tikriti, Associate Professor of History (2004, 2010)**

B.S., Georgetown University; MIA, Columbia University; M.A., Ph.D., The University of Chicago
David K. Ambuel, Leidecker Chair and Professor of Philosophy (1992, 2007)
B.A., Northwestern University; M.A., University of Munich; Ph.D., Northwestern University

Mehdi Aminrazavi, Leidecker Chair and Professor of Philosophy and Religion (1992, 2005)
B.A., M.A., University of Washington; Ph.D., Temple University

B.A., University of Mary Washington; M.A., Trinity College

Karen M. Anewalt, Professor of Computer Science (2000, 2012)
B.S., Allegheny College; M.S., Ph.D., The College of William and Mary

Josephine Antwi, Assistant Professor of Biology (2018, 2018)
B.S., Kwame Nkrumah University of Science & Technology; M.S., Southeastern Louisiana University; Ph.D., Texas A & M University

Deena A. Applebury, Senior Lecturer in Athletics, Health, and Physical Education (2003, 2008)
A.A., State Fair Community College; B.S., M.S., University of Missouri at St. Louis

Janet A. Asper, Professor of Chemistry (2005, 2018)
B.S., Ohio University; Ph.D., University of Pittsburgh

Dianne M. Baker, Professor of Biology (2006, 2018)
B.S., The Evergreen State College; M.S., Ph.D., University of Washington

Antonio Barrenechea, Professor of English (2005, 2019)
B.A., Fordham University; M.Phil., Ph.D., Yale University

Jennifer A. Barry, Associate Professor of Religion (2016, 2020)
B.A., Colorado Christian University; MTS, Duke University; Ph.D., Drew University

Michael G. Benson, Assistant Professor of Theatre (2017, 2017)
B.A., Baldwin-Wallace College; MFA, The Pennsylvania State University

Porter R. Blakemore, Associate Professor of History (1979, 1987)
B.A., University of North Carolina at Chapel Hill; M.A., Madison College; Ph.D., University of Georgia

Susanne Brenta Blevins, Assistant Professor of English (2017, 2017)
B.A., Virginia Polytechnic Institute & State University; M.A., Radford University; Ph.D., University of North Carolina at Greensboro

Maria Laura Bocaz-Leiva, Associate Professor of Spanish (2010, 2017)
Licenciatura, Pontificia Universidad Católica de Chile; M.A., Ph.D., University of Iowa

Eric C. Bonds, Associate Professor of Sociology (2011, 2017)
B.S., University of Wyoming; M.A., Minnesota State University at Mankato; Ph.D., University of Colorado at Boulder

Dawn S. Bowen, Professor of Geography (1996, 2011)
B.A., Mary Washington College; M.A., University of Maine at Orono; Ph.D., Queen’s University

Bridget G. Brew, Assistant Professor of Sociology (2019, 2019)
B.A., University of California at Berkeley; M.S., Brooklyn College; M.A., Ph.d, Cornell University

Cate M. Brewer, Senior Lecturer in Theatre (2009, 2018)

B.A., Washington University in St. Louis; MFA, Virginia Commonwealth University

John P. Broome, Associate Professor of Education (2008, 2017)
B.A., The College of William and Mary; M.Ed., George Mason University; Ph.D., University of Virginia

Laura L. Bylenok, Assistant Professor of English (2016, 2016)
B.A., University of Washington; MFA, The Johns Hopkins University; Ph.D., University of Utah

B.S., University of Mississippi; MPA, Virginia Polytechnic Institute & State University; D.M., University of Maryland University College

Gonzalo S. Campos-Dintrans, Assistant Professor of Spanish (2016, 2016)
B.A., Pontificia Universidad Católica de Chile; M.A., Ph.D., The University of Iowa

Wei Chen, Associate Professor of Management (2009, 2015)
B.A., Xiamen University (China); M.S., Ph.D., Texas Tech University

B.S., National Taiwan Normal University; M.A., Ph.D., The Johns Hopkins University

Ana G. Chichester, Professor of Spanish (1984, 2010)
B.A., Mary Washington College; M.A., University of North Carolina at Chapel Hill; Ph.D., University of Virginia

Tracy B. Citeroni, Associate Professor of Sociology (1998, 2005)
B.A., St. Vincent College; M.A., University of Pittsburgh; Ph.D., University of Texas at Austin

Courtney M. Clayton, Associate Professor of Education (2009, 2015)
B.A., University of Pennsylvania; M.A., University of San Francisco; Ph.D., Boston College

Teresa L. Coffman, Professor of Education (2004, 2014)
B.A., Hood College; M.A., San Francisco State University; Ph.D., Capella University

James B. Collins, Assistant Professor of Mathematics (2017, 2017)
B.S., James Madison University; M.S., Ph.D., North Carolina State University

Deborah A. Conway, Associate Professor of Athletics, Health, and Physical Education (1987, 1997)
A.A., Ferrum College; B.A., M.Ed., Lynchburg College

Rosalyn L. Cooperman, Professor of Political Science (2003, 2020)
B.A., Indiana University; Ph.D., Vanderbilt University

Emily D. Crosby, Assistant Professor of Communication (2018, 2018)
B.A., Allegheny College; M.A., Indiana University; Ph.D., University of Pittsburgh

Katherine Nicole Crowder, Professor of Political Science (2001, 2014)
B.S., Sweet Briar College; M.A., Ph.D., Princeton University

Shumona Dasgupta, Associate Professor of English (2013, 2017)
B.A., M.A., University of Delhi; Ph.D., State University of New York at Stony Brook

Jason W. Davidson, Professor of Political Science (2001, 2014)
B.A., University of California at Berkeley; M.A., Ph.D., Georgetown University

Stephen C. Davies, Professor of Computer Science (2006, 2019)
B.S., Rice University; M.S., Ph.D., University of Colorado at Boulder

Janine Schank Davis, Associate Professor of Education (2012, 2018)
B.A., Virginia Polytechnic Institute & State University; M.Ed., Boston College; Ph.D., University of Virginia

Julia Anne DeLancey, Professor of Art History (2017, 2017)
B.A., University of Michigan; Ph.D., University of St. Andrews (Scotland)

Andrew S. Delaney, Lecturer in Athletics, Health, and Physical Education (2016, 2016)
B.A., Franklin and Marshall College; M.S., Southern New Hampshire University

Antonia L. Delgado-Poust, Associate Professor of Spanish (2011, 2020)
B.A., Bucknell University; M.A., Ph.D., Pennsylvania State University

Melody B. Denhere, Associate Professor of Mathematics (2013, 2019)
B.Sc., M.Sc., University of Zimbabwe; Ph.D., Auburn University

Bridgette Dennett, Assistant Professor of Theatre (2019, 2019)
A.A., Hillsborough Community College; B.A., The University of South Florida; MFA, Indiana University

Kanchan Deosthali, Associate Professor of Management (2013, 2019)
B.E., University of Mumbai (India); M.S., University of Louisiana at Lafayette; Ph.D., State University of New York, University at Albany

Erin K. Devlin, Associate Professor of American Studies (2016, 2020)
B.A., The American University; M.A., Ph.D., The College of William and Mary

Amrita Dhar, Assistant Professor of Economics (2016, 2016)
B.A., M.A., Jadavpur University (India); Ph.D., University of Houston

Brooke E. Di Lauro, Professor of French (2006, 2019)
B.A., University of Pennsylvania; M.A., M.Phil., Ph.D., Yale University

Andrew S. Dolby, Professor of Biology (2000, 2012)
B.A., Appalachian State University; M.S., Colorado State University; Ph.D., The Ohio State University at Columbus

Joseph G. Dreiss, Professor of Art (1976, 1991)
B.A., Fairleigh Dickenson University; M.A., Rutgers University; Ph.D., State University of New York at Binghamton

Alexandra M. Dunn, Assistant Professor of Management (2017, 2017)
B.A., Elon University; M.A., Ph.D., University of North Carolina at Charlotte

Beverly D. Epps, Associate Professor of Education (2005, 2005)
B.S., M.Ed., Ph.D., University of Virginia

Mindy J. Erchull, Professor of Psychology (2005, 2017)
B.A., Connecticut College; M.A., Ph.D., Arizona State University

Julius N. Esunge, Associate Professor of Mathematics (2009, 2015)
B.Sc., University of Buea (Cameroon); M.S., Lehigh University; M.S., Ph.D., Louisiana State University

Marcelo Fajardo-Cárdenas, Associate Professor of Spanish (2010, 2016)
B.A., University of Havana; M.A., New Mexico State University in Las Cruces; Ph.D., University of Arizona

Samira Fallah, Assistant Professor of Management (2020, 2020)
B.S., M.S., AmirKabir University of Technology (Iran)

Paul D. Fallon, Associate Professor of Linguistics (2005, 2009)
B.S., M.S., Georgetown University; M.A., Ph.D., The Ohio State University

Stephen J. Farnsworth, Professor of Political Science (2012, 2012)
B.A., Dartmouth College; B.A., University of Missouri at Kansas City; M.A., Ph.D., Georgetown University

Susan R. Fernsebner, Professor of History (2004, 2016)
B.A., University of Massachusetts at Amherst; M.A., Stanford University; Ph.D., University of California at San Diego

Claudine L. Ferrell, Professor of History (1984, 2006)
B.A., M.A., Southwest Texas State University; Ph.D., Rice University

Caitlin C. Finlayson, Associate Professor of Geography (2013, 2019)
B.A., Winthrop University; Ph.D., Florida State University

Ian Finlayson, Associate Professor of Computer Science (2012, 2018)
B.S., Winthrop University; Ph.D., Florida State University

Christofer C. Foss, Professor of English (1999, 2012)
B.A., Concordia College; M.A., Northeastern University; Ph.D., University of Wisconsin at Madison

R. Leigh Frackelton, Jr., Professor of Business Law and Taxation (1986, 1998)
B.A., Washington & Lee University; J.D., University of Richmond; M.L.T., The College of William and Mary

Tyler E. Frankel, Assistant Professor of Environmental Science (2018, 2018)
B.A., University of Maryland Baltimore County; M.S., Ph.D., University of Maryland

E. Eric Gable, Professor of Anthropology (1996, 2008)
B.A., University of California at San Diego; M.A., Ph.D., University of Virginia

Jacqueline Gallagher, Associate Professor of Geography (2006, 2010)
B.Sc., University of Wales, College of Swansea; M.Sc., Memorial University of Newfoundland; Ph.D., University of California at Los Angeles

B.S., M.S., Ph.D., The Pennsylvania State University

Christopher J. Garcia, Associate Professor of Quantitative Business Methods (2012, 2017)
B.S., Old Dominion University; M.S., Nova Southeastern University; M.S., Florida Institute of Technology; Ph.D., Old Dominion University

Carole A. Garmon, Professor of Art (1998, 2010)
BFA, MFA, Virginia Commonwealth University

Douglas T. Gately, Senior Lecturer in Music (2005, 2011)
BFA, Mary Washington College; M.A., George Mason University

Lance C. Gentry, Professor of Marketing (2013, 2017)
B.S.B.A., MBA., University of Tennessee; Ph.D., Michigan State University

Scott P. Gersen, Lecturer in Athletics, Health, and Physical Education (2019, 2019)
B.S., University of Florida; M.S., Eastern Kentucky University

Leanna C. Giancarlo, Associate Professor of Chemistry (1999, 2005)
B.S., University of Scranton; Ph.D., University of Pennsylvania

Adria Y. Goldman, Assistant Professor of Communication (2018, 2018)
B.A., Longwood University; M.A., Virginia Polytechnic Institute & State University; Ph.D., Howard University

Kevin E. Good, Assistant Professor of Education (2017, 2020)
B.S., Oral Roberts University; M.A., Regent University; M.Ed., Ph.D., George Mason University

Kimberly S. Gower, Assistant Professor of Management (2016, 2016)
BSBA, Michigan Technological University; MBA, University of Michigan at Flint; Ph.D., Virginia Commonwealth University

Rachel L. Graefe-Anderson, Associate Professor of Finance (2012, 2018)
B.Sc., The Pennsylvania State University; M.Sc., Ph.D., Purdue University

Theresa M. Grana, Associate Professor of Biology (2008, 2014)
B.S., Grove City College; Ph.D., University of North Carolina at Chapel Hill

Steven A. Greenlaw, Professor of Economics (1982, 2000)
B.A., The College of William and Mary; M.A., Ph.D, State University of New York at Binghamton

Alan B. Griffith, Professor of Biology (2002, 2014)
B.S., M.S., The Pennsylvania State University; Ph.D., University of Maryland

Pamela R. Grothe, Assistant Professor of Geology (2016, 2017)
B.S., University of Mary Washington; M.S., University of Colorado at Boulder; Ph.D, Georgia Institute of Technology

Surupa Gupta, Professor of Political Science (2008, 2020)
B.A., M.A., Jadavpur University (India); Ph.D., University of Southern California at Los Angeles

Mary Katherine Haffey, Associate Professor of English (2014, 2018)
B.S., Ohio University; M.A., Marquette University; Ph.D., University of Wisconsin at Milwaukee

Stephen P. Hanna, Professor of Geography (1997, 2009)
B.A., Clark University; M.A., University of Vermont; Ph.D., University of Kentucky

Bradley A. Hansen, Professor of Economics (1995, 2009)
B.A, The Evergreen State College; M.S., London School of Economics; M.A., Ph.D., Washington University

Jennifer Hansen-Glucklich, Assistant Professor of German (2011, 2015)
B.A., Georgetown University; M.A., University of Maryland at College Park; Ph.D., University of Virginia

Steven E. Harris, Associate Professor of History (2006, 2011)
B.A., University of North Carolina at Chapel Hill; M.A., Ph.D., University of Chicago

Jodie L. Hayob, Professor of Geology (1993, 2006)
B.S., University of Wisconsin at Madison; M.S., Ph.D., University of Michigan at Ann Arbor

J. Todd Helbling, Senior Lecturer in Athletics, Health, and Physical Education (1999, 1999)
BBA, Millsaps College; M.S., University of Massachusetts at Amherst

Randall D. Helmstutler, Associate Professor of Mathematics (2005, 2011)
B.S., Radford University; M.S., University of Illinois at Urbana-Champaign; Ph.D., University of Virginia

David L. Henderson, III, Associate Professor of Accounting (2011, 2015)
B.A., Mary Washington College; M.S., The George Washington University; Ph.D., Virginia Polytechnic Institute & State University

Christine R. Henry, Assistant Professor of Historic Preservation (2015, 2015)
B.A., The College of William and Mary; M.Arch, The Catholic University of America; MHP, University of Maryland

B.S., MBA, University of Pittsburgh

Daniel A. Hirshberg, Associate Professor of Religion (2014, 2020)
B.A., Wesleyan University; M.A., Naropa University; Ph.D., Harvard University

Liane R. Houghtalin, Professor of Classics (1995, 2009)
A.B., University of Michigan at Ann Arbor; M.A., Ph.D., Bryn Mawr College

Daniel J. Hubbard, Associate Professor of Accounting (1999, 2006)
A.B., Georgia State University; B.S., Georgia Institute of Technology; M.A., Middlebury College; M.Acct., Ph.D., Virginia Polytechnic Institute & State University

Jane L. Huffman, Associate Professor of Education (2007, 2007)
B.S., M.S., Radford University; Ed.D., Virginia Polytechnic Institute & State University

W. Shawn Humphrey, Associate Professor of Economics (2005, 2010)
B.A., Earlham College; M.A., Virginia Commonwealth University; M.A., Ph.D., Washington University

Debra L. Hydorn, Professor of Mathematics (1994, 2006)
B.S., University of Michigan at Ann Arbor; M.S., University of Texas at San Antonio; Ph.D., University of Michigan at Ann Arbor

Christy K. Irish, Assistant Professor of Education (2016, 2017)
B.A., University of San Diego; M.Ed., San Diego State University; Ph.D., George Mason University

Jason C. James, Associate Professor of Anthropology (2005, 2011)
B.A., Boston University; M.A., Ph.D., University of California at San Diego

Melissa C. Jenkins, Assistant Professor of Education (2019, 2020)
B.A., George Mason University; M.S., Old Dominion University; Ph.D., George Mason University

Rosemary K. Jesionowski, Associate Professor of Art (2008, 2013)
BFA, Ohio University; MFA, Indiana University

Elizabeth A. Johnson-Young, Assistant Professor of Communication (2015, 2015)
B.A., University of North Carolina at Greensboro; M.A., Virginia Polytechnic Institute and State University; Ph.D., North Carolina State University

Marcus N. Kahn, Senior Lecturer in Athletics, Health, and Physical Education (2014, 2014)
B.A., University of Redlands; M.Ed., Wesley College

Peter S. Kelly, Professor of Education (2017, 2017)
B.S., M.S., Ph.D., University of Kansas
B.A., M.A., Ph.D., The Catholic University of America

J. Larry Lehman, Professor of Mathematics (1986, 1998)
B.A., Eastern Mennonite College; Ph.D., University of Virginia

Jason A. Kilby, Senior Lecturer in Athletics, Health, and Physical Education (2011, 2020)
B.S., M.Ed., Frostburg State University

Marcus L. Leppanen, Assistant Professor of Psychology (2020, 2020)
B.A., University of Wisconsin at Milwaukee; M.S., Ph.D., University of Louisville

Nora Huijung Kim, Associate Professor of Sociology (2009, 2015)
B.S., Korea University (South Korea); M.S., Ph.D., University of Wisconsin at Madison

Janie Lee, Associate Professor of Linguistics (2011, 2017)
B.A., Ewha Women's University (South Korea); M.A., Ph.D., University of California at Santa Barbara

Emile J. Lester, Professor of Political Science (2006, 2019)
B.A., The George Washington University; M.Sc., London School of Economics; Ph.D., University of Virginia

Benjamin J. LaBreche, Associate Professor of Computer Science (2014, 2020)
B.A., Drew University; Ph.D., Kansas State University

Andrew M. Marshall, Associate Professor of Computer Science (2014, 2020)
B.S., M.S., Ph.D., Rensselaer Polytechnic Institute

John S. Marsh, Associate Professor of Management (2013, 2019)
B.S., M.S., Ph.D., Rensselaer Polytechnic Institute

Jangwoon (Leo) Lee, Professor of Mathematics (2008, 2020)
B.S., Kangnam University (South Korea); M.S., Sogang University (South Korea); Ph.D., Iowa State University

Kristin L. Marsh, Professor of Sociology (2000, 2019)
B.A., M.A., Georgia State University; Ph.D., Emory University

Donghyun (Don) Lee, Assistant Professor of Economics (2015, 2015)
B.S., Arizona State University; M.S., University of Wisconsin at Madison; Ph.D., University of Oregon

Varun Suresh Makhija, Assistant Professor of Physics (2019, 2019)
B.A., Drew University; Ph.D., Kansas State University

Janie Lee, Associate Professor of Linguistics (2011, 2017)
B.A., Ewha Women's University (South Korea); M.A., Ph.D., University of California at Santa Barbara

Spencer J. Lacina, Associate Professor of Social Work (2013, 2013)
B.A., University of Michigan; M.A., University of California at Los Angeles; Ph.D., Rutgers University
B.S., New Mexico State University; M.S., Bowling Green State University; Ph.D., State University of New York at Albany

Leslie E. Martin, Associate Professor of Sociology (2007, 2012)
B.A., The College of William and Mary; M.A., Temple University; Ph.D., Emory University

Melissa Martinez, Assistant Professor of Political Science (2019, 2020)
B.A., St. Mary’s University; M.A., Ph.D., University of North Texas

Maria Isabel Martinez-Mira, Associate Professor of Spanish (2005, 2011)
B.A., University of Murcia (Spain); M.A., Ph.D., University of Illinois at Urbana-Champaign

Mary Elizabeth S. Mathews, Professor of Religion (2000, 2017)
A.B., The College of William and Mary; M.A., Ph.D., University of Virginia

Maya Mathur, Professor of English (2006, 2019)
B.A., St. Stephen’s College; M.A., Ph.D., University at Buffalo, The State University of New York

Jason P. Matzke, Professor of Philosophy (2007, 2017)
B.S., Ball State University; MAIS, Oregon State University; M.A., Ph.D., Michigan State University

Marco Millones Mayer, Associate Professor of Geography (2016, 2020)
B.A., Pontificia Universidad Católica de Peru; M.A., University of Miami; Ph.D., Clark University

Marie E. McAllister, Professor of English (1998, 2009)
B.A., Yale University; Ph.D., Princeton University

Christine A. McBride, Professor of Psychology (1994, 2006)
B.A., University of Portland; M.A., Ph.D., University of California at Riverside

Venitta C. McCall, Professor of Education (1980, 2005)
B.S., Niagara University; MBA, University of North Florida; Ed.D, Virginia Polytechnic Institute & State University

Jeffery W. McClurken, Professor of History (1999, 2013)
B.A., Mary Washington College; M.A., Ph.D., The Johns Hopkins University

Kevin J. McCluskey, Associate Professor of Theatre (2001, 2007)
BFA, University of South Dakota; MFA, Indiana University; MLS, Southern Connecticut State University

Pamela S. McCullough, Lecturer in Nursing (2014, 2018)
BSN, MSN., The Catholic University of America; DNP, Old Dominion University

Jonathon F. McMillan, Associate Professor of Art (2011, 2017)
BFA, James Madison University; MFA, Southern Illinois University at Edwardsville

Lauren K. McMillan, Assistant Professor Historic Preservation (2015, 2017)
B.A., University of Mary Washington; M.A., East Carolina University; Ph.D., University of Tennessee

Keith E. Mellinger, Professor of Mathematics (2003, 2014)
B.S., Millersville University; M.S., Ph.D., University of Delaware

Laura H. Mentore, Associate Professor of Anthropology (2010, 2017)
B.A., University of Virginia; Ph.D., University of Cambridge

Nina Mikhailovsky, Professor of Philosophy (2006, 2006)

B.A., Boston University; M.A., Ph.D., Georgetown University

Krystyn R. Moon, Professor of History (2006, 2017)
B.A., Pomona College; M.A., Ph.D., The Johns Hopkins University

Caitlin E. Moore, Senior Lecturer in Athletics, Health, and Physical Education (2013, 2018)
B.S., MBA, University of Mary Washington

Sarah A. Morealli, Senior Lecturer in Environmental Sciences (2013, 2018)
B.S., Slippery Rock University; M.S., University of Pittsburgh

John T. Morello, Professor of Communication (1989, 1996)
A.B., The College of William and Mary; M.A., Northern Illinois University; Ph.D., Wayne State University

Ginny R. Morris, Assistant Professor of Biology (2019, 2019)
B.S., Gonzaga University; Ph.D., University of New Mexico

Joseph W. Nicholas, Associate Professor of Geography (1991, 1997)
B.A., Bemidji State University; M.S., University of North Dakota; Ph.D., University of Georgia

B.A., St. Olaf College; M.A., M. Phil., Ph.D., Yale University

Marjorie A. Och, Professor of Art (1994, 2008)
B.A., Towson State University; M.A., University of Delaware; Ph.D., Bryn Mawr College

Deborah A. O’Dell, Professor of Biology (1992, 2016)
B.S., Ursinus College; Ph.D., State University of New York at Stony Brook

Timothy M. O’Donnell, Professor of Communication (1999, 2011)
B.A., M.A., Wake Forest University; Ph.D., University of Pittsburgh

E. Davis Oldham, Associate Professor of Chemistry (2013, 2019)
B.A., Lawrence University; Ph.D., University of Illinois at Urbana-Champaign

B.A., Universidad Autonoma de Nuevo Leon (Mexico); M.A., University of North Dakota; M.A., George Mason University; Ph.D., The Catholic University of America

B.A., Wellesley College; MBA, Columbia University; M.A., University of Maryland

Erin N. Palmwood, Assistant Professor of Psychology (2020, 2020)
B.S., University of Mary Washington; M.A., Ph.D., University of Delaware

Judith A. Parker, Professor of Linguistics (1987, 2008)
B.A., Sarah Lawrence College; M.A., Ph.D., Brown University

Melina A. Patterson, Associate Professor of Geography (2003, 2010)
B.A., Pitzer College; M.A., Ph.D., Rutgers University

Kelly W. Perkins, Senior Lecturer in Mathematics (2015, 2020)
B.S., Rice University; J.D., University of Houston Law School; M.S., Virginia Commonwealth University

Angela L. Pitts, Professor of Classics (2002, 2016)
B.A., Ohio University; M.A., Ph.D., University of Wisconsin at Madison

Jennifer A. Polack, Professor of Computer Science (1998, 2010)
B.S., University of Scranton; M.S., Pace University; Ph.D., University of South Florida

Allyson M. Poska, Professor of History (1992, 2004)
B.A., The Johns Hopkins University; M.A., Brown University; Ph.D., University of Minnesota at Minneapolis

Scott M. Powers, Professor of French (2002, 2017)
B.S. Ed., Arizona State University; M.A., Ph.D., Tulane University

Colin T. Rafferty, Associate Professor of English (2008, 2014)
B.A., Kansas State University; M.A., Iowa State University; MFA, University of Alabama

P. Anand Rao, Professor of Communication (2002, 2016)
B.A., M.A., Ph.D., University of Pittsburgh

Veena Ravishankar, Assistant Professor of Computer Science (2018, 2018)
B.E., Visveswaraiyah Technological University (India); M.S., Ph.D., State University of New York at Albany

Margaret A. Ray, Professor of Economics (1993, 2005)
B.S., Oklahoma State University; M.A., Western Illinois University; Ph.D., University of Tennessee

Randall D. Reif, Associate Professor of Chemistry (2014, 2020)
B.A., St. Mary's College of Maryland; Ph.D, Texas Tech University

Michael J. Reno, Lecturer in Philosophy (2015, 2018)
B.S., Illinois State University; M.A., Ph.D., Michigan State University

David A. Rettinger, Professor of Psychology (2006, 2019)
B.A., University of Michigan at Ann Arbor; M.A., Ph.D., University of Colorado at Boulder

Gary N. Richards, Professor of English (2008, 2017)
B.A., Trinity University; M.A., Ph.D., Vanderbilt University

Lynne D. Richardson, Professor of Marketing (2011, 2011)
BBA, University of Montevallo; MBA, University of Alabama at Birmingham; Ph.D., University of Alabama

Brian R. Rizzo, Associate Professor of Geography (2007, 2011)
B.A., M.A., University of Western Ontario; Ph.D., University of Virginia

Jason M. Robinson, Associate Professor of Art (2014, 2020)
B.A., Pennsylvania State University; MFA, Virginia Commonwealth University

Joseph M. Romero, Professor of Classics (2000, 2015)
B.A., Mary Washington College; Ph.D., Duke University

Marcel P. Rotter, Associate Professor of German (2004, 2010)
M.A., Pädagogische Hochschule Erfurt; Ph.D., University of Wisconsin at Madison

Farhang Rouhani, Director of Geography (2001, 2015)
B.A., University of California at Berkeley; M.A., Ph.D., University of Arizona

Robert S. Rycroft, Professor of Economics (1977, 1989)
B.A., The College of William and Mary; M.A., Ph.D., University of Maryland

Christopher O. Ryder, Associate Professor of Music (2018, 2018)
B.A., Mary Washington College; M.A., George Mason University; DMA, Shenandoah Conservatory of Shenandoah University

Jose A. Sainz, Associate Professor of Spanish (2001, 2007)
B.A., Universidad de Deusto (Spain); M.A., West Virginia University; Ph.D., University of Maryland

Sayan Sarkar, Assistant Professor of Accounting (2016, 2016)
B.A., Delhi University; M.A., Sheffield Hallam University (United Kingdom); MBA, Ph.D., University of Texas at El Paso

Mara N. Scanlon, Professor of English (1999, 2011)
B.A., University of Virginia; M.A., Ph.D., University of Wisconsin at Madison

Holly H. Schiffrin, Professor of Psychology (2005, 2017)
B.S., Mary Washington College; M.S., Ph.D., University of Miami

Debra J. Schleef, Professor of Sociology (1999, 2011)
B.A., Indiana University at Indianapolis; M.A., Ph.D., Northwestern University

Federico Schneider, Associate Professor of Italian (2004, 2009)
Diploma, Berklee College of Music; M.A., Boston College; Ph.D., Yale University

Kyle T. Schultz, Associate Professor of Education (2017, 2017)
B.A., MAT, Miami University; Ph.D., University of Georgia

Jessica Zeitze Self, Assistant Professor of Computer Science (2016, 2016)
B.S., University of Mary Washington; M.S., Ph.D., Virginia Polytechnic Institute & State University

Jason R. Sellers, Associate Professor of History (2011, 2019)
B.A., University of California at Berkeley; M.A., Ph.D., University of California at Irvine

Marie P. Sheekels, Professor of Education and Mathematics (1981, 1999)
B.A., Saint Mary's College; M.A., The Pennsylvania State University; Ph.D., University of Maryland

Ranjit Singh, Associate Professor of Political Science (2004, 2010)
B.A., Mary Washington College; M.A., Georgetown University; Ph.D., University of Virginia

Kelli M. Slunt, Professor of Chemistry (1995, 2008)
B.S., Mary Washington College; Ph.D., University of Virginia

Andréa D. Livi Smith, Professor of Historic Preservation (2008, 2020)
B.A., Brown University; M.S., University of Vermont; Ph.D., University of Maryland

Michael G. Spencer, Associate Professor of Historic Preservation (2009, 2015)
B.A., Mary Washington College; MHP, University of Kentucky

Debra J. Schleef, Associate Professor of Computer Science (2016, 2016)
B.S., University of Mary Washington; M.S., Ph.D., Virginia Polytechnic Institute & State University

Ranjit Singh, Associate Professor of Political Science (2004, 2010)
B.A., Mary Washington College; M.A., Georgetown University; Ph.D., University of Virginia

Michael G. Spencer, Associate Professor of Historic Preservation (2009, 2015)
B.A., Mary Washington College; MHP, University of Kentucky

B.S., Garhwal University (India); MBA, Jackson State University; DBA, University of Surrey (United Kingdom)

W. David Stahlman, Associate Professor of Psychology (2012, 2018)
B.A., Franklin and Marshall College; M.A., Ph.D., University of California at Los Angeles

Emily M. Stanley, Assistant Professor of Psychology (2016, 2016)
B.A., Trinity University; M.A., Ph.D., University of Delaware

Michael C. Stebar, Senior Lecturer in Biological Sciences (2014, 2020)
B.S., The College of William and Mary; M.T., University of Virginia
Hilary E. Stebbins, Associate Professor of Psychology (2010, 2016)
B.S., Mary Washington College; Ph.D., Brown University

Debra C. Steckler, Associate Professor of Psychology (1982, 1990)
B.A., Butler University; M.S., Ph.D., University of Georgia

Jesse J. Stomme, Senior Lecturer in English, Linguistics, and Communication (2019, 2019)
B.A., M.A., Ph.D., University of Colorado at Boulder

Gregg Stull, Professor of Theatre (1991, 2005)
B.A., Mary Washington College; M.A., University of Maryland

Sushma Subramanian, Assistant Professor of Journalism (2015, 2015)
B.A., University of Southern California; M.S., Columbia University

Suzanne Sumner, Professor of Mathematics (1992, 2004)
B.S., University of North Carolina at Chapel Hill; M.S., Ph.D., North Carolina State University

B.S., Allegheny College; M.S., California University of Pennsylvania

Melanie D. Szulczewski, Associate Professor of Environmental Science (2008, 2014)
B.A., Cornell University; M.S., University of Wisconsin at Madison

B.S., Radford University

Abbie M. Tomba, Associate Professor of Biology (2006, 2012)
B.S., M.S., Bowling Green State University; Ph.D., Auburn University

Cristina Turdean, Associate Professor of Historic Preservation (2011, 2017)
B.S., M.S., The Polytechnic Institute of Cluj-Hapoca (Romania); M.A., State University of New York at Oneonta; M.A., Ph.D., University of Delaware

Clarence W. Tweedy, III, Associate Professor of English (2006, 2013)
B.A., Virginia Military Institute; M.A., Ph.D., University of Kentucky

Craig R. Vasey, Professor of Philosophy (1986, 1999)
B.A., Towson State College; Doctorate, Université de Paris; Ph.D., Brown University

Jennifer D. Walker, Associate Professor of Education (2014, 2020)
B.S., University of Mary Washington; M.Ed., Ph.D., George Mason University

Robert Parrish Waters, Assistant Professor of Biology (2014, 2015)
B.A., University of North Carolina at Asheville; Ph.D., University of South Dakota

Melissa S. Wells, Assistant Professor of Education (2017, 2017)
B.A., M.A., Furman University; Ph.D., University of South Carolina

Robert L. Wells, Assistant Professor of Music (2017, 2019)
B.M., Furman University; M.A., M.M., Ph.D., Eastman School of Music

Zachary N. Whalen, Associate Professor of English (2008, 2014)
B.A., Carson-Newman College; M.A., Ph.D., University of Florida

Charles E. Whipkey, Associate Professor of Geology (2000, 2006)
B.S., The Pennsylvania State University; M.S., North Carolina State University; Ph.D., University of Pittsburgh

Marc A. Williams, Assistant Professor of Theatre (2020, 2020)
B.A., University of Mary Washington; MFA, University of North Carolina at Greensboro

Laura C. Wilson, Associate Professor of Psychology (2013, 2019)
B.S., Virginia Polytechnic Institute & State University; M.A., The College of William and Mary; Ph.D., Virginia Polytechnic Institute & State University

B.A., Randolph-Macon College; M.Ed., National-Louis University

Grant R. Woodwell, Professor of Geology (1986, 1998)
B.A., Columbia University; M.Phil., Ph.D., Yale University

April N. Wynn, Assistant Professor of Biology (2015, 2015)
B.S., McMurry University; M.S., Texas A & M University; Ph.D., North Carolina State University

Ping Yin, Associate Professor of Geography (2014, 2019)
B.E., M.E., Tsinghua University (China); Ph.D., University of Georgia

Eun Jung [Kelly] Yoon, Assistant Professor of Marketing (2019, 2019)
BBA, MBA, Kyung Hee University (South Korea); M.S., University of Florida; Ph.D., University of California at Irvine

Ronald A. Zacharski, Associate Professor of Computer Science (2007, 2013)
BFA, University of Wisconsin at Milwaukee; Ph.D., University of Minnesota

Xiaofeng Zhao, Professor of Management Science (2007, 2019)
B.S., Xian Jiaotong University (China); M.Phil., Northwestern University; MBA, Indiana University of Pennsylvania; Ph.D., University of Tennessee

Faculty Awards
Six University awards are presented each year to outstanding members of the faculty. The first four awards listed are presented at the Commencement ceremonies. The “Topher” Bill Award is presented at the opening general faculty meeting at the start of each fall semester. The Waple Faculty Professional Achievement Award, initiated in 2013, is presented at the April general meeting of the faculty.

Grellet C. Simpson Award
Established in 1972, the Grellet C. Simpson Award reflects the importance placed by the University on its primary mission as an undergraduate, teaching institution. Named for former President Grellet C. Simpson, this award was made possible by an anonymous donor and is presented to a faculty member in recognition of excellence in undergraduate teaching. The faculty rank shown is the person’s rank at the time of the award.

1972 — Carmen L. Rivera, Professor of Modern Foreign Languages
1973 — Sidney H. Mitchell, Professor of English
1974 — Anna S. Hoye, Professor of Biology
1975 — Earl G. Insley, Professor of Chemistry
1976 — Donald E. Glover, Professor of English
1977 — Glen R. Thomas, Professor of American Studies
Faculty Awards

1978 — Nancy H. Mitchell, Professor of English
1979 — Elizabeth A. Clark, Professor of Religion
1980 — Janet G. Zeleznock, Associate Professor of Mathematical Sciences
1981 — Arthur L. Tracy, Associate Professor of History
1982 — Mary W. Pinschmidt, Professor of Biology
1983 — Joseph C. DiBella, Associate Professor of Art
1984 — Bernard L. Mahoney, Jr., Professor of Chemistry
1985 — Susan J. Hanna, Professor of English
1986 — George M. Van Sant, Professor of Philosophy
1987 — Marshall E. Bowen, Professor of Geography
1988 — Joanna L. Reynolds, Associate Professor of Modern Foreign Languages
1989 — Roger J. Bourdon, Professor of History
1990 — Michael J. Joyce, Associate Professor of Dramatic Arts
1991 — Richard M. Zeleznock, Assistant Professor of Mathematics
1992 — David W. Cain, Professor of Religion
1993 — Sammy R. Merrill, Professor of Modern Foreign Languages
1994 — William B. Crawley, Jr., Distinguished Professor of History
1995 — Lewis P. Fickett, Jr., Distinguished Professor of Political Science
1996 — Carol S. Manning, Professor of English
1997 — Topher Bill, Professor of Psychology
1998 — Bulent I. Atalay, Professor of Physics
1999 — Steven A. Greenlaw, Associate Professor of Economics
2000 — William Kemp, Professor of English
2001 — Claudio F. Ascani, Professor of Italian
2002 — Steve R. Hampton, Associate Professor of Psychology
2003 — Rosemary Barra, Professor of Biology
2004 — John H. Reynolds, Professor of Computer Science
2005 — David J. Long, Professor of Music
2006 — John M. Kramer, Distinguished Professor of Political Science
2007 — Thomas G. Moeller, Professor of Psychology
2008 — Margaret Huber, Distinguished Professor of Anthropology
2009 — Jean Ann Dabb, Associate Professor of Art History
2010 — Gregg Stull, Professor of Theatre
2011 — Teresa A. Kennedy, Professor of English
2012 — Dawn S. Bowen, Professor of Geography
2013 — Joella C. Killian, Professor of Biology
2014 — Mara N. Scanlon, Professor of English
2015 — Liane R. Houghtalin, Professor of Classics
2016 — Marie E. McAllister, Professor of English
2017 — Jonathon F. McMillan, Assistant Professor of Art
2018 — Robert R. Barr, Associate Professor of Political Science
2019 — Leslie E. Martin, Associate Professor of Sociology

Graduate Faculty Award
Established in 2003, this award recognizes an exceptional full-time faculty member who demonstrates excellence in graduate teaching and professional leadership in a graduate program. The person selected must have served in a full-time position at the University for at least two years. The faculty rank shown is the person's rank at the time of the award.

2003 — Andrew Blair Staley, Assistant Professor of Leadership and Management
2004 — Jo Tyler, Associate Professor of Linguistics and Education
2005 — Alan G. Heffner, Professor of Leadership and Management
2006 — Norah S. Hooper, Associate Professor of Education
2007 — Gail D. Brooks, Associate Professor of Computer Information Systems
2008 — Brenda E. Vogel, Professor of Education
2009 — Kimberley L. Kinsley, Assistant Professor of Leadership and Management
2010 — Suzanne Houff, Professor of Education
2011 — Laurie B. Abeel, Associate Professor of Education
2012 — Mukesh Srivastava, Associate Professor of Management Information Systems
2013 — Louis A. Martinette, Associate Professor of Marketing
2014 — Beverly D. Epps, Associate Professor of Education
2015 — G. Robert Greene, Senior Lecturer in Management
2016 — John P. Broome, Assistant Professor of Education
2017 — Patricia E. Reynolds, Associate Professor of Education
2018 — Jane L. Huffman, Associate Professor of Education
2019 — Woodrow D. Richardson, Professor of Management

Alumni Association Outstanding Young Faculty Member Award
The Alumni Association Outstanding Young Faculty Member Award, established in 1989, recognizes the achievement and contribution of a faculty member who has been at the University from two to five years. The faculty rank shown is the person's rank at the time of the award.

2003 — Andrew Blair Staley, Assistant Professor of Leadership and Management
2004 — Jo Tyler, Associate Professor of Linguistics and Education
2005 — Alan G. Heffner, Professor of Leadership and Management
2006 — Norah S. Hooper, Associate Professor of Education
2007 — Gail D. Brooks, Associate Professor of Computer Information Systems
2008 — Brenda E. Vogel, Professor of Education
2009 — Kimberley L. Kinsley, Assistant Professor of Leadership and Management
2010 — Suzanne Houff, Professor of Education
2011 — Laurie B. Abeel, Associate Professor of Education
2012 — Mukesh Srivastava, Associate Professor of Management Information Systems
2013 — Louis A. Martinette, Associate Professor of Marketing
2014 — Beverly D. Epps, Associate Professor of Education
2015 — G. Robert Greene, Senior Lecturer in Management
2016 — John P. Broome, Assistant Professor of Education
2017 — Patricia E. Reynolds, Associate Professor of Education
2018 — Jane L. Huffman, Associate Professor of Education
2019 — Woodrow D. Richardson, Professor of Management
1989 — James E. Goehring, Assistant Professor of Religion
1990 — George King, III, Associate Professor of Physics
1991 — Grant R. Woodwell, Assistant Professor of Geology
1992 — Larry W. Penwell, Assistant Professor of Psychology
1993 — John T. Morello, Associate Professor of Speech
1994 — Suzanne Sumner, Assistant Professor of Mathematics
1995 — Gregg Stull, Assistant Professor of Theatre
1996 — Janusz Konieczny, Assistant Professor of Mathematics
1997 — Mehdi Aminrazavi, Assistant Professor of Philosophy and Religion
1998 — W. Gardner Campbell, Assistant Professor of English
1999 — Christine A. McBride, Assistant Professor of Psychology
2000 — Kelli M. Slunt, Assistant Professor of Chemistry
2001 — Stephen J. Farnsworth, Assistant Professor of Political Science
2002 — Carole A. Garmon, Assistant Professor of Art
2003 — Claudia Emerson, Associate Professor of English
2004 — José Angel Sainz, Assistant Professor of Spanish
2005 — William B. Crawley, Jr., Distinguished Professor of History
2006 — Claudia Emerson, Associate Professor of English
2007 — Kenneth D. Machande, Assistant Professor of Business Administration
2008 — W. Brown Morton III, Professor of Historic Preservation
2009 — Jean Ann Dabb, Associate Professor of Art History
2010 — Stephen C. Davies, Assistant Professor of Computer Science
2011 — Chad M. Murphy, Assistant Professor of Political Science
2012 — Gary N. Richards, Assistant Professor of English
2013 — Daniel J. Hubbard, Associate Professor of Accounting
2014 — Lynn O. Lewis, Professor of Biology
2015 — Maria Isabel Martinez-Mira, Associate Professor of Spanish
2016 — Dawn S. Bowen, Professor of Geography
2017 — Surupa Gupta, Associate Professor of Political Science
2018 — Smita Jain Oxford, Senior Lecturer in Business Communication
2019 — Jeremy G. Larochelle, Professor of Spanish

J. Christopher "Topher" Bill Faculty Service Award
The Topher Bill Award recognizes outstanding faculty service. Nominees must have served a minimum of seven years as a member of the Mary Washington teaching faculty and must have been heavily and consistently involved in a variety of service roles through department, college, university, and/or community service activities. This award is presented annually at the opening general faculty meeting in August. The faculty rank shown is the person's rank at the time of the award.

1999 — Stephen J. Farnsworth, Assistant Professor of Political Science
2000 — Werner Wieland, Professor of Biology
2001 — Erin H. Fouberg, Assistant Professor of Geography
2002 — Topher Bill, Professor of Psychology
2003 — Gregg Stull, Associate Professor of Theatre
2004 — José Angel Sainz, Assistant Professor of Spanish
2005 — William B. Crawley, Jr., Distinguished Professor of History
2006 — Claudia Emerson, Associate Professor of English
2007 — Kenneth D. Machande, Assistant Professor of Business Administration
2008 — W. Brown Morton III, Professor of Historic Preservation
2009 — Jean Ann Dabb, Associate Professor of Art History
2010 — Stephen C. Davies, Assistant Professor of Computer Science
2011 — Chad M. Murphy, Assistant Professor of Political Science
2012 — Gary N. Richards, Assistant Professor of English
2013 — Daniel J. Hubbard, Associate Professor of Accounting
2014 — Lynn O. Lewis, Professor of Biology
2015 — Maria Isabel Martinez-Mira, Associate Professor of Spanish
2016 — Dawn S. Bowen, Professor of Geography
2017 — Surupa Gupta, Associate Professor of Political Science
2018 — Smita Jain Oxford, Senior Lecturer in Business Communication
2019 — Jeremy G. Larochelle, Professor of Spanish

Mary W. Pinschmidt Award
Members of the senior class select the winner of the Mary W. Pinschmidt award. Established in 1999 in honor of a long-time professor of biology, this award recognizes the faculty member who seniors select as the person they will most likely remember as the one who had the greatest impact on their lives. The faculty rank shown is the person's rank at the time of the award.

1999 — Stephen J. Farnsworth, Assistant Professor of Political Science
2000 — Werner Wieland, Professor of Biology
2001 — Erin H. Fouberg, Assistant Professor of Geography
2002 — Topher Bill, Professor of Psychology
2003 — Gregg Stull, Associate Professor of Theatre
2004 — José Angel Sainz, Assistant Professor of Spanish
2005 — William B. Crawley, Jr., Distinguished Professor of History
2006 — Claudia Emerson, Associate Professor of English
2007 — Kenneth D. Machande, Assistant Professor of Business Administration
2008 — W. Brown Morton III, Professor of Historic Preservation
2009 — Jean Ann Dabb, Associate Professor of Art History
2010 — Stephen C. Davies, Assistant Professor of Computer Science
2011 — Chad M. Murphy, Assistant Professor of Political Science
2012 — Gary N. Richards, Assistant Professor of English
2013 — Daniel J. Hubbard, Associate Professor of Accounting
2014 — Lynn O. Lewis, Professor of Biology
2015 — Maria Isabel Martinez-Mira, Associate Professor of Spanish
2016 — Dawn S. Bowen, Professor of Geography
2017 — Surupa Gupta, Associate Professor of Political Science
2018 — Smita Jain Oxford, Senior Lecturer in Business Communication
2019 — Jeremy G. Larochelle, Professor of Spanish

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2004 — José Angel Sainz, Assistant Professor of Spanish
2005 — William B. Crawley, Jr., Distinguished Professor of History
2006 — Claudia Emerson, Associate Professor of English
2007 — Kenneth D. Machande, Assistant Professor of Business Administration
2008 — W. Brown Morton III, Professor of Historic Preservation
2009 — Jean Ann Dabb, Associate Professor of Art History
2010 — Stephen C. Davies, Assistant Professor of Computer Science
2011 — Chad M. Murphy, Assistant Professor of Political Science
2012 — Gary N. Richards, Assistant Professor of English
2013 — Daniel J. Hubbard, Associate Professor of Accounting
2014 — Lynn O. Lewis, Professor of Biology
2015 — Maria Isabel Martinez-Mira, Associate Professor of Spanish
2016 — Dawn S. Bowen, Professor of Geography
2017 — Surupa Gupta, Associate Professor of Political Science
2018 — Smita Jain Oxford, Senior Lecturer in Business Communication
2019 — Jeremy G. Larochelle, Professor of Spanish
2009 — Ana G. Chichester, Associate Professor of Spanish
2010 — Kelli M. Slunt, Professor of Chemistry
2011 — Ernest C. Ackermann, Professor of Computer Science
2012 — Jeffrey W. McClurken, Associate Professor of History
2013 — Craig R. Vasey, Professor of Philosophy
2014 — Louis A. Martinette, Associate Professor of Marketing
2015 — Venitta C. McCall, Professor of Education
2016 — Debra J. Schleef, Professor of Sociology
2017 — Kenneth D. Machande, Associate Professor of Accounting
2018 — Dana S. Hall, Associate Professor of Athletics, Health, and Physical Education
2019 — Jacqueline Gallagher, Associate Professor of Geography

Waple Faculty Award for Professional Achievement
Established in 2013, this award is based on the significance/impact of the faculty nominee's scholarly, creative, and/or professional achievement(s). All full-time, continuing faculty with at least seven years employment at UMW are eligible. Achievement(s) must have been undertaken during the nominee's years at UMW.

2013 — Claudia Emerson, Professor of English
2014 — Mindy J. Erchull, Associate Professor of Psychology
2015 — Christopher T. Kilmartin, Professor of Psychology
2016 — Stephen P. Hanna, Professor of Geography
2017 — Marie P. Sheckels, Professor of Education and Mathematics
2018 — E. Eric Gable, Professor of Anthropology
2019 — Elizabeth F. Larus, Professor of Political Science

Waple Faculty Award for Professional Achievement
Established in 2013, this award is based on the significance/impact of the faculty nominee's scholarly, creative, and/or professional achievement(s). All full-time, continuing faculty with at least seven years employment at UMW are eligible. Achievement(s) must have been undertaken during the nominee's years at UMW.

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2014 — Mindy J. Erchull, Associate Professor of Psychology
2015 — Christopher T. Kilmartin, Professor of Psychology
2016 — Stephen P. Hanna, Professor of Geography
2017 — Marie P. Sheckels, Professor of Education and Mathematics
2018 — E. Eric Gable, Professor of Anthropology
2019 — Elizabeth F. Larus, Professor of Political Science

Faculty Emeriti
Faculty with emeriti status as conferred by the BOV.

Ernest C. Ackermann, Professor Emeritus of Computer Science
B.A., Montclair State College; M.A., Ph.D., The Pennsylvania State University

Clavio F. Ascari, Professor Emeritus of Italian
Dottore in Lingue e Letterature Moderne, Universit. Bocconi

Bulent I. Atalay, Professor Emeritus of Physics
B.S., M.S., Ph.D., Georgetown University

James E. Baker, Distinguished Professor Emeritus of Music
B.S., M.Ed., Pennsylvania State University; D.M.A., The Catholic University of America

Rosemary Barra, Professor Emerita of Biology
B.S., Duquesne University; Ph.D., Rutgers University

Michael L. Bass, Professor Emeritus of Biology and Environmental Science
A.A., Clinch Valley College; B.S., Virginia Polytechnic Institute & State University; M.S., Medical College of Virginia; Ph.D., Virginia Polytechnic Institute & State University

Rachel J. Benton, Professor Emerita of Health, Physical Education and Recreation
B.A., De Pauw University, M.A., Ph.D., State University of Iowa

J. Christopher Bill, Professor Emeritus of Psychology
B.S., College of the Holy Cross; M.S., University of Bridgeport; Ph.D., Dartmouth College

Julien Binford, Professor Emeritus of Art
Graduate, Art Institute of Chicago; Ryerson Fellowship for study in France; Virginia Museum Senior Fellowship; Rosenwald Fellowship

Roger J. Bourdon, Professor Emeritus of History
B.S, Loyola University of Los Angeles; M.A., Ph.D., University of California at Los Angeles

Marshall E. Bowen, Distinguished Professor Emeritus of Geography
B.Ed., Plymouth Teachers College; M.A., Kent State University; Ph.D., Boston University

Joseph Bozicevic, Professor Emeritus of Modern Foreign Languages
B.S., Juniata College; M.A., Middlebury College; Ph.D., Georgetown University

Juliette Breffort-Blessing, Professor Emerita of Modern Foreign Languages
L. et L., University of Lille; D.E.S., University of Paris; Diplôme de L'Institut d'Études Politiques de Paris; Doct. U., University of Dijon

Gail D. Brooks, Professor Emerita of Management Information Systems
B.S., M.S., Virginia Polytechnic Institute & State University; Ph.D., George Mason University

Nathaniel Brown, Professor Emeritus of English
B.A., Princeton University; M.A., Syracuse University; Ph.D., Columbia University

Stanley F. Bulley, Professor Emeritus of Music

David W. Cain, Distinguished Professor Emeritus of Religion
A.B., Princeton University; B.D., Yale University; M.A., Ph.D., Princeton University

Otho C. Campbell, Associate Professor Emeritus of History
B.A., University of Richmond; M.A., American University; Ph.D., University of Virginia

Manning G. Collier, Associate Professor Emeritus of Mathematics
B.S., Furman University; M.S., Ph.D., Vanderbilt University

Herbert L. Cover, Professor Emeritus of Chemistry
B.S., M.S., Ph.D., University of Virginia

William B. Crawley, Jr., Distinguished Professor Emeritus of History
B.A., Hampden-Sydney College; M.A., Ph.D., University of Virginia

Timothy A. Crippen, Professor Emeritus of Sociology
A.B., Indiana University; M.A., Ph.D., University of Texas at Austin

Judith A. Crissman, Professor Emerita of Chemistry
B.A., Thiel College; Ph.D., University of North Carolina at Chapel Hill

Steven L. Czarsty, Professor Emeritus of Business Administration
B.S., B.A., University of Hartford; M.B.A. University of Connecticut; D.B.A. George Washington University

JeanAnn Dabb, Professor Emerita of Art History
B.A., Weber State College; M.A., University of Massachusetts at Amherst; Ph.D., University of Michigan at Ann Arbor

Fredrick Davidson, Professor Emeritus of Business Administration
B.S., Texas A & M University; MBA, Ph.D., University of Pittsburgh

Galen F. deGraff, Professor Emeritus of Management
B.S., MBA, University of Virginia; Ph.D., The George Washington University

Daniel A. Dervin, Professor Emeritus of English
B.A., Creighton University; M.A., Ph.D., Columbia University

Joseph C. DiBella, Distinguished Professor Emeritus of Art
B.A., Rutgers College; M.A., MFA, Northern Illinois University

Eileen K. Dodd, Professor Emerita of Psychology
Ph.B., Muhlenburg College; M.A., Ph.D., New York University

Mildred A. Droste, Associate Professor Emerita of Health and Physical Education
B.S., Longwood College; M.Ed., Women's College of the University of North Carolina

Albert G. Duke, Associate Professor Emeritus of Speech
A.B., M.A., Syracuse University

Samuel T. Emory, Jr., Distinguished Professor Emeritus of Geography
A.B., M.A., University of North Carolina; Ph.D., University of Maryland

Lewis P. Fickett, Jr., Distinguished Professor Emeritus of Political Science
A.B., Bowdoin College; L.L.B., M.P.A., Ph.D., Harvard University

Martha V. Fickett, Professor Emerita of Music
B.A., Mary Washington College of the University of Virginia; M.M., University of Michigan at Ann Arbor; Ph.D., The Catholic University of America

Victor A. Fingerhut, Associate Professor Emeritus of Political Science
B.A., M.A., Yale University

Delmont F. Fleming, Professor Emeritus of English
B.A., Eastern Baptist College; M.A., Ph.D., University of Pennsylvania

Stephen W. Fuller, Professor Emeritus of Biology
B.S., Cornell University; Ph.D., University of New Hampshire

James F. Gaines, Professor Emeritus of French
B.A., Michigan State University; M.A., Ph.D., University of Pennsylvania

John K. George, Professor Emeritus of Chemistry
A.B., Columbia University; M.S., University of Connecticut; M.S., Clarkson College; Ph.D., University of Virginia

Kurt M. Glaeser, Associate Professor Emeritus of Athletics, Health, and Physical Education
B.A., Western Maryland College; M.A., Montclair State College

Donald E. Glover, Distinguished Professor Emeritus of English
B.A., The College of William and Mary; M.A., Ph.D., University of Virginia

James E. Goehring, Professor Emeritus of Religion
B.A., University of California at Berkeley; M.A., University of California at Santa Barbara; Ph.D., Claremont Graduate School

Roy M. Gordon, Professor Emeritus of Athletics, Health, and Physical Education
B.A., Harpur College of the State University of New York; M.S., Springfield College

James B. Gouger, Professor Emeritus of Geography
B.A., Montclair State College; M.A., Ph.D., University of Florida

Roy F. Gratz, Distinguished Professor Emeritus of Chemistry
B.S., University of Pittsburgh; A.M., Ph.D., Duke University

Stephen L. Griffin, Professor Emeritus of Art
B.F.A., University of South Dakota; M.F.A., University of Wisconsin at Madison

Dana S. Hall, Associate Professor Emerita of Athletics, Health, and Physical Education
B.S., Frostburg State University; M.Ed., University of Virginia

Anne F. Hamer, Associate Professor Emerita of Music
B.M., University of Michigan; M.M., The Catholic University of America

Steve R. Hampton, Associate Professor Emeritus of Psychology
B.S., University of Houston; M.A., Stephen F. Austin University; Ph.D.,
Northern Illinois University

Susan J. Hanna, Professor Emerita of English
B.A., The Ohio State University; M.A., Ph.D., University of Michigan

Richard E. Hansen, Distinguished Professor Emeritus of English
B.A., M.S., Ph.D., Duke University

Anna Mae Harris, Associate Professor Emerita of Mathematical Sciences
B.A., Mary Washington College; M.A., University of Virginia

Diane F. Hatch, Professor Emerita of Classics
B.A., Sweet Briar College; M.A., Ph.D., University of North Carolina

Sonja Dragomanovic Haydar, Professor Emerita of Dance
Professional Dance Certificate, Zagreb State Opera Ballet School;
Diploma, Meister für Tranz, Berlin; Mozarteum Conservatory of Music,
Salzburg

Rosemary H. Herman, Associate Professor Emerita of Modern Foreign Languages
A.B., Woman's College of the University of North Carolina; M.A., University of North Carolina

Henry W. Hewetson, Professor Emeritus of Economics
B.A., University of Toronto; M.A., University of British Columbia; Ph.D.,
University of Chicago

Julie A. Hodge, Associate Professor Emerita of Theatre
BFA, Northern Kentucky University; MFA, Indiana University

Margaret M. Hofmann, Professor Emerita of Modern Foreign Languages
A.B., Wellesley College; M.A., University of New Hampshire; Ph.D.,
University of Kansas

Miriam B. Hoge, Professor Emerita of Modern Foreign Languages
A.B., Randolph-Macon Women's College; M.A., Ph.D., University of Pennsylvania

Joseph E. Holmes, Associate Professor Emeritus of Mathematical Sciences
B.S., M.S., State University of New York at New Paltz; Ed.D., University of Virginia

Patricia J. Holmes, Associate Professor Emerita of Mathematics
B.A., University of Colorado; M.S., Oregon State University

Suzanne G. Houff, Professor Emerita of Education
B.S., Longwood College; M.Ed., Virginia Commonwealth University; Ed.S.,
The George Washington University; Ph.D., Old Dominion University

Helen M. Housley, Professor Emerita of Theatre
B.A., St. Mary's College; M.A., Western Illinois University; Ph.D., University of Maryland

Anna S. Hoye, Professor Emerita of Biological Sciences
A.B., Lynchburg College; M.S., Ph.D., University of Wisconsin

Margaret Williamson Huber, Distinguished Professor Emerita of Anthropology
B.A., Bryn Mawr College; B.Litt., D.Phil., Oxford University

David E. Hunt, Jr., Professor Emeritus of Theatre
B.A., State University of New York at Buffalo; MFA, University of California
at Los Angeles

Rose Mary Johnson, Professor Emerita of Biological Sciences

A.B., Hood College; M.A., Ph.D., University of Virginia

Thomas L. Johnson, Professor Emeritus of Biological Sciences
B.A., Lynchburg College; M.A., Ph.D., University of Virginia

J. William Kemp, Jr., Professor Emeritus of English
B.A., Millsaps College; M.A., Mississippi State University; Ph.D., University of South Carolina at Columbia

Joella C. Killian, Professor Emerita of Biology
B.A., University of North Carolina at Chapel Hill; M.A., University of North Carolina at Greensboro; Ph.D., North Carolina State University

Christopher T. Kilmartin, Professor Emeritus of Psychology
B.S., M.S., Frostburg State College; M.S., Ph.D., Virginia Commonwealth University

George King, III, Professor Emeritus of Physics
B.A., Talladega College; M.S., Ph.D., Stanford University

Richard J. Krickus, Distinguished Professor Emeritus of Political Science
B.A., The College of William and Mary; M.A., University of Massachusetts;
Ph.D., Georgetown University

Bernard C. Lemoine, Professor Emeritus of Music
B.M., Oberlin Conservatory of Music; M.M., University of Illinois; Ph.D.,
The Catholic University of America

Almont Lindsey, Professor Emeritus of History
B.S., Fairmont State College; M.A., West Virginia University; Ph.D.,
University of Virginia

Stephen L. Lipscomb, Professor Emeritus of Mathematics
B.A., Fairmont State College; M.A., West Virginia University; Ph.D.,
University of Virginia

Kathryn E. Loesser-Casey, Professor Emerita of Biology
B.A., Drew University; Ph.D., Rutgers University and University of Medicine
and Dentistry of New Jersey–Robert Wood Johnson Medical School

David J. Long, Professor Emeritus of Music
B.M., Arizona State University; M.M., DMA, North Texas State University

B. David MacEwen, Professor Emeritus of Psychology
B.A., LeVerne College; M.A., University of California at Los Angeles; Ph.D.,
Arizona State University

Bernard L. Mahoney, Jr., Distinguished Professor Emeritus of Chemistry
B.S., M.S., Boston College; Ph.D., University of New Hampshire

Carol S. Manning, Professor Emerita of English
B.A., Delta State College; M.A., University of Kentucky; Ph.D., State
University of New York at Albany

Louis A. Martinette, Associate Professor Emeritus of Marketing
B.S., Old Dominion University; MBA, Golden Gate University; DBA, Ph.D.,
Nova Southeastern University

Adrienne C. May, Associate Professor Emerita of Education
B.A., MALS, Mary Washington College; Ed.D., University of Virginia

Robert L. McConnell, Professor Emeritus of Geology
B.S., M.S., University of Tennessee; Ph.D., University of California at Santa Barbara

Sammy R. Merrill, Distinguished Professor Emeritus of German
Barbara S. Meyer, Professor Emerita of Art
B.A., Trinity University; M.A., University of Maryland; Ph.D., Johns Hopkins University

Margaret A. Mi, Professor Emerita of Marketing
BBA, MBA, Eastern New Mexico University; Ph.D., Virginia Commonwealth University

Fred E. Miller, Associate Professor Emeritus of Economics
A.B., M.A., Colorado State College of Education

Nancy H. Mitchell, Professor Emerita of English
B.A., Swarthmore College; M.A., Yale University; Ph.D., The Catholic University of America

Sidney H. Mitchell, Professor Emeritus of English
B.A., Swarthmore College; M.A., Ph.D., University of Virginia

Thomas G. Moeller, Professor Emeritus of Psychology
B.A., Marquette University; M.A., Ph.D., University of Iowa

W. Brown Morton, III, Professor Emeritus of Historic Preservation
BAH, University of Virginia; Diplome, Ecole des Beaux Arts

Paul C. Muick, Professor Emeritus of Art
B.F.A., Ohio State University; A.M., University of Chicago; Ph.D., Ohio State University

Lorene C. Nickel, Professor Emerita of Art
B.A., Goshen College; MFA, University of Florida

Vera Niebuhr, Associate Professor Emerita of German
B.A., Douglass College; M.A., Ph.D., University of Wisconsin at Madison

Nikola M. Nikolic, Professor Emeritus of Physics
B.S., Belgrade University; M.A., Ph.D., Columbia University

Denis Nissim-Sabat, Professor Emeritus of Psychology
B.A., Case Western Reserve University; Ph.D., Temple University

Patricia P. Norwood, Professor Emerita of Music
B.M., Wheaton College; M.M., Ph.D., University of Texas at Austin

Cornelia D. Oliver, Distinguished Professor Emerita of Art
B.A., Smith College; A.M., Duke University; Ph.D., The Catholic University of America

Joan T. Olson, Associate Professor Emerita of Sociology
B.A., Wheaton College; M.A., Michigan State University; Ph.D., Northwestern University

Richard P. Palmieri, Professor Emeritus of Geography
B.S., State College at Boston; M.A., University of Texas; Ph.D., University of California at Davis

Mary Jo Parrish, Professor Emerita of Biological Sciences
B.A., M.A., University of North Carolina; Ph.D., University of Virginia

Aniano Pena, Professor Emeritus of Modern Foreign Languages
M.A., Temple University; Ph.D., University of Pennsylvania

Larry W. Penwell, Professor Emeritus of Management and Psychology
B.A., M.A., Ph.D., University of Cincinnati

Mary W. Pinschmidt, Distinguished Professor Emerita of Biological Sciences
A.B., Western Maryland College; A.M., Duke University; Ph.D., Medical College of Virginia

William C. Pinschmidt, Jr., Professor Emeritus of Biological Sciences
B.S., Mount Union College; M.S., Ohio State University; Ph.D., Duke University

William Ray Pope, Associate Professor Emeritus of Psychology
B.S., M.A., Middle Tennessee State University; Ph.D., Virginia Commonwealth University

Alice B. Rabson, Professor Emerita of Psychology
A.B., Cornell University; M.S., Ph.D., Purdue University

Donald N. Rallis, Associate Professor Emeritus of Geography
B.A., B.S., University of the Witwatersrand; M.A., University of Miami; Ph.D., The Pennsylvania State University

Claudia M. Read, Professor Emerita of Health, Physical Education, and Recreation
B.S., Women's College of the University of North Carolina; M.A., New York University

Joanna L. Reynolds, Associate Professor Emerita of Spanish
A.B., Wesleyan College; M.A., Duke University; Ph.D., George Washington University

John H. Reynolds, Professor Emeritus of Computer Science
A.S., Eastern Oklahoma A & M; B.S. Southeastern State College; M.S., State University of New York at Stony Brook

Mary B. Rigsby, Professor Emerita of English
B.A., M.A., Ph.D., Temple University

Carmen L. Rivera, Professor Emerita of Modern Foreign Languages
B.A., University of Puerto Rico; M.A., Florida State College for Women; Ph.D., University of Salamanca

Warren G. Rochelle, Professor Emeritus of English
B.A., University of North Carolina at Chapel Hill; M.S., Columbia University; MFA, Ph.D., University of North Carolina at Greensboro

Key Sun Ryang, Professor Emeritus of History
B.A., Trinity University; M.A., Ph.D., University of Maryland

Douglas W. Sanford, Professor Emeritus of Historic Preservation
B.A., The College of William and Mary; M.A., University of Pennsylvania; M.A., Ph.D., University of Virginia

Raymond B. Scott, Professor Emeritus of Chemistry
B.A., Hartwick College; M.S., Ph.D., University of Cincinnati

Charles M. Sharpless, Professor Emeritus of Chemistry
B.A., The Johns Hopkins University; Ph.D., Duke University

Raman K. Singh, Professor Emeritus of English
B.A., Saint Stephen's College; M.A., Western Michigan University; Ph.D., Purdue University

Paul C. Slayton, Jr., Distinguished Professor Emeritus of Education
B.S., M.Ed., Ed.D., University of Virginia

Charles A. Sletten, Professor Emeritus of Sociology
B.A., University of Virginia; A.M., Ph.D., Harvard University

Roy H. Smith, Distinguished Professor Emeritus of Psychology
B.S., University of Tennessee; Ph.D., University of Pennsylvania

David S. Soper, Associate Professor Emeritus of Athletics, Health, and Physical Education
B.S., M.Ed., Frostburg State College

Stephen P. Stageberg, Associate Professor Emeritus of Economics
BSFS, M.A., Ph.D., Georgetown University

Gary W. Stanton, Associate Professor Emeritus of Historic Preservation
B.A., University of California at Santa Barbara; M.A., Ph.D., Indiana University

Mary Ellen Stephenson, Professor Emerita of Modern Foreign Languages
B.A., Westminster College; M.A., Middlebury College; Ph.D., University of Chicago

Glen R. Thomas, Professor Emeritus of American Studies
B.A., Stanford University; M.A., American University; Ph.D., Emory University

Arthur L. Tracy, Associate Professor Emeritus of History and American Studies
B.A., Barrington College; M.A., Ph.D., American University

Leslie Jo Tyler, Professor Emerita of Linguistics and Education
B.A., Michigan State University; M.Ed., University of Virginia; M.A., Ph.D., University of Florida

Joseph C. Vance, Professor Emeritus of History
B.A., M.A., Ph.D., University of Virginia

George Montgomery Van Sant, Distinguished Professor Emeritus of Philosophy
A.B., St. John's College; M.A., Ph.D., University of Virginia

Brenda E. Vogel, Professor Emerita of Education
BFA, Virginia Commonwealth University; M.A.Ed., Ed.D., Virginia Polytechnic Institute and State University

Richard H. Warner, Professor Emeritus of History
A.B., Dartmouth College; M.A., Ph.D., New York University

Stephan H. Watkins, Professor Emeritus of English
B.A., M.A., Ph.D., Florida State University

Marie A. Wellington, Professor Emerita of French
B.A., Wellesley College; A.M., Ph.D., Harvard University

Katharine F. Wells, Associate Professor Emerita of Health, Physical Education, and Recreation
B.S., New York University; Ed.M., Boston University; M.S., Wellesley College; Ph.D., State University of Iowa

Werner Wieland, Professor Emeritus of Biology
B.S., M.S., Virginia Commonwealth University; Ph.D., Auburn University

Janet F. Wishner, Professor Emerita of Philosophy
B.A., University of Leeds; M.A., Bedford College, University of London; Ph.D., University of Georgia

Lawrence Wishner, Professor Emeritus of Chemistry
B.A., M.A., Ph.D., University of Maryland

Rebecca T. Woosley, Associate Professor Emerita of Health and Physical Education
A.B., Women's College of the University of North Carolina; B.S., Mary Washington College; M.S., Louisiana State University

Marsha F. Zaidman, Associate Professor Emerita of Computer Science
B.S., Brooklyn College; M.S., The George Washington University

Janet G. Zeleznock, Associate Professor Emerita of Mathematics
B.S., Saint Francis College; M.A., Duquesne University

Benjamin F. Zimdars, Professor Emeritus of History
B.A., North Central College; M.A., University of Wisconsin; Ph.D., University of Texas

Paul M. Zisman, Professor Emeritus of Education
B.A., The College of William and Mary; M.A.T., Howard University; Ph.D., The Catholic University of America

Administrators Emeriti

Edward Alvey, Jr., Dean Emeritus and Professor Emeritus of Education
B.A., M.A., Ph.D., University of Virginia; D.Hum.L., Mary Washington College

William M. Anderson, Jr., President Emeritus and Professor Emeritus of Business Administration
B.S., Virginia Commonwealth University; MPA, West Virginia College of Graduate Studies; Ed.D., Virginia Polytechnic Institute & State University

Jack E. Bales, Reference and Humanities Librarian Emeritus
B.A., Illinois College; M.S., University of Illinois at Urbana-Champaign

David S. Berreth, Director of the Gari Melchers Home and Studio Emeritus
B.A., Bowdoin College; M.A., Syracuse University

Meta R. Braymer, Vice President for Economic Development and Regional Engagement Emeritus
B.A., Maryville College; M.A., Ohio State University; Ph.D., University of Tennessee

James H. Croushore, Dean Emeritus and Professor Emeritus of English
B.A., M.A., Lehigh University; Ph.D., Yale University

Philip L. Hall, Vice President for Academic Affairs and Dean Emeritus
A.B., The College of Wooster; S.M., Ph.D., The University of Chicago

Edward H. Hegmann II, Director of Athletics Emeritus and Professor Emeritus of Athletics, Health, and Physical Education
B.S., Bucknell University; M.S., Springfield College; Ed.D., Temple University

Richard V. Hurley, President Emeritus
B.S., Richard Stockton College; M.A., Central Michigan University; D.Hum.L., University of Mary Washington

Robert U. MacDonald, Senior Associate Dean Emeritus
B.A., Carson-Newman College; M.S., Madison College

A. Ray Merchent, Executive Vice President Emeritus and Professor Emeritus of Education
B.A., Emory and Henry College; M.Ed., Ed.D., University of Virginia

John N. Pearce, Director of the James Monroe Museum and Memorial Library, Director of the James Monroe Presidential Center, and University Liaison for the Enchanted Castle Site Emeritus
B.A., Yale University; M.A., University of Delaware
Grellet C. Simpson, President Emeritus and Professor Emeritus of English
B.A., Randolph-Macon College; M.A., Ph.D., University of Virginia; LLD, Randolph-Macon College; Litt.D., Flagler College; D.Hum.L., Mary Washington College

Ronald E. Singleton, Vice President of University Relations and Communications Emeritus
B.A., The College of William and Mary; M.S., Shippensburg University of Pennsylvania; Ph.D., Virginia Commonwealth University

LeRoy S. Strohl, III, University Librarian Emeritus
B.A., Hanover College; M.A., MSLS, University of Kentucky

H. Conrad Warlick, Senior Vice President Emeritus and Professor Emeritus of Education
B.A., Wake Forest College; M.A., University of North Carolina; Ed.D., University of Virginia

Roy B. Weinstock, Vice President for Planning, Assessment, and Institutional Research Emeritus and Professor Emeritus of Psychology
B.A., Brooklyn College; M.A., Hollins College; Ph.D., Syracuse University

Reginald W. Whidden, Dean Emeritus and Professor Emeritus of English
B.A., M.A., McMaster University; Ph.D., Yale University

Martin A. Wilder, Jr., Chief of Staff Emeritus
B.A., M.Ed., Ed.D., University of Virginia
# Academic Calendar

## Fall 2020

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<td>Classes begin</td>
<td>Monday, August 24</td>
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<tr>
<td>Last day to add courses (by 5 p.m.) for 16-week semester and 1st 8-week term</td>
<td>Friday, August 28</td>
</tr>
<tr>
<td>Last day to drop 1st 8-week term course(s) without grade of W</td>
<td>Wednesday, September 2</td>
</tr>
<tr>
<td>Last day to drop 16-week semester course(s) without grade of W</td>
<td>Friday, September 11</td>
</tr>
<tr>
<td>Last day to withdraw from 1st 8-week term course without a grade of F</td>
<td>Friday, September 18</td>
</tr>
<tr>
<td>Last day to change from/to pass/fail grade for 1st 8-week term</td>
<td>Friday, September 18</td>
</tr>
<tr>
<td>Declaration of major is due (B.A./B.S. students only)</td>
<td>Tuesday, September 22</td>
</tr>
<tr>
<td>Classes end for 1st 8-week term</td>
<td>Friday, October 9</td>
</tr>
<tr>
<td>Last day to withdraw from the University (all courses) if registered for a 1st 8-week course (students may not be enrolled for 2nd 8-week term if withdrawing from 1st 8-week term)</td>
<td>Friday, October 9</td>
</tr>
<tr>
<td>Final exams for 1st 8-week term classes</td>
<td>Monday - Friday, October 12 - 16</td>
</tr>
<tr>
<td>Pre-Registration Advising</td>
<td>Wednesday - Friday, October 14 - 23</td>
</tr>
<tr>
<td>2nd 8-week term classes begin</td>
<td>Monday, October 19</td>
</tr>
<tr>
<td>Last day to withdraw from a 16-week course without a grade of F; last day to change from/to pass/fail grade (16-week semester courses)</td>
<td>Friday, October 23</td>
</tr>
<tr>
<td>Last day to add courses for 2nd 8-week term</td>
<td>Friday, October 23</td>
</tr>
<tr>
<td>Advance registration for upcoming Spring semester</td>
<td>Monday - Friday, October 26 - November 6</td>
</tr>
<tr>
<td>Last day to drop a 2nd 8-week term course(s) without grade of W</td>
<td>Wednesday, October 28</td>
</tr>
<tr>
<td>Last day to withdraw from a 2nd 8-week term course without a grade of F</td>
<td>Friday, November 13</td>
</tr>
<tr>
<td>Last day to change from/to pass/fail grade for 2nd 8-week term</td>
<td>Friday, November 13</td>
</tr>
<tr>
<td>Thanksgiving Break begins at 5 p.m.</td>
<td>Friday, November 20</td>
</tr>
<tr>
<td>Thanksgiving Break ends; classes resume</td>
<td>Monday, November 30</td>
</tr>
<tr>
<td>Classes end</td>
<td>Friday, December 4</td>
</tr>
<tr>
<td>Last day to withdraw from the University (if registered for 16-week courses and/or 2nd 8-week term courses if no grade was awarded for a 1st 8-week term course)</td>
<td>Friday, December 4</td>
</tr>
<tr>
<td>Reading Period</td>
<td>Saturday - Sunday, December 5 - 6</td>
</tr>
<tr>
<td>Final Examinations (16-week and 2nd 8-week term)</td>
<td>Monday - Friday, December 7 - 11</td>
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## Spring 2021

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<td>Monday, January 25</td>
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<tr>
<td>Late registration (16-week semester)</td>
<td>Monday, January 25</td>
</tr>
<tr>
<td>Late Day to add courses (by 5 p.m.) for 16-week semester and 1st 8-week term</td>
<td>Friday, January 29</td>
</tr>
<tr>
<td>Last day to drop 1st 8-week term course(s) without grade of W</td>
<td>Wednesday, February 3</td>
</tr>
<tr>
<td>Last day to drop 16-week semester course(s) without grade of W</td>
<td>Friday, February 12</td>
</tr>
<tr>
<td>Declaration of major is due (B.A./B.S. students only)</td>
<td>Thursday, February 18</td>
</tr>
<tr>
<td>Last day to withdraw from 1st 8-week term course without a grade of F</td>
<td>Wednesday, February 24</td>
</tr>
<tr>
<td>Last day to change from/to pass/fail grade for 1st 8-week term</td>
<td>Wednesday, February 24</td>
</tr>
<tr>
<td>Last day of classes for 1st 8-week term</td>
<td>Friday, March 12</td>
</tr>
<tr>
<td>Last day to withdraw from the University (all courses) if registered for a 1st 8-week course (students may not be enrolled for 2nd 8-week term if withdrawing from 1st 8-week term)</td>
<td>Friday, March 12</td>
</tr>
<tr>
<td>Final exams for 1st 8-week term</td>
<td>Monday-Friday, March 15 - 19</td>
</tr>
<tr>
<td>Pre-Registration Advising</td>
<td>Monday - Friday, March 15 - 26</td>
</tr>
<tr>
<td>Classes begin (2nd 8-week term)</td>
<td>Monday, March 22</td>
</tr>
<tr>
<td>Registration for upcoming Summer terms begins</td>
<td>Monday, March 22</td>
</tr>
<tr>
<td>Last day to register for 2nd 8-week term courses</td>
<td>Friday, March 26</td>
</tr>
<tr>
<td>Last day to withdraw from a 16-week course without a grade of F; last day to change from/to pass/fail grade (16-week semester courses)</td>
<td>Friday, March 26</td>
</tr>
<tr>
<td>Advance registration for upcoming Fall semester</td>
<td>Monday - Friday, March 29 - April 2</td>
</tr>
<tr>
<td>Last day to drop 2nd 8-week term course(s) without grade of W</td>
<td>Wednesday, March 31</td>
</tr>
<tr>
<td>Last day to change from/to pass/fail grade for 2nd 8-week term</td>
<td>Wednesday April 14</td>
</tr>
<tr>
<td>Last day to withdraw from 2nd 8-week term course without a grade of F</td>
<td>Wednesday, April 14</td>
</tr>
<tr>
<td>Classes end</td>
<td>Friday, April 30</td>
</tr>
<tr>
<td>Reading Period</td>
<td>Saturday - Sunday, May 1 - 2</td>
</tr>
<tr>
<td>Final Examinations (16-week semester and 2nd 8-week term)</td>
<td>Monday - Friday, May 3 - 7</td>
</tr>
<tr>
<td>Commencement</td>
<td>Saturday, May 8</td>
</tr>
</tbody>
</table>
May/June Five-Week Summer Term 2021

*Registration for all summer terms begins on Monday, March 22, 2021.

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<tr>
<th>Event</th>
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<tbody>
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<td>Classes begin</td>
<td>Monday, May 17</td>
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<tr>
<td>Last day to add courses for 1st 5-week term (by 5 p.m.)</td>
<td>Wednesday, May 19</td>
</tr>
<tr>
<td>Last day to drop courses without a grade of W</td>
<td>Tuesday, May 25</td>
</tr>
<tr>
<td>Memorial Day (no classes) (Daytime classes made up on Friday, June 4)</td>
<td>Monday, May 31</td>
</tr>
<tr>
<td>(Evening classes made up on first open evening)</td>
<td></td>
</tr>
<tr>
<td>Last day to change from/to pass/fail grade</td>
<td>Tuesday, June 1</td>
</tr>
<tr>
<td>Last day to withdraw from a course without a grade of F</td>
<td>Tuesday, June 15</td>
</tr>
<tr>
<td>Classes end, last day to withdraw from this term</td>
<td>Tuesday, June 15</td>
</tr>
<tr>
<td>Reading Period</td>
<td>Wednesday, June 16</td>
</tr>
<tr>
<td>Examinations</td>
<td>Thursday, June 17</td>
</tr>
</tbody>
</table>

Eight Week Summer Term 2021

*Registration for all summer terms begins on Monday, March 22, 2021.

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<tr>
<th>Event</th>
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<tr>
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<tr>
<td>Last day to add courses (by 5 p.m.)</td>
<td>Friday, May 21</td>
</tr>
<tr>
<td>Last day to drop courses without a grade of W</td>
<td>Friday, May 28</td>
</tr>
<tr>
<td>Memorial Day (no classes) (Daytime classes made up on Friday, June 4)</td>
<td>Monday, May 31</td>
</tr>
<tr>
<td>(Evening classes made up on first open evening)</td>
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<tr>
<td>Last day to withdraw from a course without a grade of F</td>
<td>Friday, June 4</td>
</tr>
<tr>
<td>Last day to change from/to pass/fail grade</td>
<td>Friday, June 4</td>
</tr>
<tr>
<td>Last day to withdraw from this term</td>
<td>Wednesday, June 30</td>
</tr>
<tr>
<td>Independence Day observed (no classes) (Daytime classes made up on Friday, July 9)</td>
<td>Monday, July 5</td>
</tr>
<tr>
<td>(Evening classes made up on first open evening)</td>
<td></td>
</tr>
<tr>
<td>Classes end</td>
<td>Friday, July 9</td>
</tr>
</tbody>
</table>

Ten-Week Summer Term 2021

*Registration for all summer terms begins on Monday, March 22, 2021.

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Classes begin</td>
<td>Monday, May 17</td>
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<tr>
<td>Last day to add courses (by 5 p.m.)</td>
<td>Friday, May 21</td>
</tr>
<tr>
<td>Last day to drop courses without a grade of W</td>
<td>Friday, May 28</td>
</tr>
<tr>
<td>Memorial Day (no classes) (Daytime classes made up on Friday, June 4)</td>
<td>Monday, May 31</td>
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